THE UNIVERSITY OF TEXAS SYSTEM Office of the Deputy Chancellor

March 4, 1976

TO THE HONORABLE BOARD OF REGENTS
OF THE UNIVERSITY OF TEXAS SYSTEM
Mrs. Johnson and Gentlemen:
The dockets recommended by the Chief Administrative Officers concerned and prepared by the component institutions listed below are herewith submitted with my recommendation for ratification or approval, as appropriate, at the meeting of the Board of Regents on March 26, 1976. The budget changes included in these dockets have been approved by me and are herewith submitted as a report to the Board of Regents.

The University of Texas at Arlington
(Pages AR-1 through AR-18)
The University of Texas at Austin
(Pages A-1 through A-196)
The University of Texas at Dallas
(Pages D-1 through D-343)
The University of Texas at E1 Paso
(Pages EP-1 through EP-4)
The University of Texas of the Permian Basin
(Pages PB-1 through $\mathrm{PB}-6$ )
The University of Texas at San Antonio
(Pages SA-1 through SA-328)
The University of Texas Health Science Center at Dallas
(Pages HD-1 through HD-23)
The University of Texas Medical Branch at Galveston
(Pages G-1 through G-23)
The University of Texas Health Science Center at Houston (Pages HH-1 through HH-14)
The University of Texas Health Science Center at San Antonio (Pages HS-1 through HS-14)
The University of Texas System Cancer Center (Pages CC-1 through CC-27)

The University of Texas System School of Nursing
(Pages $\mathrm{N}-1$ through $\mathrm{N}-6$ )
On the following pages, $\mathrm{C}-2$ through $\mathrm{C}-4$, are U . T. System and Institutional items which $I$ also recommend for the Board's ratification or approval, as appropriate, including my report of budget changes.


EDW:sar

Ratification is requested for the following adjustments to the 1975-76 Systemwide Personnel Pay Plan, effective December 1, 1975:


CHANGE - SALARY RANGE

| Code | Title | System-wide <br> Annual Salary Range |  |
| :---: | :---: | :---: | :---: |
|  |  | From | To |
| 5360 | Instrument Mechanic | \$ 11,016-18,180 | \$ 10,656-18,180 |

Ratification is requested for the following adjustments to the 1975-76 Systemwide Personnel Pay Plan, effective January 1, 1976:

ADDITIONS

|  | Title |  |  | System-wide <br> Code |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  | Anual Salary Range |

Ratification is requested for the following adjustments to the 1975-76 Systemwide Personnel Pay P1an, effective March 1, 1976:

ADDITIONS

| Code | Title | System-wide <br> Annual Salary Range |
| :---: | :---: | :---: |
| 1006 | Assistant Director, Nursing Service-Education | \$ 14,868 - \$ 22,224 |
| 1010 | Instructor, Nursing Service-Education | 13,908 - 20,784 |

ADJUSTMENTS TO THE 1976-77 SYSTEM-WIDE PERSONNEL PAY PLAN

Radification is requested for the following adjustments to the 1976-77 Systemwide Personnel Pay Plan, effective September 1, 1976:

## ADDITIONS

| Code | Title | System-wide <br> Annual Salary Range |
| :---: | :---: | :---: |
| 1006 | Assistant Director, Nursing Service-Education | \$ 16,440-\$ 24,564 |
| 1010 | Instructor, Nursing Service-Education | 14,868 - 22,224 |

The above recommended adjustments reflect those actions necessary to establish or maintain internal and external equity and/or accurately define and classify jobs. Salary ranges are supported by conpensation data for the area concerned. These adjustments have been initiated by the various component institutions, appropriately reviewed, and have received the approval of the System Personnel Director and the Associate Deputy Chancellor for Operations.

## CONTRACTS AND GRANTS

Basic Agreement N00014-76-A-0023 between the Office of Naval Research and The University of Texas System. Individual contracts between component institutions of The University of Texas System and the Department of Defense are to be negotiated under this basic agreement to be effective at the institution concerned.

# THE UNIVERSITY OF TEXAS SYSTEM ADMINISTRATION <br> REPORT OF AMENDMENTS TO THE 1975－76 OPERATING BUDGET 

BOARD OF REGENTS MEETING－MARCH 26， 1976
Source of Funds－Departmental Appropriations
（Unless Otherwise Specified）

## Office of the Chancellor（Chancellor＇s Council）and Special Services－ Development Division

1．Remove W．D．Blunk，Director for Development at an annual salary rate of $\$ 34,200$ ，from the budget as of February 23,1976 ，the date of his death． （RBC\＃D－36）

## Office of the Deputy Chancellor

2．Change the status of Michael E．Hudson from Assistant to the Deputy Chancellor to Director for Public Affairs effective April 1， 1976 with no change in salary．（RBC非 D－38）

3．Change the status of Henrietta S．Jacobsen，Director of Special Programs at an annual salary rate of $\$ 24,525$ ，from Leave of Absence without Pay to full time for the period March 23 through March 31，1976，and resign Mrs． Jacobsen effective March 31，1976．（RBC\＃D－40）

## Law Office of The University of Texas System

4．Appoint James T．Fitzpatrick as General Counsel（ $88 \%$ time）and as Legal Advisor to the Chancellor＇s Council（ $12 \%$ time）at an annual salary rate of $\$ 42,500$ effective February 1，1976．Sources of funds for these appoint－ ments were Law Office Administrative Salaries plus transfer from the Available Fund Unallocated Operating Account and Chancellor＇s Council． （RBC＇s非 D－29，D－30，D－31，D－32）

## Office of Facilities Planning and Construction（Revolving Fund）

5．Resign H．Clifford Baughman，Advisor，Furniture and Equipment Division at an annual salary rate of $\$ 22,000$ ，effective January 31，1976．（RBC非 D－26）

6．Resign Ben F．Powell，Construction Inspector at an annual salary rate of \＄16，300，effective February 29，1976．（RBC⿰⿰三丨⿰丨三一 D－27）

7．Resign Leo A．Dasso，Construction Inspector at an annual salary rate of $\$ 16,100$ ，effective February 29，1976．（RBC非 D－35）

System Personne1 Office－Unemployment Compensation Insurance Division （Revolving Fund）
8．Transfer $\$ 150,000$ from the Unemployment Conpensation Insurance Unallotted Account to the Unemployment Compensation Benefits account to provide the additional funds needed to meet anticipated expenditures for U．C．I．claims for the remainder of fiscal 1975－76．（RBCF D－39）

## Accrued Sick Leave

9. In accordance with Senate Bill No. 52 and with opinions from the Attorney General's Office, procedures for payment of "duly accrued" sick leave for terminating employees have been developed. To implement these procedures the establishment of Accrued Sick Leave accounts from Unallocated operating funds is necessary in the following fund groups:

| System Administration | $\$ 30,000$ |
| :--- | ---: |
| Expenses of Revenue Bearing Property |  |
| (Available University Fund) |  |
| Shared with A\&M University | 6,000 |
| Paid Entirely by University of Texas | 3,000 |
| Facilities Planning and Construction | 30,000 |
| D-33, D-34, D-37) |  |

# THE UNIVERSITY OF TEXAS AT ARLINGTON 

Arlington, Texas

February 24, 1976

Mr. E. D. Walker<br>Deputy Chancellor<br>The University of Texas System<br>601 Colorado Street<br>Austin, Texas 78701

Dear Mr. Walker:

The docket for the March 26, 1976, meeting of the Board of Regents
is submitted for your recommendation and presentation to the Board.
I recommend approval.
Sincerely,

W. H. Nedderman

President
WHN: kp

THE UNIVERSITY OF TEXAS AT ARLINGTON
BOARD MEETING ON MARCH 26, 1976

## A+F

## GIFTS

The following gifts have been received and I recommend acceptance by the Board:

## Donor

1. Arbrook, Inc. Arlington, Texas 76010
2. Texas Electric Service Co. P. O. Box 970 Fort Worth, Texas 76101
3. Mrs. Gary D. Harl 2304 San Diego Street Arlington, Texas 76015
4. Mr. and Mrs. Joe J. Rady Rady and Associates, Inc. 400 Continental Life Bldg. Fort Worth, Texas 76102

Purpose Amount
Research Fellowships \$9,250.00 in Chemistry

College of Engineering- 32,000.00 Solar Energy Research House

Scholarship in Criminal 5,000.00 Justice

College of Engineering 8,422.17*
for construction, furnish.
ing and equipping room
for use by students and
faculty
*The donation was 214 shares of stock in
Canadian Superior Oil of California, L. T. D.
MEMBERSHIP ON THE GRADUATE FACULTY


I recommend the following faculty members for membership on the graduate faculty:

Dr. Michael Foran, Department of Accounting
Dr. Robert E. Longacre, Department of Foreign Languages
and Linguistics
Dr. Kenneth M. Roemer, Department of English
Dr. Lawrence Ziegler, Department of Economics
Dr. Robert G. Landen, Dean of the College of Liberal Arts
Dr. Bob F. Perkins, Dean of the Graduate School
Dr. George W. Trivoli, Department of Business Administration
Dr. Paul M. Hayashi, Department of Economics

## USE OF TEXTBOOKS WRITTEN BY FACULTY MEMBERS

I recommend that the following faculty-authored books be approved for use
as textbooks:

College of Engineering

1. Modeling and Simulation of Dynamic Systems, authored by Assistant Professor Robert L. Woods and Professor Kent L. Lawrence, to be used in ME 3204, Mechanical Engineering Systems Analysis II. The book will be sold for $\$ 4.60$, of which $\$ 1.00$ will be returned to the Mechanical Engineering Department.
2. Synthesis and Analysis of Fluid Logic Systems, authored by Assistant Professor Robert L. Woods, to be used ingE 6302, Design of Digital Control Circuits. This book will be sold for $\$ 10.00$, of which $\$ 1.00$ will be returned to the Mechanical Engineering Department.
3. ME Measurement I, authored by Associate Professor T. J. Lawley, to be used as a lab manual in ME 2182, Mechanical Engineering Measurement I. This book will be sold for $\$ 5.00$, of which $\$ 1.00$ will be returned to the Mechanical Engineering Department.
4. ME Measurement II, authored by Associate Professor T. J. Lawley, to be used as a lab manual in ME 3182, Mechanical Engineering Measurement II. This book will be sold for $\$ 4.00$, of which $\$ 1.00$ will be returned to the Mechanical Engineering Department.
5. ME Systems Laboratory, authored by Associate Professor T. J. Lawley, to be used as a lab manual for ME 4182, Mechanical Engineering Systems Laboratory. The book will be sold for $\$ 3.00$, of which $\$ 1.00$ will be returned to the Mechanical Engneering Department.

## RESEARCH AND OTHER ACADEMIC CONTRACTS

The following contracts, grants and amendments have been signed by the appropriate official upon the recommendation of the respective technical directors and fiscal officers.

Expenditures from these contracts and grants will be made in accordance with regular University operating procedures and contractual limitations. I recommend your approval and ratification of signatures.

GRANTS, CONTRACTS AND AGREEMENTS (NONGOVERNMENTAL)

1. Agreement between the North Central Texas Council of Governments and The University of Texas at Arlington whereby NCTCOG provides support of an internship in Criminal Justice in the amount of approximately $\$ 550.00$ per month (a rate of $\$ 3.50$ per hour). This internship program is under the direction of the Institute of Urban Studies and is for the period February, 1976, through June, 1976.
2. Agreement for Contract of Services by and between the City of Grand Prairie, Texas and The University of Texas at Arlington whereby the Institute of Urban Studies shall research social services projects for the City of Grand Prairie. The amount of this agreement is $\$ 9,800$, and is for the period January 1, 1976, and shall expire no later than June 1, 1976.
3. Texas Electric Service Company grant in the amount of $\$ 4,752$ in support of research proposal entitled, "Relations of the Thermoacclimatory Process to the Blood Profile of the Largemouth Bass, Micropterus Salmoides. " The director of this project is Dr. Donald Whitmore, Department of Biology. The budget is for the study period January 1, 1976 to September 1, 1976.
4. Texas Utilities Generating Company letter dated January 12, 1976, renewing the Texas Electric Service Company Grant \#5, to cover the cost of continuing Mr. W. H. Tommey's research proposal. The fellowship renewal is for the spring semester, 1976, and is in the amount of $\$ 2,240.20$.
5. Texas Utilities Generating Company letter dated January 12, 1976, renewing the Texas Electric Service Company Grant \#6, to cover the cost of continuing Mr. Jerry L. Bird's research proposal. The fellowship renewal is for the spring semester, 1976, and is in the amount of $\$ 2,240.20$.
6. Agreement between the Institute of Urban Studies of The University of Texas at Arlington and the City of Bellaire, Texas, whereby the Institute of of Urban Studies will serve as consultant to the City of Bellaire in the implementation of a guide for organizing and administering a complete training program for city employees, as well as develop a personnel policy and a plan for its administration. The amount of this agreement is $\$ 4,101$, and the services required shall be completed within 148 working days from February 3, 1976.

GRANTS, CONTRACTS AND AGREEMENTS (STATE)


1. Amendment \#l to Interagency Cooperation Contract IAC (76-77)-0489 between UT Health Science Center at Dallas and The University of Texas at Arlington. This amendment is to amend Paragraph IV, Contract Amount to read: The total amount of this contract shall not exceed five thousand two hundred seventy and 64/100 dollars ( $\$ 5,270.64$ ). This amendment is necessary in order to adjust for a merit increase in pay for Sara Bogan effective January $1,1976$.
2. Subgrant Agreement \# D75-203 by and between the Texas Committee for the Humanities and Public Policy, and the Institute of Urban Studies of The University of Texas at Arlington. This grant is in support of "The PRECON Project'", a learning simulation designed to increase citizen understanding of the precinct convention process in Texas and confidence in taking an active part in local politics during the 1976 presidential election year. The director of the project is David W. Tees. The amount of the grant is $\$ 4,880$, and is for the period February l-May 15, 1976.


## GRANTS, CONTRACTS AND AGREEMENTS (FEDERAL)

1. Contract No. SBA-0230-PMA-76 between Small Business Administration and the Department of Business Administration, The University of Texas at Arlington, to provide management counseling and technical assistants to twenty-five (25) small business concerns. The amount of the award is $\$ 6,250$; the effective date of this contract is August 25, 1975, and all work shall be completed by June 30, 1976. The full amount of this contract will be expended in Tarrant County, Texas.
2. Contract No. F41609-76-C-0028, Requisition/Purchase Request/ Project No. FY7624-76-15014 \& Amend 1, is sued by AMD/PMR R\&D Contracts Division, Brooks AFB, Texas, whereby The University of Texas at Arlington is awarded $\$ 26,969$ in support of proposal entitled, "An Evaluation of the Fluidic Oxygen Partial Pressure Sensor." The principal investigator is Dr. Robert L. Woods, Department of Mechanical Engineering, and the award is for the period effective date December 22,1975 to six months the reafter. The full amount of this award will be expended in Tarrant County, Texas.
3. Department of Health, Education, and Welfare, Basic Educational Opportunity Grant Program, Official Authorization Letter dated December 11, 1975, NIH Transaction Number 760Y1450, whereby The University of Texas at Arlington is awarded an additional \$193,712. This adjustment brings the total authorization to $\$ 531,522$ for the period July l, 1975 through June 30, 1976. The full amount of this award will be expended in Tarrant County, Texas.
4. Contract/Purchase Order No. DACW63-76-M-0619, Requisition/Purch Request No. ADPC-76-36, whereby US Army Engineer District, Fort Worth, awards $\$ 6,000$ to The University of Texas at Arlington in support of proposal, "Operating System Evaluation Project." The project is under the direction of Ronnie G. Ward, Assistant Professor of Computer Science, and is for the period February 1, 1976 to September 30, 1976. The full amount of this award will be expended in Tarrant County, Texas.
5. Grant No. AFOSR-76-2981 whereby United States Air Force, Air Force Office of Scientific Research, awards $\$ 2,000$ for support of research proposal entitled, "Magnetic Phase Transitions and Ground State Properties of Magnetic Crystals." The principal investigator is Dr. John L. Fry, Department of Physics. The starting date is February 1, 1976, and is for the duration of eight (8) months. The full amount of this award will be expended in Tarrant County, Texas.

## RECOMMENDED AMENDMENTS TO THE 1975-76 BUDGET

Board Meeting - March 26, 1976

## GENERAL ADMINISTRATION

Office of Student Financial Aids

1. Increase the annual rate of Marion L. Jacob, Director of Student Financial Aids from $\$ 15,850$ to $\$ 17,500$ effective January l, 1976. Additional funds are available from Unallocated Salaries within the department and Unallocated General Administration - Wages. (RBC \#286)

GENERAL INSTITUTIONAL EXPENSE

News and Information Service
2. Transfer of Funds:

From: Unallocated General Institutional
Expense - Maintenance and Operation \$1642.41
To: News and Information Service-
Maintenance and Operation \$1642.41
For: $\quad$ To provide additional funds to the department to purchase necessary items and supplies for the continued operation of the photography section.
(RBC \#364)

COLLEGE OF LIBERAL ARTS
Office of the Dean of Liberal Arts
3. Transfer of Funds:

| From: | Unallocated Instructional Administration |  |
| :--- | :--- | :--- |
|  | Maintenance and Operation | $\$ 5,000$. |
| To: | Dean of Liberal Arts |  |
| For: | Maintenance and Operation | To provide funds to the Dean of Liberal Arts for faculty <br> recruiting. |

(RBC \#359)

## Department of English

4. Extend Leave of Absence without pay for Isabelle P. French (Tenure), Assistant Professor with academic rate of $\$ 12,460$ through the spring semester effective January 16, 1976. (RBC \#301)
5. Re-appoint Joyce S. Beck (non-tenure) as Lecturer with academic rate of $\$ 12,000$ at $50 \%$ with stipend of $\$ 3,000-41 / 2$ months; effective January 16 , 1976. Funds are available from Liberal Arts Unallocated Faculty Salaries. (RBC \#302)

## RECOMMENDED AMENDMENTS TO THE 1975-76 BUDGET

Board Meeting - March 26, 1976
6. Re-appoint Sylvia Major (non-tenure) as Lecturer with academic rate of $\$ 12,000$ at $75 \%$ with stipend of $\$ 4,500-41 / 2$ months; effective January $16,1976$. Funds are available from Liberal Arts Unallocated Faculty Salaries. (RBC \#303)
7. Re-appoint Elizabeth J. Morgan (non-tenure) as Lecturer with academic rate of $\$ 12,000$ at $50 \%$ with stipend of $\$ 3,000-41 / 2$ months; effective January 16 , 1976. Funds are available from Liberal Arts Unallocated Faculty Salaries. (RBC \#304)
8. Re-appoint Janet H. Potvin (non-tenure) as Lecturer with academic rate of $\$ 12,000$ at $100 \%$ with stipend of $\$ 6,000-41 / 2$ months; effective January 16 , 1976. Funds are available from Liberal Arts Unallocated Faculty Salaries. (RBC \#305)
9. Appoint Benjamin F. Capps (non-tenure) as Visiting Professor with academic rate of $\$ 24,000$ at $50 \%$ with stipend of $\$ 6,000-41 / 2$ months; effective January 16, 1976. Funds are available from Unallocated Faculty Salaries. (RBC \#395)

## Department of Art

10. Accept the resignation of Louis T. Hock (non-tenure), Assistant Professor with academic rate of $\$ 10,800$ effective January 15, 1976. (RBC \#306)
11. Appoint Cecilia Feld (non-tenure) as Lecturer with academic rate of $\$ 7800$ at $331 / 3 \%$ with stipend of $\$ 1300-41 / 2$ months; effective January $16,1976$. Funds are available from Lecturer funds within the department. (RBC \#350)
12. Appoint Robert M. Murdock (non-tenure) as Lecturer with academic rate of $\$ 7800$ at $331 / 3 \%$ with stipend of $\$ 1300-41 / 2$ months; effective January 16 , 1976. Funds are available from Lecturer funds within the department and Liberal Arts Unallocated Salaries. (RBC \#351)

Department of Foreign Languages and Linguistics
13. Weldon Litsey (Tenure), Assistant Professor with academic rate of $\$ 13,000$ retired effective January 15, 1976. (RBC \#287)
14. Appoint William D. Baker (non-tenure) as Lecturer with academic rate of $\$ 5968$ at $25 \%$ with stipend of $\$ 746-41 / 2$ months; effective January $16,1976$. Funds are available from Liberal Arts Unallocated Faculty Salaries. (RBC \#365)
15. Appoint Charles W. Lawrence (non-tenure) as Lecturer with academic rate of $\$ 5968$ at $75 \%$ with stipend of $\$ 2238-41 / 2$ months; effective January $16,1976$. Funds are available from Liberal Arts Unallocated Faculty Salaries. (RBC \#375)
16. Appoint Thomas S. Harris (non-tenure) as Lecturer with academic rate of $\$ 14,920$ at $20 \%$ with stipend of $\$ 1492-41 / 2$ months; effective January $16,1976$. Funds are available from Liberal Arts Unallocated Faculty Salaries. (RBC \#376)

## RECOMMENDED AMENDMENTS TO 1975-76 BUDGET

Board Meeting - March 26, 1976

## Department of Political Science

17. Transfer of Funds:

| From: | Wages | $\$ 2,000$. |
| :--- | :--- | :--- |
| To: | Maintenance and | Operation |
| For: | To provide additional funds for recruiting expenses for new <br> faculty positions and chairperson and other expenses for |  |
|  | supplies and services. |  |
| (RBC \#285) |  |  |

18. Accept the resignation of Benjamin M. Forbes (non-tenure), Lecturer with academic rate of $\$ 7732$, budgeted at $25 \%$ with stipend of $\$ 1933-9$ months; effective January 15, 1976. (RBC \# 288)
19. Appoint Dan L. Knight (non-tenure) as Lecturer with academic rate of $\$ 7728$ at $25 \%$ with stipend of $\$ 966-41 / 2$ months; effective January 16, 1976. Funds are available from Liberal Arts Unallocated Faculty Salaries. (RBC \#352)

## Department of History

20. Transfer of Funds:

From: Liberal Arts Unallocated
Faculty Salaries \$2,239.

To: Graduate Teaching Assistants \$2,239.
For: To provide funds to cover the appointment of Graduate Teaching Assistants for the spring semester 1976.
(RBC \#377)

## Department of Education

21. Grant Leave of Absence without pay to Judith G. Reinhartz (non-tenure), Instructor with academic rate of \$11, 290 effective January 16, 1976, through May 31, 1976. (RBC \#307)
22. Appoint Rita J. Martin (non-tenure) as Instructor with academic rate of $\$ 11,500$ at $100 \%$ with stipend of $\$ 5750-41 / 2$ months; effective January 16 , 1976. Funds are available from Liberal Arts Unallocated Faculty Salaries. (RBC \#308)
23. Appoint Kathryn E. White (non-tenure) as Lecturer with academic rate of $\$ 7600$ at $75 \%$ with stipend of $\$ 2850-41 / 2$ months; effective January $16,1976$. Funds are available from Lecturer funds within the department and Liberal Arts Unallocated Faculty Salaries. (RBC \#309)
24. Re-appoint Cynthia A. Gross (non-tenure) as Lecturer with academic rate of $\$ 9171$ at $41.43 \%$ with stipend of $\$ 1900-41 / 2$ months; effective January 16 , 1976. Funds are available from Liberal Arts Unallocated Faculty Salaries. (RBC \#310)

## THE UNIVERSITY OF TEXAS AT ARLINGTON

## RECOMMENDED AMENDMENTS TO THE 1975-76 BUDGET

Board Meeting - March 26, 1976
25. Re-appoint Kathryn P. Green (non-tenure), Lecturer with academic rate of $\$ 7971$ at $47 \%$ with stipend of \$1875-41/2 months; effective January 16, 1976. Funds are available from Liberal Arts Unallocated Faculty Salaries. (RBC \#311)

## Department of Sociology

26. Transfer of Funds:

From: Liberal Arts Unallocated Faculty Salaries
\$4326.
To: Graduate Teaching Assistants \$4326.
For: $\quad$ To provide funds to the department for the appointment of three Graduate Teaching Assistants for the spring semester. The use of Graduate Teaching Assistants necessary due to resignation of faculty member.
(RBC \#283)
27. Accept the resignation of John M. Taves (non-tenure), Assistant Professor with academic rate of $\$ 14,500$ effective January 12, 1976. (RBC \#298)
28. Appoint Robert S. McGrath (non-tenure) as Visiting Assistant Professor with academic rate of $\$ 14,500$ at $100 \%$ with stipend of $\$ 7250-41 / 2$ months; effective January 16, 1976. Funds are available from vacant position. (RBC \#298)

## Department of Communication

29. Re-appoint Edward F. Kelton (non-tenure) as Lecturer with academic rate of $\$ 9024$ at $25 \%$ with stipend of $\$ 1128$ - $41 / 2$ months; effective January 16, 1976. Funds are available from Lecturer funds within the department. (RBC \#353)
30. Re-appoint Jac Alder (non-tenure) as Lecturer with academic rate of $\$ 12,000$ at $50 \%$ with stipend of $\$ 3000-41 / 2$ months; effective January 16, 1976. Funds are available from Lecturer funds within the department. (RBC \#354)
31. Re-appoint Rosanna T. Herndon (non-tenure) as Lecturer with academic rate of $\$ 8000$ at $25 \%$ with stipend of $\$ 1000-41 / 2$ months; effective January 16 , 1976. Funds are available from Lecturer funds within the department. (RBC \#355)
32. Re-appoint Ralph W. Widener (non-tenure) as Lecturer with academic rate of $\$ 9026$ at $75 \%$ with stipend of $\$ 3385-41 / 2$ months; effective January 16, 1976. Funds are available from Lecturer funds within the department. (RBC \#356)
33. Re-appoint Karin E. McCallum (non-tenure) as Lecturer with academic rate of $\$ 6776$ at $50 \%$ with stipend of $\$ 1694-41 / 2$ months; effective January 16 , 1976. Funds are available from Lecturer funds within the department and from Liberal Arts Unallocated Faculty Salaries. (RBC \#357)
34. Appoint Ruth A. Millsap (non-tenure) as Lecturer with academic rate of $\$ 8000$ at $25 \%$ with stipend of $\$ 1000-41 / 2$ months; effective January $16,1976$. Funds are available from Lecturer funds within the department. (RBC \#358)

## RECOMMENDED AMENDMENTS TO THE 1975-76 BUDGET

Board Meeting - March 26, 1976

## COLLEGE OF SCIENCE

## Office of the Dean of Science

35. Transfer of Funds:

From: Unallocated Instructional Administration-
Maintenance and Operation \$3,000.

To: Dean of Science-
Maintenance and Operation $\quad \$ 3,000$.

For: To provide funds to the Dean of Science for use in faculty recruiting.
(RBC \#360)

## Department of Biology

36. Appoint Danny R. Downey (non-tenure) as Graduate Teaching Assistant with academic rate of $\$ 6552$ at $50 \%$ with stipend of $\$ 1638-41 / 2$ months; effective January 16, 1976. Funds are available from Science Unallocated Faculty Salaries. (RBC \#312)

## Department of Geology

37. Appoint James M. Forgotson, Jr. (non-tenure) as Instructor with academic rate of $\$ 10,000$ at $25 \%$ with stipend of $\$ 1250-41 / 2$ months; effective January 16, 1976. Funds are available from Science Unallocated Faculty Salaries. (RBC \#367)

## Department of Mathematics

38. Grant Leave of Absence without pay to Larry F. Heath (Tenure), Associate Professor with academic rate of $\$ 18,170$ effective January 16, 1976. (RBC \#368)

## Department of Physics

39. Re-appoint William E. Case (non-tenure) as Lecturer with academic rate of $\$ 6000$ at $30 \%$ with stipend of $\$ 900-4 \mathrm{l} / 2$ months; effective January $16,1976$. Funds are available from Lecturer funds within the department. (RBC \#386)

Department of Psychology
40. Appoint Bibb Latane (non-tenure) as Visiting Professor with academic rate of $\$ 9000$ at $100 \%$ with stipend of $\$ 1000$, one month; effective January $1,1976$. Funds are available from budgeted position of Assistant Professor for the spring semester. (RBC \#387)

## RECOMMENDED AMENDMENTS TO THE 1975-76 BUDGET

Board Meeting - March 26, 1976

## COLLEGE OF BUSINESS

## Office of the Dean of Business

41. Transfer of Funds:

From: Unallocated Instructional Administration -
Maintenance and Operation \$1,155.

Unallocated Salaries \$ 845.
To: Dean of Business -
Maintenance and Operation $\$ 2,000$.

For: To provide funds to the Office of the Dean of Business for use in faculty recruiting.
(RBC \#361)

## Department of Accounting

42. Accept the resignation of J. H. Catterton (non-tenure), Lecturer with academic rate of $\$ 6800$ effective January 15, 1976. (RBC \#313)
43. Appoint Richard B. Johnson (non-tenure) as Lecturer with academic rate of $\$ 6600$ at $25 \%$ with stipend of $\$ 825-41 / 2$ months; effective January $16,1976$. Funds are available from budgeted position. (RBC \#313)
44. Accept the resignation of Robert S. Parker (non-tenure), Lecturer with academic rate of $\$ 6600$ effective January 15, 1976. (RBC \#314)
45. Appoint Johnny C. Walker (non-tenure) as Lecturer with academic rate of $\$ 6600$ at $50 \%$ with stipend of $\$ 1650-41 / 2$ months; effective January 16, 1976. Funds are available from vacated position. (RBC \#314)
46. Appoint Thomas J. Tschetter (non-tenure) as Lecturer with academic rate of $\$ 6600$ at $25 \%$ with stipend of $\$ 825-41 / 2$ months; effective January $16,1976$. Funds are available from Business Unallocated Faculty Salaries. (RBC \#315)

## Department of Business Administration

47. Re-appoint E. W. Millholland, Jr. (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $50 \%$ with stipend of $\$ 1700-41 / 2$ months; effective January 16 , 1976. Funds are available from Business Unallocated Faculty Salaries. (RBC \# 318)
48. Re-appoint Michael W. Goodwin (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $50 \%$ with stipend of $\$ 1700-41 / 2$ months; effective January 16 , 1976. Funds are available from Business Unallocated Faculty Salaries. (RBC \#319)

# THE UNIVERSITY OF TEXAS AT ARLINGTON 

## RECOMMENDED AMENDMENTS TO THE 1975-76 BUDGET

Board Meeting - March 26, 1976
49. Re-appoint John D. Slack (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $50 \%$ with stipend of $\$ 1700-41 / 2$ months; effective January $16,1976$. Funds are available from Business Unallocated Faculty Salaries. (RBC \#320)
50. Re-appoint Daniel J. Smith (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $50 \%$ with stipend of $\$ 1700-41 / 2$ months; effective January $16,1976$. Funds are available from Business Unallocated Faculty Salaries. (RBC \#321)
51. Re-appoint Roger D. Walton (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $50 \%$ with stipend of $\$ 1700-41 / 2$ months; effective January $16,1976$. Funds are available from Business Unallocated Faculty Salaries. (RBC \#322)
52. Re-appoint Charles L. Lummus (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $50 \%$ with stipend of $\$ 1700-41 / 2$ months; effective January 16 , 1976. Funds are available from Business Unallocated Faculty Salaries. (RBC \#323)
53. Re-appoint Frank C. Warth (non-tenure) as Lecturer and increase academic rate from $\$ 6800$ to $\$ 7200$ at $50 \%$ with stipend of $\$ 1800-41 / 2$ months; effective January 16, 1976. Funds are available from Business Unallocated Faculty Salaries. (RBC \#324)
54. Re-appoint Morris M. McLarty (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $25 \%$ with stipend of $\$ 850-41 / 2$ months; effective January 16 , 1976. Funds are available from Business Unallocated Faculty Salaries. (RBC \#325)
55. Re-appoint William H. Cooper (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $25 \%$ with stipend of $\$ 850-41 / 2$ months; effective January 16,1976 . Funds are available from Business Unallocated Faculty Salaries. (RBC \#326)
56. Re-appoint Donald K. Kersey (non-tenure) as Lecturer with academic rate of $\$ 7200$ at $25 \%$ with stipend of $\$ 900-41 / 2$ months; effective January $16,1976$. Funds are available from Business Unallocated Faculty Salaries. (RBC \#327)
57. Re-appoint John A. Rollins (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $25 \%$ with stipend of $\$ 850-41 / 2$ months; effective January $16,1976$. Funds are available from Business Unallocated Faculty Salarie s. (RBC \#328)
58. Re-appoint Don W. Garrett (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $50 \%$ with stipend of $\$ 1700-41 / 2$ months; effective January 16, 1976. Funds are available from Business Unallocated Faculty Salaries. (RBC \#329)
59. Re-appoint Harold D. Gant (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $25 \%$ with stipend of $\$ 850-41 / 2$ months; effective January 16, 1976. Funds are available from Business Unallocated Faculty Salaries. (RBC \#330)

## RECOMMENDED AMENDMENTS TO THE 1975-76 BUDGET

Board Meeting - March 26, 1976
60. Re-appoint Emile L. Faciane III (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $50 \%$ with stipend of $\$ 1700-41 / 2$ months; effective January 16 , 1976. Funds are available from Business Unallocated Faculty Salaries. (RBC \#331)
61. Re-appoint Ronald L. Wallace (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $25 \%$ with stipe nd of $\$ 850-41 / 2$ months; effective January $16,1976$. Funds are available from Business Unallocated Faculty Salaries. (RBC \#332)
62. Re-appoint Donald N. Turner (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $25 \%$ with stipend of $\$ 850-41 / 2$ months; effective January $16,1976$. Funds are available from Business Unallocated Faculty Salaries. (RBC \#333)
63. Re-appoint W. H. Barnette (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $25 \%$ with stipend of $\$ 850-41 / 2$ months; effective January 16, 1976. Funds are available from Business Unallocated Faculty Salaries. (RBC \#334)
64. Re-appoint Frank W. Sullivan (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $25 \%$ with stipend of $\$ 850-41 / 2$ months; effective January $16,1976$. Funds are available from Business Unallocated Faculty Salaries. (RBC \#335)
65. Re-appoint John A. George (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $25 \%$ with stipend of $\$ 850-41 / 2$ months; effective January $16,1976$. Funds are available from Business Unallocated Faculty Salaries. (RBC \#336)
66. Re-appoint Steve Watson (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $25 \%$ with stipend of $\$ 850-41 / 2$ months; effective January 16, 1976. Funds are available from Business Unallocated Faculty Salaries. (RBC \#337)
67. Re-appoint Robert G. Russell (non-tenure), Lecturer with academic rate of $\$ 6800$ at $25 \%$ with stipend of $\$ 850-41 / 2$ months; effective January $16,1976$. Funds are available from Business Unallocated Faculty Salaries. (RBC \#338)
68. Appoint M. R. McDaniel (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $50 \%$ with stipend of \$1700-4 1/2 months; effective January 16, 1976. Funds are available from Business Unallocated Faculty Salaries. (RBC \#339)
69. Appoint Larry Turner (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $50 \%$ with stipend of \$1700-41/2 months; effective January 16, 1976. Funds are available from Business Unallocated Faculty Salaries. (RBC \#340)
70. Appoint C. M. Bush (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $25 \%$ with stipend of $\$ 850-41 / 2$ months; effective January 16, 1976. Funds are available from Business Unallocated Faculty Salaries. (RBC \#341)
71. Appoint Billy J. Atkins (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $25 \%$ with stipend of $\$ 850-41 / 2$ months; effective January $16,1976$. Funds are available from Business Unallocated Faculty Salaries. (RBC \#342)

THE UNIVERSITY OF TEXAS AT ARLINGTON
RECOMMENDED AMENDMENTS TO THE 1975-76 BUDGET
Board Meeting - March 26, 1976
72. Appoint Joseph W. Sandifer III (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $50 \%$ with stipend of $\$ 1700-41 / 2$ months; effective January $16,1976$. Funds are available from Business Unallocated Faculty Salaries. (RBC \#343)
73. Appoint James A. Craig, Jr. (non-tenure) as Lecturer with academic rate of $\$ 8000$ at $25 \%$ with stipend of $\$ 1000-41 / 2$ months; effective January $16,1976$. Funds are available from Business Unallocated Faculty Salaries. (RBC \#344)
74. Appoint David L. Brown (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $25 \%$ with stipend of $\$ 850-41 / 2$ months; effective January $16,1976$. Funds are available from Business Unallocated Faculty Salaries. (RBC \#345)
75. Appoint Ted O. Christopher (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $25 \%$ with stipend of $\$ 850-41 / 2$ months; effective January 16,1976 . Funds are available from Business Unallocated Faculty Salaries. (RBC \#346)
76. Appoint Steven McGinnis (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $25 \%$ with stipend of $\$ 850-41 / 2$ months; effective January $16,1976$. Funds are available from Business Unallocated Faculty Salaries. (RBC \#347)
77. Appoint Donald V. Murphey (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $25 \%$ with stipend of $\$ 850-41 / 2$ months; effective January 16, 1976. Funds are available from Business Unallocated Faculty Salaries. (RBC \#348)
78. Transfer of Funds:

From: Unallocated Departmental Operating Maintenance and Operation $\$ 1,400$.
To: Business Administration Capital Outlay \$1,400.
For: To provide additional funds to the department to purchase capital outlay items needed within the department.
(RBC \#362)

## Department of Economics

79. Accept the resignation of Lester Hammon (non-tenure) as Instructor with academic rate of $\$ 10,560$ effective January 15, 1976. (RBC \#316)
80. Re-appoint Charles S. Armstrong (non-tenure) as Lecturer with academic rate of $\$ 6780$ at $50 \%$ with stipend of $\$ 1695-41 / 2$ months; effective January 16, 1976. Funds are available from Business Unallocated Faculty Salaries. (RBC \#317)
81. Appoint Daniel W. Marsh (non-tenure) as Lecturer with academic rate of $\$ 6800$ at $50 \%$ with stipend of $\$ 1700-41 / 2$ months; effective January $16,1976$. Funds are available from Business Unallocated Faculty Salaries. (RBC \#369)

## THE UNIVERSITY OF TEXAS AT ARLINGTON

## RECOMMENDED AMENDMENTS TO THE 1975-76 BUDGET

Board Meeting - March 26, 1976
82. Appoint Jungshik Sou (non-tenure) as Lecturer with academic rate of $\$ 10,560$ at $100 \%$ with stipend of $\$ 5280-41 / 2$ months; effective January 16,1976 . Funds are available from Business Unallocated Faculty Salaries. (RBC \#396)

## COLLEGE OF ENGINEERING

## Department of Aerospace Engineering

83. Change the status of Corliss W. Adams (non-tenure) from Graduate Research Assistant with 9 months rate of $\$ 6552$ to Lecturer with academic rate of $\$ 8800$ at $50 \%$ with stipend of $\$ 2200-41 / 2$ months; effective January 16, 1976. Funds are available from Lecturer funds within the department. (RBC \#370)
84. Appoint T. L. Green (non-tenure) as Lecturer with academic rate of $\$ 7800$ at $25 \%$ with stipend of $\$ 975-41 / 2$ months; effective January 16, 1976. Funds are available from Engineering Unallocated Faculty Salaries. (RBC \#378)

## Department of Civil Engineering

85. Re-appoint Nabil S. Hadawi (non-tenure) as Adjunct Associate Professor with academic rate of $\$ 8800$ at $25 \%$ with stipend of $\$ 1100-41 / 2$ months; effective January 16, 1976. Funds are available from Lecturer funds within the department. (RBC \#379)
86. Re-appoint J. Clyde Armstrong (non-tenure) as Adjunct Associate Professor with academic rate of $\$ 9200$ at $26.08 \%$ with stipend of $\$ 1200-41 / 2$ months; effective January 16, 1976. Funds are available from Lecturer funds within the department. (RBC \#380)
87. Appoint Wen-Jo Chiang (non-tenure) as Instructor with academic rate of $\$ 8000$ at $25 \%$ with stipend of $\$ 1000-41 / 2$ months; effective January $16,1976$. Funds are available from Lecture $r$ funds within the department. (RBC \#381)

## Department of Mechanical Engineering

88. Appoint C. W. Garrard, Jr. (non-tenure) as Instructor with academic rate of $\$ 8800$ at $25 \%$ with stipend of $\$ 1100-41 / 2$ months; effective January 16, 1976. Funds are available from Lecturer funds within the department. (RBC \#388)
89. Appoint Richard L. Bennett (non-tenure) as Instructor with academic rate of $\$ 8000$ at $25 \%$ with stipend of $\$ 1000-41 / 2$ months; effective January $16,1976$. Funds are available from Lecturer funds within the department. (RBC \#389)
90. Re-appoint Frank C. Smith (non-tenure) as Instructor with academic rate of $\$ 8800$ at $25 \%$ with stipend of $\$ 1100-41 / 2$ months; effective January $16,1976$. Funds are available from Lecturer funds within the department. (RBC \#390)

RECOMMENDED AMENDMENTS TO THE 1975-76 BUDGET

Board Meeting - March 26, 1976

Department of Electrical Engineering
91. Re-appoint James S. Bailey (non-tenure) as Adjunct Assistant Professor with academic rate of $\$ 8000$ at $25 \%$ with stipend of $\$ 1000-41 / 2$ months; effective January 16, 1976. Funds are available from Lecturer funds within the department. (RBC \#392)
92. Appoint H. E. Welch (non-tenure) as Adjunct Associate Professor with academic rate of $\$ 10,400$ at $25 \%$ with stipend of $\$ 1300-41 / 2$ months; effective January 16, 1976. Funds are available from Lecturer funds within the department. (RBC \#393)

## Department of Industrial Engineering

93. Change the status of Subhash C. Singhal (non-tenure) from Graduate Teaching Associate with academic rate of $\$ 8712$ with stipend of $\$ 2178-41 / 2$ months at $50 \%$ to Instructor with academic rate of $\$ 8000$ at $25 \%$ with stipend of $\$ 1000$ $41 / 2$ months; effective January 16, 1976. Funds available from budgeted position. (RBC \#394)

Department of Computer Science
94. Re-appoint John R. Rumsey (non-tenure) as Lecturer with academic rate of $\$ 5600$ at $25 \%$ with stipend of $\$ 700-41 / 2$ months; effective January $16,1976$. Funds are available from Engineering Unallocated Faculty Salaries. (RBC \#382)
95. Re-appoint W. D. Baker (non-tenure) as Instructor with academic rate of $\$ 5600$ at $25 \%$ with stipend of $\$ 700-41 / 2$ months; effective January 16, 1976. Funds are available from Engineering Unallocated Faculty Salaries. (RBC \#383)
96. Appoint Robert S. Manna (non-tenure) as Instructor with academic rate of $\$ 8000$ at $25 \%$ with stipend of $\$ 1000-41 / 2$ months; effective January $16,1976$. Funds are available from Engineering Unallocated Faculty Salaries. (RBC \#384)

## GRADUATE SCHOOL

Criminal Justice Program
97. Appoint Irving C. Stone, Jr. (non-tenure) as Adjunct Associate Professor with academic rate of $\$ 8800$ at $25 \%$ with stipend of $\$ 1100-41 / 2$ months; effective January 16, 1976. Funds are available from Lecturer funds within the department. (RBC \#289)
98. Appoint Jack V. Strickland (non-tenure) as Adjunct Assistant Professor with academic rate of $\$ 9600$ at $25 \%$ with stipend of $\$ 1200-41 / 2$ months; effectve January 16, 1976. Funds are available from Lecturer funds within the delartment. (RBC \#290)

## RECOMMENDED AMENDMENTS TO THE 1975-76 BUDGET

Board Meeting - March 26, 1976
99. Appoint Vernell Sturns (non-tenure) as Adjunct Assistant Professor with academic rate of $\$ 7200$ at $25 \%$ with stipend of $\$ 900-41 / 2$ months; effective January 16, 1976. Funds are available from Lecturer funds within the department. (RBC \#292)
100. Appoint James M. McEntire (non-tenure) as Adjunct Assistant Professor with academic rate of $\$ 7200$ at $25 \%$ with stipend of $\$ 900-41 / 2$ months; effective January 16, 1976. Funds are available from Lecturer funds within the department. (RBC \#291)

## Urban and Regional Affairs

101. Appoint Frank W. Hill (non-tenure) as Adjunct Assistant Professor with academic rate of $\$ 12,800$ at $25 \%$ with stipend of $\$ 1600-41 / 2$ months; effective January 16, 1976. Funds are available from Urban Studies Unallocated Faculty Salaries. (RBC \#293)
102. Appoint Scott B. Cummings (non-tenure) as Assistant Prof essor with academic rate of $\$ 15,000$ at $100 \%$ with stipend of $\$ 8333-5$ months; effective January 1, 1976. Funds are available from Urban Studies Unallocated Faculty Salaries. (RBC \#294)

## COLLEGE OF ARCHITECTURE

## Department of Architecture and Environmental Design

103. Accept the resignation of Peter J. Wood (non-tenure), Assistant Professor with academic rate of $\$ 13,100$ effective January 15, 1976. (RBC \#299)
104. Appoint Joe B. Goldsteen (non-tenure) as Associate Professor with academic rate of $\$ 18,000$ at $100 \%$ with stipend of $\$ 10,000-5$ months; effective January 1, 1976. Funds are available from Architecture Unallocated Faculty Salaries. (RBC \#300)
105. Re-appoint John P. Shaw (non-tenure) as Visiting Professor with academic rate of $\$ 16,000$ at $25 \%$ with stipend of $\$ 2000-41 / 2$ months; effective January 16, 1976. Funds are available from Architecture Unallocated Faculty Salaries. (RBC \#349)
106. Transfer of Funds:

From: Unallocated Departmental Operating Computer Service
To: Architecture and Environmental Design $\$ 2,000$. Computer Service $\$ 2,000$.
For: To provide Computer funds to the department for use by the faculty for instructional purposes.
(RBC \#363)

THE UNIVERSITY OF TEXAS AT ARLINGTON
RECOMMENDED AMENDMENTS TO THE 1975-76 BUDGET
Board Meeting - March 26, 1976
107. Appoint Joel G. Sanders (non-tenure) as Adjunct Assistant Professor with academic rate of $\$ 24,000$ at $25 \%$ with stipend of $\$ 3,000-41 / 2$ months; effective January 16, 1976. Funds are available from Lecturer funds within the department. (RBC \#371)
108. Appoint Forrest S. Higgs (non-tenure) as Instructor with academic rate of $\$ 11,570$ effective January 16, 1976. Funds are available from Architecture Unallocated Faculty Salaries and Lecturer funds within the department. (RBC \#372)

## COMPUTER DEVELOPMENT AND TRAINING

109. Transfer of Funds:
From: Computer Services
To: $\quad$ Capital Outlay $\quad \$ 1,885$.
For: $\quad$ To provide funds for the purchase of terminal for use in the

(RBC $\# 284$ )

## SPECIAL ITEMS

Institute of Urban Studies
110. Appoint Philip D. Baumann (non-tenure) as Adjunct Assistant Professor with academic rate of $\$ 9600$ at $25 \%$ with stipend of $\$ 1200-41 / 2$ months; effective January 16, 1976. Funds are available from Unallocated Salaries. (RBC \#295)
111. Appoint Stan E. Wilkes (non-tenure) as Adjunct Assistant Professor with academic rate of $\$ 6000$ at $25 \%$ with stipend of $\$ 750-41 / 2$ months; effective January 16, 1976. Funds are available from Unallocated Salaries. (RBC \#296)
112. Cancel appointment of Philip D. Baumann (non-tenure) as Adjunct Assistant Professor with academic rate of $\$ 9600$ at $25 \%$ with stipend of $\$ 1200-41 / 2$ months; as of January 16, 1976. (RBC \#391)

## CURRENT RESTRICTED FUNDS

## Financial Aids

113. Transfer of Funds:
From: Estimated Income
To: $\quad$ Unallocated Salaries
For: $\quad$ Maintenance and Operation $\quad \$ 6134$.
To provide additional funds to the account to cover the employ-
ment of additional personnel and provide funds for fringe benefits
(RBC \#374)
```
Office of the President
    February 27, 1976
```

Mr. E. D. Walker
Deputy Chancellor
The University of Texas System
601 Colorado
Dear Mr. Walker:
The docket for the March 26,1976 meeting of the
Board of Regents is submitted for your recommendation
and presentation to the Board.
I recommend approval.
Sincerely yours,


Lorene L. Rogers President

LLR/aj
Attachment

# THE UNIVERSITY OF TEXAS AT AUSTIN 

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## March 26, 1976

## Meeting

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THE UNIVERSITY OF TEXAS AT AUSTIN
March 26, 1976

GIFTS TO THE UNIVERSITY OF TEXAS AT AUSTIN

## $D+F$

The following gifts have been received and I recommend acceptance by the Board.

A single asterisk preceding the name of the donor indicates no letter of transmittal from the donor. Two asterisks following the dollar amount indicate a noncash gift. In the case of unsold stock, the dollar amount stated is an appraisal or book value.

## DONOR

1 * American Marketing Association, Inc.
222 South Riverside Plaza Chicago, Illinois 60606

2 *American Psychological Association, Inc.
1200 l7th Street, N.W. Washington, D. C. 20006

3 Amoco Foundation, Inc.
Donald E. Burney
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4 Amoco Foundation, Inc.
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200 East Randolph Drive
Chicago, Illinois 60601
5 Atlantic Richfield Company
W. J. Westerlage

Division Controller
North American Producing Division
Post Office Box 2819
Dallas, Texas 75221

PURPOSE AND CONDITIONS
College of Business
$\$ 9,212.00$
Administration
Contribution to cover costs
of editing the Journal of Marketing

College of Social and 9,782.00 Behavioral Sciences
Contribution to the Department of Psychology to cover expenses of editing the Journal of Contemporary Psychology

College of Engineering 6,600.00 Contribution to the Department of Petroleum Engineering to support six undergraduate scholarships representing $\$ 4,800$ stipend and $\$ 1,800$ departmental grant

College of Natural Sciences $5,000.00$ Contribution to the Department of Geological Sciences for the Amoco Foundation Fellows hip in Geology for 1975-76

College of Engineering 7,500.00 Contribution in support of the Industrial As sociates Program

AMOUNT

$\square$
$\qquad$


GIFTS TO THE UNIVERSITY OF TEXAS AT AUSTIN
March 26, 1976

DONOR PURPOSE AND CONDITIONS AMOUNT

6 * Mary B. Auler
$\quad 1106$ West 29 th Street
Austin, Texas 78703

7 Mr . and Mrs. L. T. Barrow 3314 Chevy Chase Drive Houston, Texas 77019

College of Engineering $\$ 5,000.00$
Contribution to the Bureau of
Engineering Research for the
Murray Marschall Fund

College of Natural Sciences 6,000.00
Contribution to the Department
of Geological Sciences:
Hal P. Bybee Memorial
Fund $\$ 1,000$
F. L. Whitney Memorial

Book Fund 500
Dorothy Ogden Carsey
Scholarship Fund 500
Mackin Memorial Scholarship Fund500

Geology Library 500
International Map Library Fund 500
DeFord Summer Scholarship Fund500

Geophysical Equipment Fund 1,000
Professor of Sedimentary Geology 1,000

8 H. E. Butt Grocery Company
Charles C. Butt, President
Post Office Box 9216
Corpus Christi, Texas

9 Rocco C. Caffarelli
Educational Trust
c/o Frost National Bank
Post Office Box 1600
San Antonio, Texas 78296
College Entrance Examination Board
U. T. Austin

14,332.00 Contribution for scholarships for 27 designated students
College of Business
$5,000.00$
Administration
Contribution for the unrestricted use of the College
U. T. Austin

7,153.00
Contribution for scholarships
for eight designated students

Director
888 Seventh Avenue
New York, New York 10019

## GIFTS TO THE UNIVERSITY OF TEXAS AT AUSTIN

## March 26, 1976

## DONOR

1] Dow Chemical U.S.A. Everett Jacob Texas Division
Freeport, Texas 77541

12 * Educational Testing Service
Box 200
Berkeley, California
94704
13 Ethyl Corporation
Charles H. Zeanah
Director
Corporate Public Relations 330 South Fourth Street Richmond, Virginia 23217

14 Exxon USA Foundation
H. A. Reddicliffe

Secretary
800 Bell Avenue
Houston, Texas 77002

PURPOSE AND CONDITIONS
College of Engineering $\$ 15,000.00$
Contribution to the College of Engineering Foundation for the proposed Chair of Free Enterprise

Graduate School 5,752.00
Contribution for tuition and
fee charges for Ford Foundation
Fellows enrolled at UT-Austin

College of Engineering $\quad 10,000.00$
Contribution to the College of Engineering Foundation for the proposed Chair of Free Enterprise
U. T. Austin $5,220.00$

Contribution to match gifts made
by employees of Exxon Company,
U.S.A. and its affiliates:

College of Engineering $\$ 1,270$
U. T. Austin 415

Arts \& Sciences 25
Ex-Students' Association 45
College of Natural Sciences:
Department of Geological
Sciences 3,240
College of Business Admn. 125
School of Law 100
College of Engineering $5,000.00$
Contribution to the College of
Engineering Foundation for the proposed Chair of Free Enterprise
U.T.Austin 62,502.00

Contribution to the Measure-
ment and Evaluation Center to
support the professional re-
search and writing activities of Professor Emeritus Herschel
T. Manuel

GIFTS TO THE UNIVERSITY OF TEXAS AT AUSTIN
March 26, 1976

|  | DONOR | PURPOSE AND CONDITIONS | AMOUNT |
| :---: | :---: | :---: | :---: |
| 17 | Halliburton Education <br> Foundation, Inc. <br> John P. Harbin, President <br> 3211 Southland Center <br> Dallas, Texas 75201 | College of Engineering Contribution to the College of Engineering Foundation for the proposed Chair of Free Enterprise | \$35,000.00 |
| 18 | Hoblitzelle Foundation <br> Robert Lynn Harris <br> Grant Coordinator <br> 2522 Republic Bank Bldg. <br> Dallas, Texas 75201 | U. T. Austin <br> First payment of a $\$ 20,000$ grant for the "UT History Project: Special Collections" under the direction of Dr . Harry Ransom | 10,000.00 |
| 19 | Houston Endowment Inc. <br> J. H. Creekmore, President <br> Post Office Box 52338 <br> Houston, Texas 77052 | School of Communication Contribution to the Department of Journalism ffor the Martin Emmet Walter Scholarships | 5,000.00 |
| 20 | Houston Endowment Inc. <br> J. H. Creekmore, President <br> Post Office Box 52338 <br> Houston, Texas 77052 | School of Communication Contribution to the Department of Journalism for the Jesse H. Jones Scholarships in Journalism | 6,000.00 |
| 21 | Houston Endowment Inc. <br> J. H. Creekmore, President Post Office Box 52338 <br> Houston, Texas 77052 | School of Communication Contribution to the Department of Journalism for the Program of Public Affairs Reporting | $10,000.00$ |
| 22 | * The Lyndon Baines Johnson Foundation 2313 Red River Austin, Texas 78705 | Lyndon B. Johnson School of Public Affairs <br> Contribution for the Dean Rusk Chair representing the first payment on a pledge of $\$ 500,000$ | $15,000.00$ |
| 23 | The Lyndon Baines Johnson Foundation Mike Naeve Associate Director 2313 Red River Austin, Texas 78705 | Lyndon B. Johnson School of Public Affairs Contribution representing the third installment on a commitment of \$108,000 | $25,000.00$ |
| 24 | Joe J. King 853 Main Building Houston, Texas 77002 | College of Engineering Gift of 300 shares of Tenneco Inc. Common Stock to the Colleg of Engineering to be administere pursuant to Mr. King's Trust Deed dated December 11, 1957, to the Board of Regents for the Joe J. King Engineering Achievement Award | $7,725.00 \text { ** }$ <br> ge <br> ed |

GIFTS TO THE UNIVERSITY OF TEXAS AT AUSTIN March 26, 1976

|  | DONOR | PURPOSE AND CONDITIONS | AMOUNT |
| :---: | :---: | :---: | :---: |
| 25 | Mr . and Mrs. R. W. <br> McKinney <br> Post Office Box 8 <br> Nacogdoches, Texas 75961 | College of Engineering Contribution to the College of Engineering Foundation for the proposed Chair of Free Enterprise | \$ 5,000.00 |
| 26 | LTV Corporation Post Office Box 5003 Dallas, Texas 75222 | College of Engineering Contribution representing the second and final payment to the Engineering Foundation for the proposed Chair of Free Enterprise | 12,500.00 |
| 27 | * Mobil Foundation Inc. 150 East 42 nd Street New York, New York 10017 | College of Engineering Contribution for support of the Industrial Associates Program | 10,000.00 |
| 28 | * Mobil Oil Corporation <br> Ed Lautherback <br> Post Office Box 900 <br> Dallas, Texas 75221 | Marine Science Institute Contribution for the Sea Gravimeter Project | 10,000.00 |
| 29 | The Moody Foundation Robert L. Washington Grant Analyst 704 Moody National Bank Building <br> Galveston, Texas 77550 | U. T. Austin Contribution for scholarships for 52 designated students | 20,175.00 |
|  | R. Morgan Properties c/o Hayden W. Head Head \& Kendrick Bank \& Trust Tower Corpus Christi, Texas 78477 | College of Business <br> Administration <br> Contribution for the unrestricted use of the College | $5,000.00$ |
|  | * Pan American Health Organization 525 23rd Street, N.W. Washington, D. C. 20037 | College of Engineering Contribution to the Bureau of Engineering Research representing the second quarter payment for research project entitled "Development of Research and Environmental Pollution Control Programs for the State of Sao Paulo, Brazil" in agreement with The World Health Organization (original agreement forwarded with UT Austin docket of July 25 , 1975, Item 33, Page A-8) | $12,000.00$ |

## GIFTS TO THE UNIVERSITY OF TEXAS AT AUSTIN

March 26, 1976
DONOR
Jack and Katherine Pearce
Educational Foundation
Bryan F. Williams, Jr.
Chairman
Post Office Box 179
Galveston, Texas 77550
3.3 The Prescon Corporation

Earl Cutler, Vice President
2426 Cee Gee, Suite 102
San Antonio, Texas 78217
PURPOSE AND CONDITIONS
AMOUNT
U. T. Austin

7,500.00
Contribution in accordance with agreement between the Jack and Katherine Pearce Educational Foundation and the Board of Regents of The University of Texas System approved March 5, l973, to provide assistance for student housing

College of Engineering 5,000.00 Contribution to the Bureau of Engineering Research for research project entitled "Static and Fatigue Strength of StayedBridge Cable" representing the second of three payments totaling \$14,536.00 (original agreement forwarded with UTAustin docket of February 13 1976, Page A-6, Item 21)

Prestressed Concrete Institute
20 North Wacker Drive Chicago, Illinois 60606

College of Engineering
Contribution to the Bureau of Engineering Research for research project entitled "Test of Four Panel Post-Tensioned Flat Plate with Banded Tendon Arrangement" representing the first of two payments totaling \$16,000.00

35 Price Waterhouse Foun-
College of Business $5,000.00$ dation
William R. Gifford
Secretary
Administration
Contribution for an endowment
for the Student/Faculty Excellence
1251 Avenue of the Americas Fund in the College of Business New York, New York 10020 Administration Foundation

Mr. and Mrs. James A.
Reichert
Post Office Box 491
Houston, Texas 77001

Administration
Gift of 100 shares of Xerox
Corporation Common Stock for an endowment the income from which might be granted to a faculty member showing interest in the Free Enterprise System, perhaps in the Institute of Constructive Capitalism

GIFTS TO THE UNIVERSITY OF TEXAS AT AUSTIN
March 26, 1976

|  | DONOR | PURPOSE AND CONDITIONS | AMOUNT |
| :---: | :---: | :---: | :---: |
| 37 | * Sabine Royalty Corporation Ashley H. Priddy President 1200 Mercantile Bank Bldg. Dallas, Texas 75201 | College of Business <br> Administration <br> Contribution for the Institute for Constructive Capitalism in the Graduate School of Business | 5,000.00 |
| 38 | Schlumberger Well Services <br> C. A. Rosenthal <br> Director of Industry Affairs <br> Post Office Box 2175 <br> Houston, Texas 77001 | College of Engineering Contribution to the College of Engineering Foundation for the proposed Chair of Free Enterprise | 10,000.00 |
| 39 | * Shell Oil Company <br> Post Office Box 20329 <br> Houston, Texas 77025 | College of Engineering Contribution to the Department of Chemical Engineering for the program on in situ conversion of Texas lignite to synthetic fuels | 5,000.00 |
| 40 | * Shell Oil Company Post Office Box 20329 Houston, Texas 77025 | Marine Science Institute Contribution to support Shell's portion of the Gulf Tectonic project | 15,000.00 |
| 41 | * Shell Oil Company <br> Post Office Box 20329 <br> Houston, Texas 77025 | U. T. Austin <br> Contribution for support of the International Ex-Students' Conference on Energy to be held on April 26-30, 1976, on the UT-Austin campus | 5,000.00 |
| 42 | Tenneco Oil <br> Dan B. Johnson <br> Vice President <br> Post Office Box 2511 <br> Houston, Texas 77001 | College of Engineering Contribution to support the program of Enhanced Recovery under the direction of Dr. Robert Schechter and Dr. W. H. Wade | 5,000.00 |
| 43 | The Texas Interscholastic <br> League Foundation <br> R. J. Kidd <br> Assistant Secretary <br> Box 8028 University Station <br> Austin, Texas 78712 | U. T. Austin Contribution for scholarships for 67 designated students | 22,612.50 |

DONOR
44 Texas Life Insurance Association Dawson Sterling
Secretary-Treasurer c/o American General
Life Insurance Company
Post Office Box 1931
Houston, Texas 77001

PURPOSE AND CONDITIONS AMOUNT
College of Business $\quad \$ 10,400.00$
Administration
Contribution representing
\$7,500 for supplemental salary
for Eugene Wisdom and $\$ 400$
for compensation for teaching
assistants $\$ 7,900$
Contribution to the scholar-
ship fund for the School of Insurance 2,500

College of Business
25,000.00
Administration
Contribution for the Institute
for Constructive Capitalism in the Graduate School of Business

College of Engineering 25,000.00
Contribution to the College of
Engineering Foundation for the proposed Chair of Free Enterprise

College of Business $\quad 15,625.00$
Administration
Payment of principal on
Applied Devices Corporation debentures held by U.T.
Foundation for the benefit of the College of Business
Administration
College of Natural Sciences $10,000.00$
Contribution to the Department of Geological Sciences for the Fred M. Bullard Professorship Fund
U. T. Austin 6,000.00

Contribution for scholarships
for 12 designated students
College of Business 6,300.00
Administration
Contribution to the Department
of Accounting for the Arthur
Young Professorship of Accounting

GIFTS TO THE UNIVERSITY OF TEXAS AT AUSTIN
March 26, 1976

DONOR

51 * Zurn Industries, Inc.
Everett F. Zurn, Chairman
2214 West Eighth Street
Erie, Pennsylvania 16512

PURPOSE AND CONDITIONS

College of Engineering Contribution in support of the Industrial Participant Program

The following nonmonetary gifts have also been received:

52 * Louis Alexander $\quad 704$ Mulberry Lane

Humanities Research Center 1,600.00 ** Glft to the History of Aviation Collection of a collection of pamphlets, printed materials, transcripts, photographs, and ephemera relating to the activities of the NASA Space Center

53 * Dr. Evelyn M. Carrington Room 7-F Cambridge Towers 1801 Lavaca Austin, Texas 78701

54 Robert L. Clark, Jr. 9 East Tenth Street, Apt. 5F New York, New York 10003

55 Dr. W. H. Crain Humanities Research Center 1,800.00 ** 2511 San Gabriel Gift to the Theatre Arts Library Austin, Texas 78705

56 Dr. Thomas M. Cranfill 1901 Cliff Street
Austin, Texas 78705

57 * W. R. Curtis
ABC Interstate Theatres, Inc.
Majestic Building
Dallas, Texas 75201

Humanities Research Center 1,600.00 ** Gift of a collection of eight colored intaglios by Donald Saff for the Iconography Collection of a collection of Original Drawings and Watercolors of Costume and Decor renderings for Les Folies Bergere
Humanities Research Center 650.00 ** Gift to the Library of three diaries written while she was traveling throughout the world between 1963 and 1972 , 600.00 *

Humanities Research Center 12,615.00 ** Gift of a collection of sixtyfour works of art for the Iconography Collection

Humanities Research Center 248,389.00 ** Gift to the Theatre Arts Library of a collection of movie posters, press books, and other advertising material

GIFTS TO THE UNIVERSITY OF TEXAS AT AUSTIN
March 26, 1976

|  | DONOR | PURPOSE AND CONDITIONS | AMOUNT |
| :---: | :---: | :---: | :---: |
| 58 | Duncan Emrich 2029 Connecticut Avenue, Washington, D. C. 20008 | Humanities Research Center Gift of a primitive East Indian bronze statue of an elephant tossing a man and a number of related materials for special collections | \$ 4,050.00 ** |
| 59 | Mrs. L. Monroe Glass <br> 9 East 84th Street <br> New York, New York 10028 | University Art Museum Gift of a painting, Adam and Eve, by Guillermo Meza, ca. 1941, for the Art of the Americas Collection | 8,000.00 ** |
| 60 | * Edwin H. Gray, M. D. Student Health Center The University of Texas at Austin Austin, Texas 78712 | U. T. Austin <br> Gift to the Student Health Center of five items of technical equipment for use by the professional staff | 947.00 ** |
| 61 | Jack V. Hazzard Executive Vice President Frates Communities, Inc. 1515 City Bank Building Austin, Texas 78701 | College of Business <br> Administration <br> Gift to the Graduate School of Business of a painting by Helmet Barnett | 8,500.00 ** |
| 62 | Buffie Johnson 333 East 43 Street New York, New York 10017 | University Art Museum Gift of the sculpture, Column of Points, by William Tarr for the collection of 20 th century American sculpture | 8,000.00 ** |
| 63 | Harry Macklowe, President Wolf \& Macklowe Company, Inc. <br> 866 Second Avenue <br> New York, New York 10017 | University Art Museum Gift of a sculpture, Machu Picchu, by David Slivka for the Art of the Americas Collections | 21,000.00 ** |
| 64 | * Mrs. Edgar Lee Masters Pine Plains, New York 12567 | Humanities Research Center Gift to the Library of the collection of letters both written and received by the late Edgar Lee Masters for the Edgar Lee Masters Collection | 32,640.00 ** |
| 65 | *Mr. and Mrs. Charles R. Vance 2505 Brooklawn Drive Temple, Texas 76501 | Humanities Research Center Gift of a collection of scrapbooks and folders including historical letters and autographs and Winkley family papers | 2,750.00 ** |

PURPOSE AND CONDITIONS
AMOUNT
Humanities Research Center \$ 1,750.00 ** Gift to the Library of the books, Le Musee Francais, Recueil Complet des Tableaux, Statues et Bas-Reliefs, qui composent la Collection Nationale, and La Basilica di San Marcos in Venezia

TRAVEL FOR FACULTY AND STAFF. The following trips are reported in accordance with Section 12 of the Budget Rules and Procedures for 1975-76 when expenses are paid from funds not specifically designated for travel; and in accordance with Section 13.33 of Chapter III of Part Two of the Rules and Regulations of the Board of Regents for the Government of The University of Texas when the absence is for a longer period than twenty-nine days.

1. E1don Sutton, Vice President for Research, February 17,1976 only, to College Station, Texas, to represent the President of The University of Texas at Austin at the Texas State Agency Energy Conservation Conference at Texas A\&M. Expenses in the approximate amount of $\$ 34.56$ are to be paid from Academic Development Fund.
2. Bernice Melvin, Instructor in French and Italian, February 27 - March 4, 1976, to New York, New York, to attend the Annual Convention of Teachers of English as a Second Language and to deliver a paper on the role of memory in language acquisition. Expenses in the approximate amount of $\$ 254.73$ are to be paid from Academic Development Fund.
3. Benjamin Matta, Teaching Assistant III, Department of Economics, February 19-20, 1976, to E1 Paso, Texas and Albuquerque, New Mexico, to recruit minority students. Expenses in the approximate amount of $\$ 370$ are to be paid from Academic Development Fund.
4. Michae1 J. S. Dewar, Professor of Chemistry, December 22, 1975 - January 31, 1976, to London, Eng1and, and Geneva, Switzerland, to present lectures at the University of Geneva, and to visit universities in London. No expense to the University.
5. 

Leon Long, Professor of Geology, February 9 August 30,1976 , to Sâo Paulo, Brazil, to teach at the Universidad de Sâo Paulo and to work on developing a collaborative graduate education project in isotope geology. Expenses in the approximate amount $\$ 1,100$ are to be paid; $\$ 600$ from ILAS Foreign Travel, $\$ 300$ from ILAS Domestic Travel, and $\$ 200$ from URI Grant.

THE UNIVERSITY OF TEXAS AT AUSTIN
March 26, 1976

TRAVEL FOR FACULTY AND STAFF:
6. C. Fred Moore, Professor of Physics, January 4 -

May 31, 1976, to Los Alamos, New Mexico, to work at the Los Alamos Scientific Laboratory developing the medium energy nuclear physics program for the University. Expenses in the approximate amount of $\$ 2,682$ are to be paid from Medium Energy Program Development.
7. Charles E. Lamb, Assistant Professor of Curriculum and Instruction, January 29-31, 1976, to Los Angeles, California, to participate as a speaker at the Sixth Annual Interdisciplinary International Conference on Piagetian Theory and the Helping Professions. Expenses in the approximate amount of $\$ 213.47$ are to be paid from Academic Development Fund.
8. Ruben D. Olivarez, Director, Curriculum and Instruction, January 18-20, 1976, to Washington, D. C., to meet with National Teacher Corps administrators. Expenses in the approximate amount of $\$ 294.73$ are to be paid from Academic Development Fund.
9.

Ernest D. O'Neil, Assistant Professor of Curriculum and Instruction, February $26-28$, 1976, to E1 Paso, Texas, to participate at the National Council of Teachers of Mathematics meeting. Expenses in the approximate amount of $\$ 106.73$ are to be paid from Academic Development Fund.
10. Richard Tucker, Visiting Professor of Civil Engineering, January 28-31, 1976, to Scottsdale, Arizona, to attend the Annual Forum of the American Institute of Constructors. Expenses in the approximate amount of $\$ 355$ are to be paid from Academic Development Fund.
11. Ronald G. Boling, Assistant Professor of Art, February 5-8, 1976, tonacogdoches, Texas, to conduct a workshop at the Stephen F. Austin University. Expenses in the approximate amount of $\$ 160.64$ are to be paid from Academic Development Fund.
12. Jerry Harris, Director of Public Programs, College of Fine Arts, January 22-24, 1976, to Houston, Texas, to attend the third annual meeting and seminars of the Texas Association of Arts Councils. Expenses in the approximate amount of $\$ 120$ are to be paid from Academic Development Fund.
13. Kenneth W. Prescott, Professor of Art, January 31February 5, 1976, to Chicago, Illinois, to attend College Art Association meetings to interview candidates for new positions in department. Expenses in the approximate amount of $\$ 391.47$ are to be paid from Academic Development Fund.
14. Jarvis Ulbricht, Assistant Professor of Art, April 11-16, 1976, to St. Louis, Missouri, to participate in a meeting of the National Art Education Association. Expenses in the approximate amount of $\$ 210$ are to be paid from Academic Development Fund.

## TRAVEL FOR FACULTY AND STAFF:

15. Sam G. Whitten, Associate Professor, Graduate School of Library Science, February 18-20, 1976, to Corpus Christi, Brownsville and Laredo, Texas, to recruit minority students. Expenses in the approximate amount of $\$ 60.50$ are to be paid from Academic Development Fund.
16. Ronald E. Wyllys, Assistant Professor, Graduate School of Library Science, February 12-13, 1976, to Prairie View, Houston and Galveston, Texas, to recruit minority students. Expenses in the approximate amount of $\$ 124$ are to be paid $\$ 80$ from Trave1, $\$ 44$ from Academic Development Fund.
17. Ronald Eugene Wyllys, Assistant Professor, Graduate School of Library Science, February 18-20, 1976, to Corpus Christi, Kingsville, Harlingen, Edinburg and Laredo, Texas, to recruit minority students. Expenses in the approximate amount of $\$ 187.46$ are to be paid $\$ 126.96$ from Travel, $\$ 60.50$ from Academic Development Fund.
18. George K. Herbert, Associate Dean, Graduate School of Social Work February 27 - March 3, 1976, to Philadelphia, Pennsylvania, to participate in a conference of Social Work Deans. Expenses in the approximate amount of $\$ 438$ are to be paid from Academic Development Fund.
19. Jack Otis, Dean, Graduate School of Social Work, February 29 - March 3, 1976, to Philadelphia, Pennsylvania, to participate in a conference of Social Work Deans. Expenses in the approximate amount of $\$ 368$ are to be paid from Academic Development Fund.
20. James Byron Whited, Police Officer, University Police, January 8 - February 11, 1976, to Port Aransas, Texas, to provide police protection and service during the continued surgery and recuperation of co-worker. Expenses in the approximate amount of $\$ 386.08$ are to be paid from Travel.

USE OF TEXTBOOKS WRITTEN BY FACULTY. In accordance with Chapter III, Section 24 of Part One of the Regents' Rules and Regulations for the Government of The University of Texas, I recommend approval of the use of the following faculty authored books as textbooks for the 1975-76 fiscal year.
*Indicates that these books have not been previously used at the University.

| Title | Author (s) | Cost to Student | Royalty per author per volume |
| :---: | :---: | :---: | :---: |
| Geology | Leon E. Long | \$14.50 | \$2.175 |

GOLF SCHEDULE FOR 1976. I recommend approval of the following Golf Schedule for 1976 as submitted by the Athletics Director Darrell K. Royal and Chairman of Athletics Council J. Neils Thompson.

| January 31, February 1 | Aggie Invitational | College Station |
| :--- | :--- | :--- |
| February 7,8 | Atascocita | Houston |
| February $14,15,16$ | Pan American II | Monterrey, Mexico |
| March $4,5,6$ | Border Olympics | Laredo |
| March $26,27,28$ | Morris Williams II | Austin |
| To Be Determined | Bevo | Austin |
| To Be Determined | Longhorn | Austin |
| April 3,4 | Woodland Hills II | Nacgodoches |
| April 9,10 | Oklahoma State | Austin |
| April $14,15,16,17$ | All American | Houston |
| April 23,24 | Southwest Conference | Waco |
| June $9,10,11,12$ | NCAA | Albuquerque, New Mexico |

SUPPLEMENT TO THE GOLF SCHEDULE FOR 1976. I recommend approval of the following Supplement to the Golf Schedule for 1976 as submitted by the Athletics Director Darrell K. Royal and Chairman of Athletics Council J. Neils Thompson.

February 23, 24 Southwest Texas State Wimberly Bobcat Tournament

TENNLS SCHEDULE FOR 1976. I recommend approval of the following Tennis Schedule for 1976 as submitted by the Athletics Director Darrell K. Royal and Chairman of Athletics Council J. Neils Thompson.

## February 10

February 12,13,14,15
February 18
February 20
February 23
February 24
February 26,27,28
March 4
March 6
March 10 or 11
March 13 (tentative)
March 15
March 16
March 18,19,20,21
March 23
March 27
March 29
April 3
April 10
April 12
April 17
April 19
April 22,23,24
May $24,25,26,27,28,29$

| Central Texas |  |
| :---: | :---: |
| National Indoors |  |
|  | Southwest Texas State |
| Central Texas |  |
|  | North Texas State |
| New Mexico University |  |
| Corpus Christi Invitational |  |
| Arkansas |  |
| Texas Christian |  |
| Baylor |  |
| University of Miami |  |
| Southern Louisiana |  |
| Louisiana State |  |
| Rice Invitational |  |
| University of Wisconsin |  |
| Southern Methodist |  |
| Michigan State |  |
| Texas Tech |  |
| Texas A \& M |  |
| Rice |  |
| University of Houston |  |
| Pepperdine |  |
|  | Southwest Conference Tourney |
|  | NCAA's |

Killeen
Madison, Wisconsin
Austin
Austin
Austin
Austin
Corpus Christi
Austin
Fort Worth
Austin
Miami, Florida
Lafayette, Louisiana
Baton Rouge, Louisiana
Hous ton
Austin
Austin
Austin
Lubbock
Austin
Hous ton
Houston
Austin
To Be Announced
Corpus Christi

THE UNIVERSITY OF TEXAS AT AUSTIN
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ADDITION TO THE TENNIS SCHEDULE FOR 1976. I recommend approval of the following Addition to the Tennis Schedule for 1976 as submitted by the Athletics Director Darrell K. Royal and Chairman of Athletics Council J. Neils Thompson.

March 22 Oklahoma City University Austin

APPROVAL OF INSTRUCTOR OF CREDITED COURSE OFFERED BY THE ASSOCIATION OF RELIGIOUS TEACHERS, In accord with our currently established procedures, the Biblical Studies Committee chaired by Professor Marcia Herndon has recommended that Reverend Anthony Lee Ash be approved to teach for the Church of Christ Bible Chair for the Spring 1976 to replace Mr. Pat Harrell who was unable to resume his duties this semester.


GRANTS, CONTRACTS, AND AGREEMENTS (NON-GOVERNMENTAL)

1. Grant (letter dated January 9, 1976), by which Adria Laboratories, Inc., Wilmington, Delaware, provides $\$ 18,000$ for the period effective December 1, 1975 through November 30, 1977, and currently funds $\$ 10,000$ of that amount. The research entitled, "Determination of Indoprofen in Bilogical Fluids," will be under the direction of Dr. Robert V. Smith, Associate Professor, College of Pharmacy.
2. Grant (letter dated 13 January 1976), by which Adria Laboratories, Inc., Wilmington, Delaware, provides $\$ 21,544$ for the period effective December 1, 1975 through November 30, 1976, and currently funds $\$ 11,544$ of the total amount. The "Program to Study the Cardiotoxicity of Adriamycin," will be under the direction of Dr. Karl Folkers, Ashbel Smith Professor of Chemistry, and Director, Institute for Biomedical Research.
3. Grant (letter dated December 15, 1975), by which The Educational Foundation of America, Westport, Connecticut, provides \$14,519 for support of a matching grant for research entitled, "Antimetabolites of Coenzyme $Q$ for Cancer Therapy, " beginning December 15, 1975. The research is under the direction of Dr. Karl Folkers, Ashbel Smith Professor of Chemistry, and Director, Institute for Biomedical Research.
4. Grant (letter dated 24 December 1975), by which Farbwerke Hoechst AG, Pharma-Forschung Chemi, Frankfurt, Germany, provides $\$ 5,000$ for the purchase of quantities of Coenzyme $Q$ for continuing investigations. The grant is effective beginning December 24, 1975, and the project is under the direction of Dr. Karl Folkers, Ashbel Smith Professor of Chemistry and Director, Institute for Biomedical Research.
5. Revision to Agreement between The University of Texas at Austin and FERRING AB, Malmö, Sweden, provides $\$ 20,000$ additional funds and extends the agreement for the period January 1, 1976, through December 31, 1976. The research entitled, "Hormonal Control of Lipid Metabolism, "continues under the direction of Dr. Karl Folkers, Ashbel Smith Professor of Chemistry, and Director, Institute for Biomedical Research.
6. Amendment No. 7 to Agreement (dated June 30, 1972) between The University of Texas at Austin and Georgia State University, Atlanta, Georgia, by which GSU provides $\$ 1,900$ for additional travel and communication costs for the current period June 30, 1972 through June 30, 1976. The project entitled, "To Assess the Economic and Social Impact of Welfare in Rural South Before and After Legislative Reform, "continues under the direction of Dr. Vernon M. Briggs, Professor of Economics.
7. Agreement between The University of Texas at Austin and Pan American Health Organization, Pan American Sanitary Bureau, World Health Organization Regional Office, Washington, D. C., by which PAHO provides $\$ 5,887$ for support of research entitled, "Developmental, Ultrastructural and Taxonomic Studies of Dermatophytic Fungi." The Agreement is effective for the period January 1, 1976 through December 31, 1976, and the research will be under the direction of Dr. Garry T. Cole, Associate Professor of Botany.
8. Grant (letter dated 7 November 1975) by which Pharmaceutical Manufacturers Association Foundation, Inc., provides $\$ 5,000$ as first-year support effective January 1, 1976 through December 31, 1976, for research entitled, "The Hepatic Cell Culture as a Model to Investigate Drug Metabolism and Toxicity, " under the direction of Dr. Daniel Acosta, Jr., Assistant Professor, College of Pharmacy.

## GRANTS, CONTRACTS, AND AGREEMENTS (NON-GOVERNMENTAL)

9. Grant (File No. 75-266, dated December 9, 1975) by which Sid W. Richardson Foundation, Fort Worth, Texas, provides $\$ 205,000$ for support of a program entitled, "To Service Rapidly Expanding Texas Community Colleges by Providing Well-Prepared Administrators and Teachers to Meet Critical Manpower Needs." The grant is effective for the school years 1976-77 through 1979-80 and the program will be under the direction of Dr. John E. Roueche, Professor of Educational Administration.
10. Contract between Texas Municipal League, Austin, Texas, and The University of Texas at Austin, by which the League provides \$8,095 for support of research entitled, "Urban Capacity and Social Services Delivery." The contract is effective for the period October 1, 1975 through May 31, 1976, and the research will be under the direction of R. Barry Lovelace, Lyndon B. Johnson School of Public Affairs.
11. Supplemental Agreement No. 2, to Subcontract No. 4082, by which Union Carbide Corporation, Oak Ridge, Tennessee, extends the period of performance through June 30, 1976, without additonal funds. The research entitled, "Investigation of Salt Transport in Vertical Boreholes and Brine Invasion into Fresh Water Aquifers," continues under the direction of Dr. A. L. Podio, Associate Professor of Petroleum Engineering, and Dr. R. M. Knapp, Assistant Professor of Petroleum Engineering.
12. Modification No. 2 to Contract No. 953976, by which the Jet Propulsion Laboratory, California Institute of Technology, Pasadena, California, deletes from the contract paragraph (a)(2)(A), requirement of a final report. The research entitled, "Numerical and Analytical Procedures for the Analysis of Astronomical Spectra," continues under the direction of Dr. Charles Jenkins, Associate Director, McDonald Observatory.
13. 

Contract between The University of Texas at Austin (together with Campus Services, Incorporated) and Gibson's Coin Copy, signed by Vice President James H. Colvin, whereby the Ex-Students' Association, of which Campus Services, Inc. is a subsidiary, has the sole and exclusive right to manage the operation of all vending which are installed on the Campus of the University, together with all extensions thereof in Travis County, Texas, except for the vending machines which may beorwill hereafter be located in Memorial Stadium, Gregory Gymnasium, and Disch-Falk Field. Campus Services, Incorporated by this contract grants to Gibson's Coin Copy the right to operate coin-operated copying machines on the University campus. The contract became effective September 1, 1975 and shall continue in effect unlesss modified in writing by the mutual agreement or terminated by either party. Gibson's Coin Copy agrees to furnish the University with monthly reports as to gross volume of each machine operated by Gibson's coin copy and will pay to the University an amount equal to total rental on all copying machines installed pursuant to this agreement.
GRANTS, CONTRACTS, AND AGREEMENTS (NON-GOVERNMENTAL):
14. Contract between The University of Texas at Austin (Joe C. Thompson Conference Center) and the Oak Farms Dairies, signed by Vice President James H. Colvin, whereby the Oak Farms Dairies agrees to furnish dairy products (milk and ice cream) for the Joe C. Thompson Conference Center. The contract became effective February 1,1976 and shall terminate August 31, 1976.
15. Agreement between The University of Texas at Austin (University Art Collections) and Pedro Vallenilla Echeverria of Residencias Parque Castellana, Apartado 4-C, La Castellana, Caracas, Venezuela, signed by Vice President James H. Colvin, whereby the University agrees to borrow a collection of art of the Cubist School known as the Vallenilla Cubist Collection from Pedro Vallenilla Echeverria. The contract became effective January 19, 1976 and shall terminate January 31, 1977. The University agrees to pay all actual costs of necessary conservation work, if any, all other expenses directly related to the handing, exhibition and study of the collection, all transportation charges, all insurance premiums, and all duties and taxes if any.
16. Amendment to existing contract between The University of Texas at Austin (Division of Housing and Food Service), together with Campus Services, Incorporated, and $\mathrm{M}-\mathrm{F}$ Route Laundries, Incorporated, signed by Vice President James H. Colvin, which will transfer the responsibilities incident to the cleaning of the laundry rooms at Gateway and Colorado Apartments. For this service, M-F Route Laundries, Incorporated agrees to pay $\$ 200$ per month to the University. The Amendment became effective February l, 1976. A11 other terms and conditions not hereby amended are to remain in full force and effect.
17. Amendment to existing contract between The University of Texas at Austin (together with Campus Services, Incorporated) and Neelley Vending Company, signed by Vice President James H. Colvin, which amends Item 4 of the schedule of commission as it appears in Article 4 of the above mentioned contract as follows:
ITEM $\quad$ Cigarettes $\quad$ stay at $60 \% \quad$ From $\frac{\text { COMMISSION }}{13.33 \% \text { to } 10.83 \%}$

The Amendment became effective January 1, 1976. A11 other terms and conditions not hereby amended are to remain in full force and effect.

GRANTS, CONTRACTS, AND AGREEMENTS (STATE):

1. Modification No. 1, to Subcontract No. 75-1 between The University of Texas Medical Branch at Galveston (Prime Contract NO1-MB-24391) and UT-Austin, by which UTMB provides $\$ 31,725$ additional funds for a new total of $\$ 49,626$ and extends performance through June 30, 1976. The project (which assists in an Area Health Education Center program) continues under the dir ection of Dr. Victor A. Yanchick, Associate Professor, College of Pharmacy.
2. 

Memorandum of Agreement No. UT-75-1 between Texas A\&M University, Texas Water Resources Institute, College Station, and The University of Texas at Austin, by which A\&M provides \$9, 946 for support of Water Research Project A-036-TEX entitled, "Legal Aspects of Land Use Regulation of Lake Shorelands by State and Local Governments for the Protection of Lakes." The Agreement is effective for the period January 1, 1976 through December 31, 1976, and the project will be under the direction of Dr. Corwin W. Johnson, William C. Liedtke Professor, School of Law.
3. Memorandum of Agreement No. UT-75-1 (Project B-196 TEX) between Texas A\&M University, Texas Water Resources Institute, College Station, and The University of Texas at Austin, by which Texas A\&M provides $\$ 14,046$ for support of a water resources research project entitled, "Design of Urban Drainage Systems for Downstream Flood Plain Management." The Agreement is effective for the period October 1, 1975 through September 30, 1976, and the project will be under the direction of Mr. Leo R. Beard, Technical Director, Center for Research in Water Resources.
4. Interagency Cooperation Contract No. IAC (76-77)-0474 Amendment No. 1, between The University of Texas at Austin (College of Education) and the Texas Education Agency (Department of Special Education and Special Schools), signed by Vice President James H. Colvin, which changes the budget line items, but the total stipend remains the same. The Amendment became effective December 29, 1975. A11 other terms and conditions not hereby amended are to remain in full force and effect. 5. Interagency Cooperation Contract No. IAC (76-77)0819, between The University of Texas at Austin (College of Engineering-Biomedical Engineering Program) and the Austin State Hospital of the Texas Department of Mental Health and Mental Retardation, signed by Vice President James H. Colvin, whereby the University agrees to conduct a lecture series class on "Coronary Care Unit, Data Interpretation Basic" for personnel of the Texas Department of Mental Health and Mental Retardation. The contract became effective January 5, 1976 and terminated January 31, 1976. Total amount of the contract shall not exceed $\$ 75$.
6.

Interagency Cooperation Contract No. IAC (76-77)-
0833, between The University of Texas at Austin (Bureau of Economic Geology) and the General Land Office, signed by Vice President James H. Colvin, whereby the University agrees to conduct the first phase of a two year study of sediment distribution and bottom conditions in the bays and state-owned portion of the Gulf of Mexico continental shelf. The contract became effective January 1,1976 and shall terminate May 31,1976 . Total amount of the contract shall not exceed \$151,558.

GRANTS, CONTRACTS, AND AGREEMENTS (STATE):
7. Interagency Cooperation Contract No. IAC (76-77)0834 , between The University of Texas at Austin (Bureau of Business Research) and the Governor's Office (Education Resources), signed by Vice President James H. Colvin, whereby the University agrees to provide the Governor's Office with consulting services. The contract became effective January 2 1976 and shall terminate May 31, 1976. Total amount of the contract shall not exceed $\$ 3,000$.
8.

Interagency Cooperation Contract No. IAC (76-77)0835, between The University of Texas at Austin (Joe C. Thompson Conference Center) and the Comptroller of Public Accounts, signed by Vice President James H. Colvin, whereby the University agrees to furnish facilities for the "Assistance for Field Managers, Employees, Comprehensive Training Program." The contract became effective December 22, 1975 and shall terminate August 31, 1976. Total amount of the contract shall not exceed $\$ 4,000$.
9.

Interagency Cooperation Contract No. IAC (76-77)0837 , between The University of Texas at Austin (Computation Center) and the Texas Governor's Energy Advisory Council, signed by Business Manager Bobby G. Cook, for Vice President James H. Colvin, whereby the University agrees to furnish the Texas Governor's Energy Advisory Council the services of its Computation Center computer systems. The contract became effective January 1, 1976 and sha11 terminate August 31, 1977. Total amount of the contract shal1 not exceed $\$ 10,000$.
10. Interagency Cooperation Contract No. IAC (76-77) 0844 , between The University of Texas at Austin (Bureau of Economic Geology) and the Governor's Office (Education Resources), signed by Vice President James H. Colvin, whereby the University will acquire and plot mineral production localities on acquired base maps; including current production historical production and mineral occurrence localities. These maps will be retained by the University and this data will be used to compile a Mineral Atlas of Texas. The contract became effective January 15,1976 and shall terminate August 31, 1976. Total amount of the contract shall not exceed $\$ 56,383$.
11.

Interagency Cooperation Contract No. IAC (76-77)0845 , between The University of Texas at Austin (Bureau of Business Research) and the Texas Tourist Development Agency, signed by Vice President James H. Colvin, whereby the University agrees to provide the Texas Tourist Development Agency with a partial analysis of the effectiveness of the Texas Tourist Development Agency. The contract became effective January 14, 1976 and sha11 terminate March 31, 1976. Total amount of the contract shall not exceed $\$ 3,625$.

0858, between The University of Texas at Austin (Center for Research in Water Resources) and Southwest Texas State University, signed by Vice President James H. Colvin, whereby Southwest Texas State University agrees to purchase the following publications in the water resources symposium series from the University.
No. 4 - Contemporary Development in Water Law
No. 5 - Conflicts in Water Resources Planning
No. 6 - App1ications of Commercial Oxygen to Water and
No. 7 - Vastewater Systems
No. 8 - Water Survival in Water and Wastewater Systems

The contract became effective February 1,1976 and shall terminate August 31, 1976. Total amount of the contract shall not exceed \$150.
13. Interagency Cooperation Contract No. IAC (76-77)0864, between The University of Texas at Austin (Division of Extension) and the San Antonio State Hospital of the Texas Department of Mental Health and Mental Retardation, signed by Vice President James H. Colvin, whereby the University will conduct an intensive course on 'Management of Alcoholism Programs" combining resident study, study/work assignments in regular work setting residential facilities and group discussions, task forces, problem-solving models and individual technical assistance-consultation for personnel of the San Antonio State Hospital. The contract became effective February 1, 1976 and shal1 terminate March 12, 1976. Total amount of the contract shall not exceed $\$ 125$.
14. Interagency Cooperation Contract No. IAC (76-77)0874 , between The University of Texas at Austin (R\&D Center for Teacher Education) and Stephen F. Austin State University, signed by Vice President James $H$. Colvin, whereby the University agrees to conduct a faculty in-service development workshop. The contract became effective February 6. 1976 and terminated February 7, 1976. Total amount of the contract shall not exceed \$416.64.
15. Interagency Cooperation Contract No. IAC (76-77)0875, between The University of Texas at Austin (Computation Center) and Texas Tech University, signed by Vice President James H. Colvin, whereby the University agrees to furnish Texas Tech University the services of its Computation Center computer systems. The contract became effective January 28, 1976, and shall terminate August 31, 1976. Total amount of the contract shall not exceed $\$ 1,000$.
16. Interagency Cooperation Contract No. IAC (76-77)0876 , between The University of Texas at Austin (LBJ School of Public Affairs) and The University of Texas Medical Branch at Galveston, signed by Vice President James H. Colvin, whereby the University of Texas Branch at Galveston agrees to provide a medical nutritional team and perform a detailed evaluation of the health and nutritional impact of the 'Meal System for the Elderly" feeding trial that is to be conducted under the direction of the University. The contract became effective January 1, 1976 and shall terminate August 31, 1976. Total amount of the contract shall not exceed $\$ 15,000$.

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17. Interagency Cooperation Contract No. IAC (76-77)-

0882 , between The University of Texas at Austin (Drug Dynamics Institute) and the Texas Department of Community Affairs, signed by Vice President James H. Colvin, whereby the University agrees to conduct analytical laboratory, consultative, and research activities for the Texas Department of Community Affairs. The contract became effective February 1, 1976 and shall terminate January 31,1977 . Total amount of the contract shall not exceed $\$ 20,678$.
18.

Interagency Cooperation Contract No. IAC (76-77)0884 , between The University of Texas at Austin (Center for Natural Resources and Environment) and the Texas Historical Commission, signed by Vice President James H. Colvin, whereby the Texas Historical Commission agrees to prepare a comprehensive, illustrated, technical report concerning archeological resources of the Lower Canyons of the Rio Grande for inclusion within an interdisciplinary scientific study of the said region presently under preparation by the University of Texas Natural Areas Survey. The contract became effective February 1,1976 and shall terminate May 31, 1976. Total amount of the contract shall not exceed $\$ 4,800$.
19.

Interagency Cooperation Contract No. IAC (76-77)0890 , between The University of Texas at Austin (Bureau of Business Research) and Southwest Texas State University, signed by Vice President James H. Colvin, whereby Southwest Texas State University will purchase publications of the Bureau of Business Research. The contract became effective February 1 , 1976 and shall terminate August 31,1976 . Total amount of the contract shall not exceed $\$ 50$.
20.

Interagency Cooperation Contract No. IAC (76-77)0891 , between The University of Texas at Austin (University Press) and West Texas State University, signed by Business Manager Bobby G. Cook for Vice President James H. Colvin, whereby the University agrees to provide West Texas State University with University Press publications. The contract became effective February 1,1976 and shall terminate August 31, 1977. Total amount of the contract shall not exceed $\$ 100$.

1. Modification AFOSR 74-2660C, to Grant AFOSR 74-2660, by which the U.S. Air Force, Air Force Office of Scientific Research, Arlington, Virginia, extends the grant through February 29, 1976, without additional funds. The research entitled, "The Theory and Application of Hybrid Finite Element Approximations to Problems in Solid Mechanics," continues under the direction of Dr. John Tinsley Oden, Professor of Aerospace Engineering and Engineering Mechanics.
2. Contract F29601-76-C-0043, by which the U.S. Air Force, Air Force Special Weapons Center, Kirtland Air Force Base, New Mexico, provides $\$ 98,675$ (Travis County) for the design and fabrication of a 70.0 GHz measurement radar system. The contract is effective for the period February 4, 1976 through November 30, 1976, and the research will be conducted in Applied Research Laboratories under the direction of Dr. Chester M. Mc Kinney, Jr., Director.
3. 

Contract F44620-76-C-0072, by which the U. S. Air Force, Air Force Office of Scientific Research, Bolling Air Force Base, D. C., provides $\$ 42,849$ (Travis County) for support of research entitled, "Suppression of Flutter Phenomenon," for the period effective February 1, 1976 through January 31, 1977; however, only $\$ 18,878$ is funded through June 30, 1976. The research will be under the direction of Dr. Ronald O. Stearman, Professor of Aerospace Engineering and Engineering Mechanics.
4. Modification P00001, to Contract F33615-76-C-1010, by which the U.S. Air Force, Air Force Systems Command, AeronauticalSystems Division, Wright-Patterson Air Force Base, Ohio, provides $\$ 8,507$ additional funds (Travis County) and increases the total estimated cost to $\$ 158,507$ for the contract period effective September 15, 1975 through December 31, 1975. The research entitled, "Advanced Radar Flight Test Analysis," is performed in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.
5. Modification P00004, Change to Contract F33615-76-C-1010, by which the U.S. Air Force, Air Force Systems Comm and, Aeronautical Systems Division, Wright-Patterson Air Force Base, Ohio, provides $\$ 41,000$ incremental funds and completes the funding of $\$ 150,000$ awarded with the contract. The advanced radar flight test analysis continues in Applied Research Laboratories under the direction of Dr. Chester M. Mc Kinney, Jr., Director.
6. Modification P00007, Supplemental Agreement to Contract DAAH01-73-C-1016, by which the U.S. Army, Army Missile Command, Redstone Arsenal, Alabama, increases the estimated cost of the contract by $\$ 40,874$ (Travis County) and of that amount funds $\$ 20,500$ through June 30,1976 . The contract is extended for the period January 30, 1976 through January 29, 1977, and the research entitled, "Analysis of the Launch-Tube Flowfield," continues under the direction of Dr. John C. Westkaemper and Dr. John J. Bertin, Associate Professors of Aerospace Engineering and Engineering Mechanics.
7. Modification P00008, Administrative Change to Contract DAAH01-73-C-1016, by which the U.S. Army, Army Missile Command, Redstone Arsenal, Alabama, corrects accounting data in Modification P00007. The research entitled, "Analysis of LaunchTube Flowfield, " continues under the direction of Dr. John J. Bertin and Dr. John C. Westkaemper, Associate Professors of Aerospace Engineering and Engineering Mechanics.

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8. Modification P00005, Supplemental Agreement to Contract DACA87-75-C-0026, by which the U. S. Army Engineer Division, Huntsville, Alabama, authorizes utilization of equipment produced during Phase I of the contract for work to be completed in Phase II, already funded, which results in the deobligation of $\$ 21,000$ (Travis County-decrease) and reduction of total estimated cost of the contract to $\$ 426,209$. The development of a parametric sonar for detection of buried objects continues in Applied Research Laboratories under the direction of Dr. Chester M. Mc Kinney, Jr., Director.
9. Modification P00006, to Contract DACW72-74-C-0017, by which the U.S. Army Coastal Engineering Research Center, Fort Belvoir, Virginia, extends the contract through Apri1 30, 1976, without additional funds. The research entitled, "Bathymetry and Hydrography of the Corpus Christi Water Exchange Pass, Mustang Island, Texas," continues under the direction of Dr. E. William Behrens, The University of Texas at Austin Marine Science Institute, Marine Science Laboratory, Port Aransas, Texas.
10. Modification P00010, Administrative Change to Contract DMA800-74-C-0086, by which the Defense Mapping Agency Topographic Center, Procurement Division, Washington, D. C., provides $\$ 44,495$ (Travis County) to increase the estimated cost of the contract to $\$ 150,495$; of the additional amount there are $\$ 22,000$ current funding, for a total funding of $\$ 128,000$. The contract period ( $1 / 15 / 73-1 / 15 / 76$ ) is extended through January 14, 1977, and the Doppler tracking system operation continues in Applied Research Laboratories under the direction of Dr. Chester M. Mc Kinney, Jr., Director.
11. Modification No. 10, Supplemental Agreement to Contract N00014-67-A-0126-0004, by which the Department of the Navy, Office of Naval Research, Arlington, Virginia, transfers scientific effort to Contract N00014-76-C-0484 and deletes final report requirements from -0004 to the new contract. The magnetotelluric studies continue in Electrical Engineering Research Laboratory under the direction of Dr. H. W. Smith, Director, and Dr. F. X. Bostick, Professor of Electrical Engineering.
12. Modification P00002, Supplemental Agreement to Contract N00014-75-C-0604, by which the Department of the Navy, Office of Naval Research, Arlington, Virginia, increases the estimated cost of the contract by $\$ 10,000$ (Travis County) to a new total of $\$ 20,000$ and of that amount currently funds $\$ 5,000$. The period of performance is extended through December 31, 1976, and the research entitled, "Underwater Acoustic Imaging System Tests," continues in Applied Research Laboratories under the direction of Dr. Chester M. Mc Kinney, Jr., Director.
13. Modification P00001, to Contract N00014-75-C-0538, by which the Department of the Navy, Office of Naval Research, Arlington, Virginia, provides $\$ 30,000$ additional funds (Travis County) and extends the contract for the period January 1, 1976 through December 31, 1976. The research entitled, "Experimental and Theoretical Study of Dielectric Properties of Gases Adsorbed on Metal Surfaces," continues under the direction of Dr. William D. McCormick and Dr. Peter R. Antoniewicz, Associate Professors of Physics.
14. Modification P00001, to Contract N00014-75-C-0922, by which the Department of the Navy, Office of Naval Research, Arlington, Virginia, provides $\$ 37,500$ additional funds (Travis County) and extends the contract for the period May 1, 1976 through July 31, 1977; however, only $\$ 30,000$ is currently funded for the period ending April 30, 1977. The research entitled, "Structure Reactivity in Catalytic Systems, " continues under the direction of Dr. John M. White, Associate Professor of Chemistry.
15. Contract N00014-76-C-0484, by which the Department of the Navy, Office of Naval Research, Arlington, Virginia, provides $\$ 15,000$ (Travis County) for the contract period October 1, 1975 through September 30, 1976; however, funding of only $\$ 12,000$ is a vailable through June 30, 1976, after all funds under the predecessor contract shall have been expended. The performance of magnetotellurics studies begun under N00014-67-A-0126-0004 continues in the Electrical Engineering Research Laboratory under the direction of Dr. H. W. Smith, Director, and Dr. F. X. Bostick, Professor of Electrical Engineering.
16. Modification P000011, Administrative Change to Contract N00024-75-C-6070, by which the Department of the Navy, Naval Sea Systems Command, Washington, D. C., provides incremental funds of $\$ 340,000$ to increase total funding to $\$ 1,754,616.85$ (against $\$ 2,900,000$ awarded with the contract) for the current period effective November 5, 1974 through November 4, 1976. The research entitled, "Naval Shipyard and TRF Sonar Support and Assistance," continues in Applied Research Laboratories under the direction of Dr. Chester M. Mc Kinney, Jr., Director.
17. Modification P000002, Administrative Change to Contract N00024-75-C-6078, by which the Department of the Navy, Naval Sea Systems Command, Washington, D. C., extends the period of performance through March 31, 1976. The automatic classification development and sound propagation effects study continues in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.
18. Modification P00001, Supplemental Agreement to Contract N00024-76-C-6022, by which the Department of the Navy, Naval Sea Systems Command, Washington, D. C., provides $\$ 52,886$ additional funds (Travis County) for the contract period September 2, 1975, through December 1, 1976, and increases the total estimated cost to $\$ 692,297$ and total funding to $\$ 492,886$. The research entitled, "Automatic Classification Development and Instrumentation," continues in Applied Research Laboratories under the direction of Dr. Chester M. Mc Kinney, Jr., Director.
19. Contract N00024-76-C-6079, by which the Department of the Navy, Naval Sea Systems Command, Washington, D. C., provides $\$ 345,000$ (Travis County) as total estimated cost of detection/classification systems development. The contract is effective for the period January 5, 1976 through March 4, 1977, and allows anticipatory costs beginning October 1, 1975. Current incremental funds of $\$ 250,000$ are provided for Items 0001 and 0005 for fourteen months, and the research will be performed by Applied Research Laboratories under the direction of Dr. Chester M. Mc Kinney, Jr., Director.

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20. Modification P00008, Supplemental Agreement to Contract N00123-73-C-2140, by which the Department of the Navy, Naval Regional Procurement Office, Long Beach, California, extends the contract through December 31, 1975, without additional funds, and authorizes transfer of final deliverable items as governmentfurnished equipment to follow-on contract N00123-76-C-0537. The research entitled, "Design and Fabrication of a Vehicle Search Sonar," continues in Applied Research Laboratories under the direction of Dr. Chester M. Mc Kinney, Jr., Director.
21. Modification P00020, Supplemental Agreement to Contract N00140-74-C-6316, by which the Department of the Navy, Naval Regional Procurement Office, Philadelphia, Newport Division, Newport, Rhode Island, adds incremental funds of \$68,000 and increases total funding to $\$ 789,600$ against the contract award of $\$ 950,000$. The sonar test instrumentation development and AN/BQQ-3 technical support continues in Applied Research Laboratories under the direction of Dr. Chester M. Mc Kinney, Jr., Director.
22. Modification P00021, Administrative Change to Contract N00140-74-C-6316, by which the Department of the Navy, Naval Regional Procurement Office, Philadelphia, Newport Division, Newport, Rhode Island, corrects accounting data appearing in P00017 and makes an Item correction in P00020 without otherwise changing the contract. The sonar test instrumentation development and AN/BQQ-3 technical support continues in Applied Research Laboratories under the direction of Dr. Chester M. Mc Kinney, Jr., Director.
23. Modification P00022, Supplemental Agreement to Contract N00140-74-C-6316, by which the Department of the Navy, Naval Regional Procurement Office, Philadelphia, Newport Division, Newport, Rhode Island, provides $\$ 45,000$ incremental funds toward the $\$ 950,000$ awarded with the contract for the period June 14, 1974 through May 31, 1976, for total funding of $\$ 834,600$. The sonar test instrumentation development and AN/BQQ-3 technical support continues in Applied Research Laboratories under the direction of Dr. Chester M. Mc Kinney, Jr., Director.
24. Contract N60921-76-C-0103, by which the Department of the Navy, Naval Surface Weapons Center, White Oak Laboratory, Silver Spring, Maryland, provides \$134, 966 (Travis County) as total estimated cost for development, repair and improvement of the NTC Systems, and of that amount funds $\$ 40,000$. The contract is effective for the period January 16, 1976 through January 15, 1977, with performance in Applied Research Laboratories under the direction of Dr. Chester M. Mc Kinney, Jr., Director.
25. Contract N60921-76-C-A109, by which the Department of the Navy, Naval Systems Weapons Center, Dahlgren Laboratory, Dahlgren, Virginia, provides $\$ 40,000$ (Travis County) for support of research entitled, "Simulation of Ionospheric Effects on Satellite-to-Satellite Tracking Data." The contract is effective for the period January 12, 1976 through January 11, 1977, and research performance will be in Applied Research Laboratories under the direction of Dr. Chester M. Mc Kinney, Jr., Director.

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26. Modification P00003, Administrative Change to Contract N61339-75-C-0058, by which the Department of the Navy, Naval Training Equipment Center, Orlando, Florida, provides $\$ 500,000$ incremental funds toward the total award of $\$ 3,279,389$ for the period effective February 14, 1975 through June 13, 1978, for a total funding of $\$ 1,521,000$. The design and development of a shipborne minehunting sonar continues in Applied Research Laboratories under the direction of Dr. Chester M. Mc Kinney, Jr., Director.
27. Modification No. 1S, to Contract NAS 9-14491, by which National Aeronautics and Space Administration, Lyndon B. Johnson Space Center, Houston, Texas, provides $\$ 68,959$ additional funds (Travis County) and extends the contract for the period January 31, 1976 through February 17, 1977. The research entitled, "Adsorption Pumping Cryogenic Refrigerator Studies," continues under the direction of Dr. William H. Hartwig, Professor of Electrical Engineering, and Dr. Hugo Steinfink, Professor of Chemical Engineering.
28. Contract NAS 9-14892, by which National Aeronautics and Space Administration, Lyndon B. Johnson Space Center, Technical Support Procurement Branch, Houston, Texas, provides $\$ 15,000$ (Travis County) for support of research entitled, "Mathematical Model Definition for Imaging Radar Systems Performance." The contract is effective for the period January 29, 1976 through July 31, 1976, and performance will be in Applied Research Laboratories under the direction of Dr. Chester M. Mc Kinney, Jr., Director.
29. Supplement No. 6 to Grant NGR 44-012-209, by which National Aeronautics and Space Administration, Washington, D. C., provides $\$ 10,944$ additional funds (Travis County) and extends the grant for the period December 1, 1975 through November 30, 1976. The research entitled, "Optical and Millimeter Studies of X-ray Sources," continues under the direction of Dr. Paul A. Vanden Bout, Associate Professor of Astonomy.
30. Supplement No. 5, to Grant NGR44-012-258, by which National Aeronautics and Space Administration, Washington, D. C., extends the grant through August 31, 1976, without additional funds. The research entitled, "Line Strengths and Stark Broadening of Lines of Atoms and Ions," continues under the direction of Dr. Roger D. Bengtson, Associate Professor of Physics.
31. Supplement No. 1, to NSG-2065, by which National Aeronautics and Space Administration, Ames Research Center, Moffett Field, California, provides $\$ 30,000$ additional funds (Travis County) and extends the grant for the period February 1, 1976 through January 31, 1977. The research entitled, "Antecedents of Achievement and Creativity," continues under the direction of Dr. Robert L. Helmreich, Professor of Psychology.
32. Supplement No. 1, to Grant NSG-9021, by which National Aeronautics and Space Administration, Lyndon B. Johnson Space Center, Houston, Texas, provides \$27, 800 additional funds (Travis County) and extends the grant for the period February 1, 1976 through January 31, 1977. The research entitled, "Evolution of the Lunar Regolith Based on Ferromagnetic Resonance and Magnetic Studies," continues under the direction of Dr. Wulf Achim Gose, The University of Texas at Austin Marine Science Institute, Geophysics Laboratory, Galveston, Texas.

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33. Modification No. 7, Supplemental Agreement to Contract E(40-1)-3919 (formerly AT(40-1)-3919), by which the U.S. Energy Research and Development Administration, Oak Ridge Operations, Oak Ridge, Tennessee, extends the contract through December 31, 1976, without additional funds. The Nuclear Reactor Teaching Laboratory continues under the direction of Dr. E. Linn Draper, Associate Professor of Mechanical Engineering, and Director.
34. Letter Supplement (dated 29 January 1976) to Contract E(40-1)-4900, by which the U.S. Energy Research and Development Administration, Oak Ridge Operations, Oak Ridge, Tennessee, provides $\$ 50,815$ additional funds (Travis County) and extends the contract for the period December 1, 1975 through March 31, 1976. The "Geothermal Resource Management and Scope-of-Work Study" continues under the direction of Dr. Myron H. Dorfman, Assistant Professor of Petroleum Engineering.
35. Supplement No. 1 to Amendment No. 2, to Grant R803395, by which the U.S. Environmental Protection Agency, Washington, D. C., provides $\$ 8,000$ additional funds (Travis County) for the current grant period September 23, 1975 through September 22, 1976. The research entitled, "Characterization of Shrimp Baculovirus," continues under the direction of Dr. Max D. Summers, Associate Professor of Botany.
36. Modification No. 1, to Contract CO-05-60484-00, by which the Federal Energy Administration, Office of Procurement, Washington, D. C., substitutes Liability to Third Persons Clause in the General Provisions under the contract. The Study on Direct and Indirect Economic, Social, and Environmental Impacts of the Passage of the California Nuclear Safeguards Initiative continues under the direction of Dr. H. H. Woodson, Alcoa Professor of Electrical Engineering, and Dr. Martin L. Baughman, Associate Director, Center for Energy Studies.
37. Modification No. 2, to Contract CO-05-60484-00, by which the Federal Energy Administration, Office of Procurement, Washington, D. C., revises reporting requirements and extends the contract through May 17, 1976, without additional funds. The Study on Direct and Indirect Economic, Social and Environmental Impacts of the Passage of the California Nuclear Safeguards Initiative continues under the direction of Dr. H. H. Woodson, Alcoa Professor of Electrical Engineering, and Dr. Martin L. Baughman, Associate Director, Center for Energy Studies.
38.

Grant FS-24699-76-190, by which National Endowment for the Humanities, Washington, D. C., provides $\$ 38,423$ (Travis County) for support of a project entitied, "Roman Culture in the Age of Augustus." The grant is effective for the period January 1, 1976 through August 20, 1976, and the project will be under the direction of Dr. G. Karl Galinsky, Professor of Classics.
39. Modification No. 7, Supplemental Agreement to Contract $\mathrm{E}(40-1)-3992$ (formerly AT-(40-1)-3992), by which the Energy Research and Development Administration, Oak Ridge Operations, Oak Ridge, Tennessee, provides \$155,000 additional funds (Travis County) and extends the contract for the period September 1, 1975, through August 31, 1976. The research in elementary particle theory continues under the direction of Dr. E. C. G. Sudarshan, Professor of Physics.

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40. Modification No. 1, to Contract WQ5AC100, by which the National Commission on Water Quality, Washington, D. C., provides $\$ 1,500$ additional funds (Travis County) for the current period September 8, 1975 through February 28, 1976. The project for assistance in preparation of the Industrial Impact portion of the Economic and Social Impact section's Technical Appendix continues under the direction of Dr. Kenneth W. Tolo, Acting Dean, Lyndon B. Johnson School of Public Affairs.
41. Modification No. 1, to Contract E(05-1)-1660, by which the U. S. Energy Research and Development Administration, Grand Junction Office, Grand Junction, Colorado, extends the contract th rough October 31, 1976, without additional funds. The research entitled, "Uranium Potential of the Catahoula Formation, Texas A Stratigraphic, Depositional and Geochemical Evaluation, "continues under the direction of Dr. L. F. Brown, Jr., Professor of Geological Sciences.
42. Letter 281.00 dated January 20 , 1976, by which the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Environmental Research Laboratories, Boulder, Colorado, provides a no-cost time extension for NOAA Grant No. 04-5-022-12 through June 30, 1976. The research entitled, "Finite-Amplitude Effects in Atmospheric Propagation," continues in Applied Research Laboratories under the direction of Dr. Chester M. Mc Kinney, Jr., Director.
43. Contract CX 702960107, by which the U.S. Department of the Interior, National Park Service, Santa Fe, New Mexico, provides $\$ 45,000$ (Travis County) beginning January 14, 1976, with field work to be completed by June 1, 1976 and final report submitted by September 13, 1977. The project entitled, "Archaeological Investigations in the Palmeto Bend Reservoir Area," continues under the direction of Dr. David S. Dibble, Director, Texas Archaeological Survey.
44. Amendment No. 6 to Grant No. 1069-587075, by which the Department of State, Bureau of Educational and Cultural Affairs, Washington, D. C., provides $\$ 75,000$ additional funds (Travis County) and extends the grant for the period January 1, 1976 through August 31, 1976. The project entitled, "Orientation and Academic Programs for Groups of Portuguese Teachers," continues under the direction of Dr. Joe W. Neal, Professor of Speech Communication, and Director, International Office.
45. Contract DOT-FH-11-8900, by which the U.S. Department of Transportation, Federal Highway Administration, Washington, D. C., provides $\$ 109,740$ (Travis County) for support of research entitled, "Slip Behavior of Friction-Type Joints with Coated Faying Surfaces." The contract is effective for the period February 5, 1976 through August 5, 1977, and the research will be under the direction of Dr. Joseph A. Yura, Professor of Civil Engineering, and Dr. Karl H. Frank, Assistant Professor of Civil Engineering.
46. Modification No. 2, Supplemental Agreement to Contract NIE-C-74-0088, by which the Department of Health, Education, and Welfare, National Institute of Education, Washington, D. C., in creases estimated cost by $\$ 22,592$ (Travis County) for a new total of $\$ 497,292$ and extends the contract period (3/16/74-8/31/76) for one month through September 30, 1976; new and incremental funds totaling $\$ 180,738$ are provided to fully fund the total amount. The project entitled, "Evaluation of Teaching," continues in the Research and Development Center for Teacher Education under the direction of Dr. Gary D. Borich, Assistant Professor of Educational Psychology.

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47. Modification No. 2, Supplemental Agreement to Contract NIE-C-74-0089, by which the Department of Health, Education, and Welfare, National Institute of Education, Washington, D. C., increases estimated cost by $\$ 57,790$ (Travis County) for a new total of $\$ 628,948$ and extends the contract period ( $3 / 17 / 74-7 / 31 / 76$ ) for two months through September 30, 1976; new and incremental funds totaling $\$ 170,000$ are provided to fully fund the total amount. The project entitled, "Correlates of Effective Teaching," continues in the Research and Development Center for Teacher Education under the direction of Dr. Jere Brophy, Associate Professor of Educational Psychology.
48. Modification No. 8, Supplemental Agreement to Contract NE-C-00-3-0066, by which the Department of Health, Education, and Welfare, National Institute of Education, Washington, D. C., increases estimated cost by $\$ 47,407$ (Travis County) for a new total of \$1, 051, 543 and extends the contract ( $3 / 1 / 73-8 / 31 / 76$ ) for one month through September 30, 1976; new and incremental funds totaling $\$ 131,702$ are provided to fully fund the total amount. The Research and Development Teacher Education Program continues under the direction of Dr. Robert F. Peck, Professor of Educational Psychology.
49. Grant G007503914, by which the Department of Health, Education, and Welfare, Office of Education, Washington, D. C., provides $\$ 2,887$ equivalent in Egyptian pounds for support of a Faculty Research Abroad Program (Fulbright Hays) Fellowship for participant Peter F. Abboud to conduct research in the Arab Republic of Egypt. The grant is effective for the period September 15, 1975 through August 15, 1976, and the program will be coordinated in the Graduate School by Dr. Irwin C. Lieb, Vice-President and Dean of Graduate Studies.
50. Revision No. 2, to Grant OEG-0-73-1195, by which the Department of Health, Education, and Welfare, Office of Education, Washington, D. C., extends the grant through March 31, 1976, without additional funds. The special experimental demonstration project entitled, "Adult Performance Level Study--Phase II," continues in the Industrial and Business Training Bureau.
51. Revised Grant GM06590-17, by which the Department of Health, Education, and Welfare, Public Health Service, National Institute of General Medical Sciences, Bethesda, Maryland, provides $\$ 6,000$ additional funds (Travis County) for support of research entitled, "Biochemistry of a-Keto Acid Dehyrogenase Complexes," for the current period August 1, 1975 through July 31, 1976. The total project period is August 1, 1975 through July 31, 1980, and the research continues under the direction of Dr. Lester J. Reed, Professor of Chemistry.
52. Grant GM11300-13, by which the Department of Health, Education, and Welfare, Public Health Service, National Institute of General Medical Sciences, Bethesda, Maryland, provides \$27,386 (Travis County) for support of research entitled, "Metabolic Controls in Light-Driven Metabolism," for the period February 1, 1976 through January 31, 1977. The total project period is February 1, 1974 through January 31, 1979, and the research continues under the direction of Dr. Jack Myers, Professor of Botany and Zoology.

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53. Grant GM 19582-04, by which the Department of Health, Education, and Welfare, Public Health Service, National Institute of General Medical Sciences, Bethesda, Maryland, provides \$9, 314 (Travis County) for support of research entitled, "Chromosome Structures and Meiotic Mechanisms," for the period February 1,1976 through January 31, 1977. The total project period is February 1, 1976 through January 31, 1979, and the research continues under the direction of Dr. Marjorie Maguire, Associate Professor of Zoology.
54. Grant GM 19770-04, by which the Departmnet of Health, Education, and Welfare, Public Health Service, National Institute of General Medical Sciences, Bethesda, Maryland, provides \$53,599 (Travis County) for support of research entitled, "Male Recombination - Mutator System in Drosophila, " for the period April 1, 1976 through March 31, 1977. The total project period is April 1, 1976 through March 31, 1979, and the research continues under the direction of Dr. Yuichiro Hiraizumi, Professor of Zoology.
55. Grant GM20024-03, by which the Department of Health, Education, and Welfare, Public Health Se rvice, National Institute of General Medical Sciences, Bethesda, Maryland, provides \$23, 746 (Travis County) for support of research entitled, "The Role of Egg Organization Du ring Early Development, " for the period February 1, 1976 through January 31, 1977. The total project period is February 1, 1976 through January 31, 1979, and the research will be under the direction of Dr. Gary L. Freeman, Associate Professor of Zoology.
56. Grant HL12528-08, by which the Department of Heal th, Education, and Welfare, Public Health Service, National Heart and Lung Institute, Bethesda, Maryland, provides $\$ 21,580$ (Travis County) for support of research entitled, "NMR Relaxation of Liquid Crystal Systems," for the period February 1, 1976 through January 31, 1977. The total project period is February 1, 1975 through January 31, 1978, and the research continues under the direction of Dr. Charles G. Wade, Associate Professor of Chemistry.
57. Grant K04-ES70088-05, Development Award-Research Career Program, by which the Department of Health, Education, and Welfare, Public Health Service, National Institute of Environmental Health Sciences, Bethesda, Maryland, provides $\$ 25,000$ (Travis County) for support of research entitled, "Mechanisms of Enzymatic Oxygen Fixation." The grant is effective for the period April 1, 1976 through March 31, 1977, and the research continues under the direction of Dr. L. Joe Berry, Professor of Microbiology (Sponsor) and Dr. David T. Gibson, Associate Professor of Microbiology (Awardee).
58. Modification No. 6, Supplemental Agreement to Contract N01-AM-3-2205, by which the Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, National Institute of Arthritis, Metabolism, and Digestive Diseases, Bethesda, Maryland, provides $\$ 50,000$ additional funds (Travis County) and extends the contract for the period December 1, 1975 through October 31, 1976. The research entitled, "Physiological Transport Parameters in Patients in Peritoneal and Hemodialysis," continues under the direction of Dr. Robert P. Popovich, Associate Professor of Chemical Engineering.

THE UNIVERSITY OF TEXAS AT AUSTIN
March 26, 1976
GRANTS, CONTRACTS, AND AGREEMENTS (FEDERAL):
59. Grant AER 76-04169, by which National Science Foundation, Wa shington, D. C., provides $\$ 46,000$ for support of a project entitled, "Documentation and Dissemination of Research Results for the Energy Systems Modeling-Interfuel Competition." The grant is effective for the period January 15, 1976 through December 31, 1976, and the project will be under the direction of Dr.Martin L. Baughman, As sociate Director, Center for Energy Studies.
60. Amendment A01, to Grant AER74-02060 (formerly GI-42497)
by which National Science Foundation, Washington, D. C., provides $\$ 232,400$ additional funds (Travis County) and extends the grant for the period October 1, 1975 through October 31, 1977. The research entitled, "Tertiary Oil Recovery Processes," continues under the direction of Dr. William H. Wade, Professor of Chemistry.
61. Amendment A05, to Grant AST71-03131 (formerly MPS7103131), by which National Science Foundation, Washington, D. C., conveys full right, title, and interest in and to certain items for Federal property to The University of Texas at Austin, with the grant period remaining March 1, 1975 through August 31, 1976. The research entitled, "Extragalactic and Solar System Radio Astronomy," continues under the direction of Dr. James N. Douglas, Professor of Astronomy.
62. Grant BNS76-02972, by which National Science Foundation, Washington, D. C., provides $\$ 5,000$ (Travis County) for support of Doctoral Dissertation Research entitled, "Mate Choice and Sexual Selection in the Pigeon, Columba livia. "The grant is effective for the period January 1, 1976 through June 30, 1978, and the research will be performed by Nancy Tyler Burley (Candidate) under the direction of Dr. Eric R. Pianka, Associate Professor of Zoology (Advisor).
63. Amendment A01, to Grant CHE 75-14461, by which National Science Foundation, Washington, D. C., approves the designation of Dr. Robert $E$. Wyatt as the replacement project director. The project period remains January 1, 1976 through June 30, 1976, and the Research Conference on Gas Kinetics originally under the direction of Dr. William $\bar{C}$. Gardiner and Dr. John M. White continues under the direction of Dr. Robert E. Wyatt, Associate Professor of Chemistry.
64. Grant CHE 76-00186, by which National Science Foundation, Washington, D. C., provides $\$ 49,800$ (Travis County) for support of research entitled, "Quantum Theory of Energy Transfer in Chemical Reactions: Application to the $\mathrm{F}+\mathrm{H}_{2}$ Reaction." The grant is effective for the period January 1, 1976 through June 30, 1978, and the research will be under the direction of Dr. Robert E. Wyatt, Associate Professor of Chemistry.
65. Amendment A04, to Grant CHE 71-03344 ! formerly grant MPS71-03344), by which National Science Foundation, Washington, D. C., provides $\$ 37,700$ additional funds (Travis County) and extends the grant for the period January 1, 1976 through June 30, 1977. The research entitled, "Mechanisms of Orgənic Electrode Reactions," continues under the direction of Dr. Allen J. Bard, Professor of Chemistry.

## GRANTS, CONTRACTS, AND AGREEMENTS (FEDERAL):

66. Amendment A06, to Grant DEB 71-00645 (formerly BMS71-00645), by which National Science Foundation, Washing ton, D.C., extends the grant through February 28, 1977, without additional funds. The research entitled, "Collaborative Research on Structure of Ecosystems, Part 2," continues under the direction of Dr. W. Frank Blair, Professor of Zoology; Dr. Tom J. Mabry, Professor of Botany; Dr. B. L. Turner, Professor of Botany; and Dr. Daniel Otte, Assistant Professor of Zoology.
67. Grant DEB76-02189, by which National Science Foundation, Washington, D.C., provides $\$ 3,000$ (Travis County) for support of Doctoral Dissertation research entitled, "A Systematic and Evolutionary Study of Solanum, Section Androceras." The grant is effective for the period February 15, $\overline{976}$ through July 31 , 1978, and the research will be performed by Michael D. Whalen (Candidate) under the direction of Dr. Marshall C. Johnston, Professor of Botany (Advisor).
68. Amendment A02, to Grant DMR72-03247, by which National Science Foundation, Washington, D.C., provides $\$ 35,000$ additional funds (Travis County) and extends the grant for the period January l, 1975 through J une 30, 1977. The research entitled, "High Pressure Syntheses Magnetic and Electrical Properties of Selected Ternary Chalcogenide Systems," continues under the direction of Dr. Hugo Steinfink, Professor of Chemical Engineering.
69. Amendment A02, to Grant DUE73-10191 (formerly GY-10928) by which National Science Foundation, Washington, D. C., extends the grant through May 31, 1976, without additional funds. The Instructional Scientific Equipment Program continues under the direction of Dr. Elmer L. Hixson, Professor of Electrical Engineering.
70. Grant EAR75-22201, by which National Science Foundation, Washington, D. C., provides $\$ 44,000$ (Travis County) for support of research entitled, "Magmatic Evolution in the Trans-Pecos Province." The grant is effective for the period January l, 1976 through June 30, 1978, and the research will be under the direction of Dr. Daniel S. Barker, Professor of Geological Sciences.
71. 

Grant ENG75-07846, by which National Science Foundation, Washington, D.C., provides $\$ 68,000$ (Travis County) for support of research entitled, "Convergence and Accuracy of Finite Element Approximations in Finite Elasticity. " The grant is effective for the period January 1, 1976 through June 30, 1978, and the research will be under the direction of Dr. J. Tinsley Oden, Professor of Engineering Mechanics.
72. Amendment A06, to Grant HES71-04422 (formerly EPP71-04422), by which National Science Foundation, Washington, D. C., provides $\$ 25,530$ additional funds (Travis County) for the current grant period October 31, 1975 through August 31, 1976. The research entitled, "The Use of Computer-Based Teaching Techniques in Undergraduate Science and Engineering Education," continues under the direction of Dr. John J. Allan, Associate Professor of Mechanical Engineering and Dr. J.J. Lagowski, Professor of Chemistry and Education.

THE UNIVERSITY OF TEXAS AT AUSTIN March 26, 1976
GRANTS, CONTRACTS, AND AGREEMENTS (FEDERAL):
73. Amendment A01, to Grant PCM74-10297 (formerly

GB-43268), by which National Science Foundation, Washington, D. C., conveys full right, title and interest in and to certain items of equipment from NASA Training Grant NSG(T)-83 to The University of Texas at Austin for scientific research or science education. The research entitled, "Evolution and Control of $\mathrm{CO}_{2}$ Assimilatory Enzymes, " continues under the direction of Dr. F. Robert Tabita, Assistant Professor of Microbiology.
74. Amendment A01, to Grant OIP74-08869 (formerly GF-42416), by which National Science Foundation, Washington, D. C., extends the grant through July 31, 1977, without additional funds. The research entitled, "To Determine the Dynamical Evolution of the Galilean Satellites of Jupiter, " continues under the direction of Dr. Paul E. Nacozy, Associate Professor of Aerospace Engineering and Engineering Mechanics.
75. Amendment A01, to Grant OCE74-24357 (formerly IDO74-24357), by which National Science Foundation, Washington, D. C., provides $\$ 45,000$ additional funds (Travis County) and extends the grant for the period January 1, 1976 through June 30, 1977. The research entitled, "Seagrass Ecos ystem Study, Seagrass Two: Environmental Tolerances of Seagrasses," continues under the direction of Dr. Calvin McMillan, Professor of Botany.
76. Grant OCE76-01306, by which National Science Foundation, Washington, D. C., provides $\$ 21,700$ (Travis County) for support of research entitled, "Stable Carbon Isotope Ratios of Food Webs and Biogeochemical Cycles in Seagrass Ecosystems." The grant is effective for the period February 1, 1976 through July 31, 1977, and the research will be under the direction of Dr. Patrick L. Parker, Director, and Dr. Richard S. Scalan, The University of Texas at Austin Marine Science Institute, Marine Science Laboratory, Port Aransas, Texas.
77. Amendment A02, to Grant PHY74-03563 (formerly MPS -74-03563), by which National Science Foundation, Wa shington, D.C., provides $\$ 38,700$ additional funds (Travis County) and extends the grant for the period January 15, 1976 through June 30, 1977. The research entitled, "The Role of Gravitation in Physics," continues under the direction of Dr. Bryce S. DeWitt, Professor of Physics.
78. Grant SMI 76-05403, by which National Science Foundation, Washington, D. C., provides $\$ 23,570$ (Travis County) for support of a project entitled, "Student Science Training for High Ability Secondary School Students." The grant is effective for the period January 26, 1976 through October 31, 1976, and the project will be under the direction of Dr. Irwin Spear, Professor of Botany.
79.

Agreement between The University of Texas at
Austin and the United States Department of the Navy, signed by Vice President James H. Colvin, whereby the University agrees to maintain a Naval Reserve Officers Training Corps Unit as presently established at The University of Texas at Austin. The agreement became effective January 27, 1976 and shall be terminated or modified upon providing one academic year's notice of such intent by either party. The Secretary of the Navy agrees to pay expenses required by the University of all students who are selected for the Scholarship Program and the College Program.

## THE UNIVERSITY OF TEXAS AT AUSTIN

## AMENDMENTS TO THE 1975－76 OPERATING BUDGET

BOARD OF REGENTS MEETING－MARCH 26， 1976

The term＂rate＂for academic personnel is the full－time nine－month base rate； for classified personnel it is the full－time twelve－month rate，the appointee receiving a proportionate amount depending upon the fraction of time for which he is appointed and the period of his appointment．Source of funds for pay－ ment of salaries，unless otherwise shown，is the departmental salaries account．

| Item，Department，Title，Name | Period of Appointment | $\begin{gathered} \% \\ \text { Time } \\ \hline \end{gathered}$ | Full No． Mos． | Full－time Salary | Salary Rate |
| :---: | :---: | :---: | :---: | :---: | :---: |
| GENERAL ADMINISTRATION AND STUDENT SERVICES |  |  |  |  |  |
| Office of the President |  |  |  |  |  |
| Appointment |  |  |  |  |  |
| Presidential Intern |  |  |  |  |  |
| 1．Anne C．Wahrmund （RBC非1866） | 1／19－5／31 | 50 | 12 | \＄ | 10，861 |


| Employee Relations |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Salary Increase Assistant Director |  |  |  |  |
|  |  |  |  |  |
| 2．Clemith J．Houston |  |  |  |  |
| To： | 9／1－12／31 | 100 | 12 | 19，400 |
|  | 1／1－8／31 | 100 | 12 | 20，000 |
| From： | 9／1－8／31 | 100 | 12 | 19，400 |
| Rate Increase （RBC非1701） |  |  | $\underline{\underline{12}}$ | 600 |

Transfer of Funds
3．Amount of Transfer－$\$ 18,910$
To：Office of Personnel Services and Employee Relations－Wages
From：Unallocated Maintenance and Operation
Funds were needed for clerical help for vacation and sick leave reporting and record keeping and for increased activity in the Employment and Benefits sections of this office．


Office of the Dean of Students
Salary Increase
Counseling Coordinator
4．Robert C．Murff

| To： | $\begin{aligned} & 1 / 16-1 / 31 \\ & 2 / 1-5 / 31 \end{aligned}$ | 75 75 | 12 12 | $\begin{aligned} & 18,596 \\ & 19,200 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| From： | 1／16－5／31 | 75 | 12 | 18，596 |
| Rate Increase |  |  | $\underline{12}$ | 604 |
| Concurrent Employment： |  |  |  |  |
| Educational Psychology |  |  |  |  |
| $\begin{aligned} & \text { Lecturer } \\ & \text { (RBC非 1876) } \end{aligned}$ | 1／16－5／31 | 25 | 9 | 13，947 |



OFFICE OF THE VICE PRESIDENT AND DEAN
OF GRADUATE STUDIES
Transfer of Funds
8. Amount of Transfer - $\$ 1,000$

To: Office of the Vice President and Dean of Graduate Studies - Travel

From: Unallocated Travel
To provide additional travel funds needed for minority recruitment.
(RBC非 1689)




| Item，Department，Title，Name | Period of <br> AppointmentFull－time Salary <br> No． |
| :--- | :--- | :--- |

## COLLEGE OF HUMANITIES（Continued）

## Slavic Languages

Interdepartmental Transfer
30．Amount of Transfer－$\$ 1,009$
To：Slavic Languages－Teaching Assistants
From：French and Italian－Teaching Assistants
Reallocation of funds to provide for the stipend of a Teaching Assistant needed by the Slavic Languages Department for the Spring Semester． （RBC非 1845）

## Spanish and Portuguese

Change of Status and Salary Increase
31．Nestor A．Lugones（Non－tenure）

| To： Assistant Instructor | $9 / 1-1 / 15$ | 50 | 9 | $\$ 9,000$ |
| :---: | ---: | ---: | ---: | ---: |
| Instructor | $1 / 16-5 / 31$ | 50 | 9 | 10,000 |
| From：Assistant Instructor | $9 / 1-5 / 31$ | 50 | 9 | $\underline{9,000}$ |
| Rate Increase |  |  | $\underline{9}$ | $\underline{1,000}$ |
| （RBC\＃1891，1961） |  |  |  |  |

## COLLEGE OF SOCIAL AND BEHAVIORAL SCIENCES

## Anthropology

## Transfer of Funds

32．Amount of Transfer－$\$ 1,925$
To：Anthropology－Teaching Assistants
From：Unallocated Faculty Salaries
To provide for the stipend of a Teaching Assistant needed to staff the computer laboratory portion of Anthropology 301 for the Spring Semester．
（RBC非1688）

Economics
Appointment
Visiting Professor（Spring 1976 Only）
33．Raymond F．D．Hutchings（Non－tenure） $1 / 16-5 / 31 \quad 100 \quad 9 \quad 28,000$ （RBC非 1897）

Transfer of Funds
34．Amount of Transfer－$\$ 5,000$
To：Economics－Academic Development Funds
From：Una1located Academic Development Funds
To provide for start－up costs for Project Mulhall，which is directed by Professor Walt Rostow． （RBC\＃1605）



| Item，Department，Title，Name | Period of Appointment | $\begin{gathered} \% \\ \text { Time } \\ \hline \end{gathered}$ | Fu11 No． Mos． | Full－time Salary | Salary Rate |
| :---: | :---: | :---: | :---: | :---: | :---: |
| COLLEGE OF SOCIAL AND BEHAVIORAL SCIENCES |  |  |  |  |  |
| （Continued） |  |  |  |  |  |
| Sociology（Continued） |  |  |  |  |  |
| Appointment |  |  |  |  |  |
| Visiting Professor |  |  |  |  |  |
| 50．Bryan Roberts（Non－tenure） | 1／16－5／31 | 100 | 9 | \＄ | 24，000 |
| Sources of Funds：Departmental Faculty Salaries and Transfer from Unallocated Faculty Salaries （RBC非1736，1757） |  |  |  |  |  |
| Visiting Professor |  |  |  |  |  |
| 51．Ted R．Vaughn（Non－tenure） <br> （RBC非1611） | 1／16－5／31 | 50 | 9 |  | 18，000 |

## COLLEGE OF NATURAL SCIENCES

## Office of the Dean

Transfer of Funds
52．Amount of Transfer－$\$ 14,305$
To：Office of the Dean－Computer Rental and Purchased Services（ $\$ 3,500$ ）
Office of the Dean－Wages $(\$ 10,805)$
From：Unallocated Maintenance and Operation
To provide for computer and wages expenses to be incurred by the operation of the Natural Sciences teaching centers for the remainder of the fiscal year．
（RBC非1592，1593）

## Botany

Appointment Visiting Professor
53．Gunnar Bergstrom（Non－tenure） $1 / 16-3 / 21 \quad 100 \quad 9 \quad 27,335$ （RBC非 1811）

Visiting Associate Professor
54．Beryl B．Simpson（Non－tenure）$\quad 1 / 16-5 / 31 \quad 100 \quad 9 \quad 19,000$ （RBC非 1635）

Visiting Associate Professor
55．James L．Patton（Non－tenure） $1 / 19-1 / 30100 \quad 9 \quad 15,577$ （RBC非1936）

## Chemistry

Appointment
Visiting Professor（1975－76 Only）
56．Henry Taubb（Non－tenure） （RBC非 1925）


| Item，Department，Title，Name | Period of Appointment | $\begin{gathered} \% \\ \text { Time } \\ \hline \end{gathered}$ | Full－time Salary <br> No． <br> Mos．$\quad$ Rate |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| COLLEGE OF NATURAL SCIENCES（Continued） |  |  |  |  |  |
| Computer Sciences（Continued） |  |  |  |  |  |
| ```Change of Status Assistant Instructor 64. John W. Roach (Non-tenure)``` |  |  |  |  |  |
| To： | $\begin{array}{r} 9 / 1-1 / 15 \\ 1 / 16-5 / 31 \end{array}$ | $\begin{aligned} & 25 \\ & 50 \end{aligned}$ | 9 | \＄ | 9，000 |
| From： <br> （RBC非 1775） | 9／1－5／31 | 25 | 9 |  | 9，000 |
| Geological Sciences |  |  |  |  |  |
| Salary Increase <br> Professor <br> 65．Wann Langston，Jr．（Tenure） |  |  |  |  |  |
| To： | 9／1－1／31 | 25 | 9 |  | 18，149 |
|  | 2／1－5／31 | 25 | 9 |  | 18，649 |
| From： | 9／1－5／31 | 25 | 9 |  | 18，149 |
| Rate Increase （RBC非1935） |  |  | $\underline{9}$ |  | 500 |
| ```Change of Status Professor 66. L. Frank Brown (Tenure)``` |  |  |  |  |  |
| To： | $\begin{array}{r} 9 / 1-1 / 15 \\ 1 / 16-5 / 31 \end{array}$ | 50 -- | 9 |  | 21，782 |
| From： | 9／1－5／31 | －－－ | 9 |  | $(21,782)$ |
| Concurrent Employment： <br> Bureau of Economic Geology Associate Director for Research <br> （RBC非1617，1665） | $\begin{array}{r} 9 / 1-1 / 15 \\ 1 / 16-8 / 31 \end{array}$ | $\begin{array}{r} 50 \\ 100 \end{array}$ | 12 |  | 29，043 |

## Home Economics

Reappointment
Assistant Instructor 67．Nancy V．Moore（Non－temure）

Source of Funds：Transfer from Unallocated Faculty Salaries
Previous appointment was at the same rate．
（RBC非 1770，1601）

Appointment
Assistant Professor
68．Carol Akkerman（Non－tenure）$\quad 1 / 16-5 / 31 \quad 100 \quad 9 \quad 16,000$

| Item，Department，Title，Name | Period of Appointment | $\begin{gathered} \% \\ \text { Time } \end{gathered}$ | Ful1 <br> No． <br> Mos． | ne | Salary Rate |
| :---: | :---: | :---: | :---: | :---: | :---: |
| COLLEGE OF NATURAL SCIENCES（Continued） |  |  |  |  |  |
| Mathematics |  |  |  |  |  |
| Appointment <br> Assistant Professor（Spring 1976 Only） <br> 69．Mahmoud Daneshmand（Non－tenure） <br> （RBC非 1780） | 1／16－5／31 | 100 | 9 | \＄ | 13，000 |
| ```Change of Status Instructor (1975-76 Only) 70. Nancy S. Hamilton (Non-tenure)``` |  |  |  |  |  |
| To： | 1／16－5／31 | 75 | 9 |  | 10，000 |
| From： <br> （RBC非 1778） | 1／16－5／31 | 50 | 9 |  | 10，000 |
| Instructor（1975－76 On1y） <br> 71．Gray Jennings（Non－tenure） |  |  |  |  |  |
| To： | $\begin{array}{r} 9 / 1-1 / 15 \\ 1 / 16-5 / 31 \end{array}$ | $\begin{aligned} & 25 \\ & 50 \end{aligned}$ | 9 |  | 10，026 |
| From： <br> （RBC＃1695） | 9／1－5／31 | 25 | 9 |  | 10，026 |
| Instructor <br> 72．Charlotte A．Murff（Non－tenure） |  |  |  |  |  |
| To： | 1／16－5／31 | 75 | 9 |  | 10，000 |
| From： <br> （RBC非 1777） | 1／16－5／31 | 50 | 9 |  | 10，000 |
| Leave of Absence |  |  |  |  |  |
| 73．Newcomb Greenleaf（Tenure） <br> Term of Leave <br> （RBC非1700） | $\begin{aligned} & 9 / 1-5 / 31 \\ & 1 / 16-5 / 31 \end{aligned}$ | 100 | 9 |  | 23，136 |
| Resignation |  |  |  |  |  |
| 74．David P．Wright（Non－tenure） <br> Date of Resignation <br> （RBC非1698） | $\begin{gathered} 1 / 16-5 / 31 \\ 1 / 15 / 76 \end{gathered}$ | 50 | 9 |  | 10，526 |

Transfer of Funds
75．Amount of Transfer－$\$ 3,000$
To：Mathematics－Academic Development Fund
From：Office of the Dean－Academic Development Fund
Funds were used to help defray costs of printing a brochure prepared by the Student Recruitment Committee，to support a meeting designed to improve the quality of incoming graduate students，to provide for travel expenses of faculty lecturing at schools and colleges throughout the state，and for consul－ tation fees．
（RBC非 1693）


Change of Status
Assistant Professor 79. Herman E. Matthews (Non-tenure)

| To: | $\begin{array}{r} 9 / 1-1 / 15 \\ 1 / 16-5 / 31 \end{array}$ | $50$ | 9 9 | $\begin{gathered} (14,580) \\ 14,580 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| From: | 9/1-5/31 | --- | 9 | $(14,580)$ |
| Concurrent Employment: Physics |  |  |  |  |
| Research Scientist Associate V (RBC\# 1893) | $\begin{array}{r} 9 / 1-1 / 15 \\ 1 / 16-5 / 31 \end{array}$ | $\begin{array}{r} 100 \\ 50 \end{array}$ | 12 | 19,440 |

Assistant Professor 80. Kar1 I. Trappe (Non-tenure)

| To: | $9 / 1-1 / 15$ | $-\ldots$ | 9 | $(12,000)$ |
| :---: | ---: | ---: | ---: | ---: |
|  | $1 / 16-5 / 31$ | 50 | 9 | 12,000 |
| From: | $9 / 1-5 / 31$ | --- | 9 | $(12,000)$ |

Resignation
Visiting Professor 81. Nicholaos vanKampen (Non-tenure) $1 / 16-5 / 31 \quad 100 \quad 9 \quad 29,000$ Date of Resignation

1/15/76 (RBC非1697)


|  |  | Full-time Salary |
| :---: | :---: | :---: |
|  | Period of \% | No. |
| Item, Department, Title, Name | Appointment Time | Mos. Rate |

## DIVISION OF GENERAL AND COMPARATIVE STUDIES

## Office of the Dean

| Appointment |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 87. William M. Stott | 1/16-5/31 | 50 | 9 | \$ 17,205 |
|  | 6/1-8/31 | 100 |  |  |
| Source of Funds: Transfer from Unallocated Classified Salaries |  |  |  |  |
| Concurrent Employment: American Studies |  |  |  |  |
| Associate Professor | 1/16-5/31 | 50 | 9 | 17,205 |
| English |  |  |  |  |
| Associate Professor (RBC\#\# 1889, 1890, | 9/1-5/31 | --- | 9 | $(17,205)$ |

## Comparative Studies

Appointment

## Visiting Professor

88. C. Preston Andrade, Jr. (Non-tenure) 1/16-5/31 $100 \quad 9 \quad 28,000$ (RBC\# 1641)

## American Studies

Appointment
Assistant Instructor
89. Ann F. Crawford (Non-tenure) $1 / 16-5 / 31 \quad 50 \quad 9 \quad 9,000$
(RBC\#1 1848)

Transfer of Funds
90. Amount of Transfer - $\$ 2,657$

To: American Studies - Faculty Salaries
From: Unallocated Faculty Salaries
Funds were needed for the Spring Semester reappointment of Lecturer Aida B. Close. See U. T. Austin docket for the February 13, 1976 Board Meeting, page A-58, item no. 72. (RBC非1590)

## Ethnic Studies: African and Afro-American

## Appointment

Visiting Associate Professor
91. Martin L. Chanock (Non-tenure)
$1 / 16-5 / 31 \quad 100 \quad 9 \quad 16,000$
(RBC\#11739)

## Center for Asian Studies

Appointment
Instructor
92. Ronald J. Herring (Non-tenure)
Source of Funds: Transfer from
Unallocated Faculty Salaries
(RBC非 1854, 1870)

| Item，Department，Title，Name | Period of Appointment | $\begin{gathered} \% \\ \text { Time } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Fu11- } \\ & \begin{array}{l} \text { No. } \\ \text { Mos. } \end{array} \end{aligned}$ | ne Salary <br> Rate |
| :---: | :---: | :---: | :---: | :---: |
| DIVISION OF GENERAL AND COMPARATIVE STUDIE |  |  |  |  |
| （Continued） |  |  |  |  |
| Center for Asian Studies（Continued） |  |  |  |  |
| Appointment |  |  |  |  |
| Instructor |  |  |  |  |
| 93．Naomi Owens（Non－tenure） | 1／16－5／31 | 25 | 9 | \＄10，966 |
| Source of Funds：Transfer from Unallocated Faculty Salaries （RBC非 1349，1892，1220） |  |  |  |  |
| Language and Area Center for Latin |  |  |  |  |
| American Studies |  |  |  |  |
| Appointment |  |  |  |  |
| Visiting Professor | 1／16－5／31 | 50 | 9 | 20，000 |
| 94．Carlos G．Mota（Non－tenure） <br> （RBC非1740） | 1／16－5／31 | 50 | 9 | 20，000 |
| Language and Area Center for Latin |  |  |  |  |
| American Studies and Institute of Latin |  |  |  |  |
| American Studies |  |  |  |  |
| Appointment and Change of Status |  |  |  |  |
| Consultant |  |  |  |  |
| 95．Richard N．Adams |  |  |  |  |
| Appointment： <br> Language and Area Center for Latin American Studies | 7／1－7／15 | 100 | 9 | 31，936 |
| Change of Status： <br> Institute of Latin American Studies |  |  |  |  |
| To： | 6／1－6／30 | 85 | 9 | 31，936 |
| From： | 8／1－8／31 | 85 | 9 | 31，936 |
| Academic Status：Professor （Anthropology） <br> （RBC非1723，1898） |  |  |  |  |

Center for Middle Eastern Studies
Transfer of Funds
96．Amount of Transfer－$\$ 10,000$
To：Center for Middle Eastern Studies－Academic Development Funds
From：Unallocated Academic Development Fund
To provide additional support for this Center＇s developmental activities． （RBC非1752）

| Item，Department，Title，Name | Period of Appointment | $\begin{gathered} \% \\ \text { Time } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Full } \\ & \text { No. } \\ & \text { Mos. } \end{aligned}$ |  | Salary Rate |
| :---: | :---: | :---: | :---: | :---: | :---: |
| COLLEGE OF BUSINESS ADMINISTRATION |  |  |  |  |  |
| Office of the Dean |  |  |  |  |  |
| Change of Status |  |  |  |  |  |
| Assistant Dean |  |  |  |  |  |
| 97．Robert W．Smith |  |  |  |  |  |
| To： | 6／1－7／15 | 100 | 9 | \＄ | 16，700 |
| From： | 7／16－8／31 | 100 | 9 |  | 16，700 |
| ```Academic Status: Lecturer (Accounting) (RBC非 1621)``` |  |  |  |  |  |
| Transfer of Funds |  |  |  |  |  |
| To：Office of the Dean－Graduate Business School Building Dedication |  |  |  |  |  |
| From：Unallocated Academic Development Funds |  |  |  |  |  |
| To provide for dedication ex held in conjunction with th （RBC非1823） | and expenses tion． | acti | vitie |  |  |

## Accounting

Leave of Absence
Arthur Young Professor 99．Raynard M．Sommerfeld（Tenure）

Term of Leave
$9 / 1-5 / 31 \quad 100 \quad 9$

32，300

Academic Rate－$\$ 27,300$
（RBC非1835，1836）

Finance
Appointment
Lecturer
100．E．Joe Duckworth（Non－tenure）
Source of Funds：Transfer from
Unallocated Faculty Salaries
（RBC\＃1728，1750）

| Item，Department，Title，Name | Period of Appointment | $\begin{gathered} \% \\ \text { Time } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Full. } \\ & \begin{array}{l} \text { No. } \end{array} \\ & \text { Mos. } \end{aligned}$ |  | Salary <br> Rate |
| :---: | :---: | :---: | :---: | :---: | :---: |
| COLLEGE OF BUSINESS ADMINISTRATION |  |  |  |  |  |
| （Continued） |  |  |  |  |  |
| General Business |  |  |  |  |  |
| ReappointmentLecturer |  |  |  |  |  |
| 102．Anna L．Drayer（Non－tenure） | 1／16－5／31 | 50 | 9 | \＄ | 16，096 |
| Source of Funds：Transfer from Unallocated Faculty Salaries |  |  |  |  |  |
| Previous appointment was at the same rate． <br> （RBC非1824，1782） |  |  |  |  |  |
| Appointment |  |  |  |  |  |
| Adjunct Assistant Professor <br> 103．Adrian M．Overstreet，Jr． （Non－tenure） （RBC非1614） | 1／16－5／31 | 25 | 9 |  | 16，096 |
| Management |  |  |  |  |  |
| Reappointment |  |  |  |  |  |
| 104．Leo B．Osterhaus（Non－tenure） | 1／16－5／31 | 25 | 9 |  | 16，000 |
| Previous appointment was at the same rate． <br> （RBC非1737） |  |  |  |  |  |
| Lecturer |  |  |  |  |  |
| Previous appointment was at the same rate． <br> （RBC非1738） |  |  |  |  |  |
| Appointment |  |  |  |  |  |
| Assistant Professor |  |  |  |  |  |
| 106．Christine C．Gerrard（Non－tenure） | 1／16－5／31 | 33 | 9 |  | 14，651 |
| Concurrent Employment： Graduate School of Social Work－ Center for Social Work Research |  |  |  |  |  |
| Social Science Research Associate （RBC非1833，1518） | $\begin{array}{r} 1 / 16-5 / 31 \\ 6 / 1-6 / 30 \end{array}$ | $\begin{array}{r} 67 \\ 100 \end{array}$ | 12 |  | 19，534 |

## SCHOOL OF COMMUNICATION

## Advertising

## Appointment

Lecturer
107．Car1os F．Femat（Non－tenure）$\quad 1 / 16-5 / 31 \quad 25 \quad 9 \quad 12,000$

Source of Funds：Transfer from Unallocated Faculty Salaries （RBC非1940，1944）

| Item，Department，Title，Name | Period of Appointment | $\begin{gathered} \% \\ \text { Time } \end{gathered}$ | $\begin{aligned} & \text { Ful1. } \\ & \text { No. } \\ & \text { Mos. } \end{aligned}$ |  | Salary <br> Rate |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SCHOOL OF COMMUNICATION（Continued） |  |  |  |  |  |
| Journalism |  |  |  |  |  |
| Appointment |  |  |  |  |  |
| Assistant Professor |  |  |  |  |  |
| 108．Melvin L．Sharpe（Non－tenure） | 1／16－5／31 | 100 | 9 | \＄ | 15，000 |
| Source of Funds：Transfer from Unallocated Faculty Salaries <br> （RBC非1735，1756） |  |  |  |  |  |
| Change of Status |  |  |  |  |  |
| Specialist |  |  |  |  |  |
| 109．Pamela J．Clark（Non－tenure） |  |  |  |  |  |
| To： | 9／1－1／15 | 25 | 9 |  | 10，026 |
|  | 1／16－5／31 | 33 |  |  |  |
| From： <br> （RBC非1734） | 9／1－5／31 | 25 | 9 |  | 10，026 |

Radio－Television－Film
Appointment
Assistant Instructor
110．Larry K．Burke（Non－tenure） $1 / 16-5 / 31 \quad 50 \quad 9 \quad 9,000$
（RBC非1883）

Resignation
Assistant Instructor

| 111．Frank Tavares（Non－tenure） | $9 / 1-5 / 31$ | 50 | 9 | 9,026 |
| :---: | :---: | :---: | :---: | :---: |
| Date of Resignation | $1 / 15 / 76$ |  |  |  | （RBC非 1841）

Transfer of Funds
112．Amount of Transfer－\＄5，425
To：Radio－Television－Film－Teaching Assistants
From：Unallocated Faculty Salaries
To provide for the salaries of Teaching Assistants needed for the Spring Semester．
（RBC非1691）

Speech Communication
Reappointment
Assistant Instructor
113．Phillis R．Jeffrey（Non－tenure） $1 / 16-5 / 31 \quad 25 \quad 9 \quad 9,000$

Previous appointment was at the same rate．
（RBC非 1886）


| Item，Department，Title，Name | Period of Appointment | $\begin{gathered} \% \\ \text { Time } \\ \hline \end{gathered}$ | $\begin{aligned} & \frac{\text { Ful1 }}{\text { No. }} \\ & \text { Mos. } \end{aligned}$ |  | Salary Rate |
| :---: | :---: | :---: | :---: | :---: | :---: |
| COLLEGE OF EDUCATION（Continued） |  |  |  |  |  |
| Educational Psychology |  |  |  |  |  |
| Reappointment <br> Assistant Instructor <br> 118．William J．Crawford（Non－tenure） <br> Previous appointment was at the same rate． <br> （RBC非1773） | 1／16－5／31 | 25 | 9 | \＄ | 9，000 |
| Appointment <br> Adjunct Assistant Professor <br> 119．Freda M．Holley（Non－tenure） <br> （RBC非1834） | 1／16－5／31 | －－－ | －－ |  | －－－ |
| Resignation <br> Assistant Instructor <br> 120．Richard L．Graves（Non－tenure） <br> Date of Resignation <br> （RBCㅑ 1585） | $\begin{gathered} 9 / 1-5 / 31 \\ 1 / 15 / 76 \end{gathered}$ | 50 | 9 |  | 9，000 |
| Health，Physical Education，and Recreation |  |  |  |  |  |
| ```Appointment Practice Teaching Specialist 121. Dorothy L. Abraham (Non-tenure) (RBC非 1899)``` | 1／16－5／31 | 100 | 9 |  | 10，000 |
| Instructor <br> 122．Tommy C．Ford（Non－tenure） （RBC非1612） | 1／16－5／31 | 25 | 9 |  | 10，026 |
| Change of Status <br> 123．Margaret Fullilove（Non－tenure） <br> Change Title On1y <br> To：Specialist（Physical Activity） <br> From：Assistant Professor <br> Effective Date <br> （RBC\＃1852） | $9 / 1-5 / 31$ $1 / 16 / 76$ | 100 | 9 |  | 13，900 |
| Transfer of Funds <br> 124．Amount of Transfer－$\$ 11,816$ <br> To：Health，Physical Education， Assistants <br> From：Unallocated Faculty Salaries <br> To provide for Teaching Assistants （RBC非 1599） | d Recreation <br> eded for the | －Tea <br> Sprin | Sem |  |  |


| Item，Department，Title，Name | Period of Appointment | $\begin{gathered} \text { \% } \\ \text { Time } \end{gathered}$ | $\begin{aligned} & \text { Full. } \\ & \text { No. } \\ & \text { Mos. } \end{aligned}$ | Salary <br> Rate |
| :---: | :---: | :---: | :---: | :---: |
| COLLEGE OF EDUCATION（Continued） |  |  |  |  |
| Special Education |  |  |  |  |
| Appointment Instructor |  |  |  |  |
| Source of Funds：Transfer from Unallocated Faculty Salaries |  |  |  |  |
| Concurrent Employment： <br> Special Education－Office of Education Contract Funds Instructor <br> （RBC非1651，1680，1657） | 1／16－5／31 | 67 | 9 | 13，500 |
| Instructor |  |  |  |  |
| Concurrent Employment： Office of the Dean of Education Social Science Research Associate V （RBC非1954） | 9／1－5／31 | 100 | 12 | 18，180 |
| Salary Increase |  |  |  |  |
| Assistant Professor |  |  |  |  |
| To： | 9／1－12／31 | 100 | 9 | 14，552 |
|  | 1／1－5／31 | 100 | 9 | 15，052 |
| From： | 9／1－5／31 | 100 | 9 | 14，552 |
| Rate Increase （RBC非 1583） |  |  | $\underline{9}$ | － 500 |
| Academic Rate Increase |  |  |  |  |
| Assistant Professor |  |  |  |  |
| 128．Margaret H．Booker（Tenure） |  |  |  |  |
| To： | 9／1－10／31 | －－－ | 9 | $(15,609)$ |
|  | 11／1－5／31 | －－－ | 9 | $(16,155)$ |
| From： | 9／1－5／31 | －－－ | 9 | $(15,609)$ |
| To conform academic rate in department of Special Education to that in the Learning Resources Center Contract． |  |  |  |  |
| Concurrent Employment： Texas Area Learning Resources Center |  |  |  |  |
| Assistant Professor | 9／1－10／31 | 100 | 9 | 15，609 |
| （RBC\＃1853） | 11／1－8／31 | 100 | 9 | 16，155 |

Transfer Between Dissimilar Appropriations
129．Amount of Transfer－\＄1，500
To：Travel
From：Wages
To provide for travel expenses incurred by faculty who attend professional meetings．
（RBC⿰⿰三丨⿰丨三一 1871）




Civil Engineering and
Electrical Engineering
Transfer of Funds
146. Amount of Transfer - \$ 16,339

To: Civi1 Engineering - Teaching Assistants (\$15,383)
Electrical Engineering - Teaching Assistants (\$956)
From: Unallocated Faculty Salaries

To provide for stipends of Teaching Assistants needed by these departments for the Spring Semester.
(RBC非 1595, 1597, 1941)

## Electrical Engineering

Appointment and Salary Increase
Assistant Instructor
147. Douglas M. Green (Non-tenure) $1 / 16-5 / 31 \quad 50 \quad 9 \quad 9,000$

Source of Funds: Transfer from Unallocated Faculty Salaries

| Previous Appointment: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Teaching Assistant | 9/1-1/15 | 50 | 9 | 8,206 |
| Academic Rate Increase |  |  | 9 | 794 |





Transfer of Funds
163. Amount of Transfer - $\$ 2,767$

To: Music - Faculty Salaries
From: Unallocated Faculty Salaries
Funds were needed for the Spring Semester reappointment of Instructor Gaby G. Fulda. See U. T. Austin docket for February 13, 1976 Board Meeting, page A-66, item no. 109.
(RBC非 1603)

| Item，Department，Title，Name | Period of Appointment | $\begin{gathered} \% \\ \text { Time } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Fu11. } \\ & \text { No. } \\ & \text { Mos. } \end{aligned}$ | Salary <br> Rate |
| :---: | :---: | :---: | :---: | :---: |
| SCHOOL OF LAW |  |  |  |  |
| Reappointment Lecturer |  |  |  |  |
| 164．H．Coke Wilson（Non－tenure） | 1／16－5／31 | 33 | 9 | \＄ 24,000 |
| Source of Funds：Transfer from Unallocated Faculty Salaries |  |  |  |  |
| ```Previous appointment was at the same rate. (RBC# 1937, 1948)``` |  |  |  |  |
| AppointmentLecturer |  |  |  |  |
| 165．Myron M．Shinfeld（Non－tenure） （RBC非1666） | 1／16－5／31 | 11 | 9 | 18，000 |
| Lecturer |  |  |  |  |
| 166．A1 exandra J．Harmon（Non－tenure） <br> （RBC非 1837） | 1／16－5／31 | 48 | 9 | 17，708 |
| GRADUATE SCHOOL OF LIBRARY SCIENCE |  |  |  |  |
| Reappointment |  |  |  |  |
| Assistant Professor（Temporary） |  |  |  |  |
| 167．Katherine McMurrey（Non－tenure） | 1／16－5／31 | 67 | 9 | 12，808 |
| Source of Funds：Transfer from Unallocated Faculty Salaries |  |  |  |  |
| Previous appointment was at the same rate． （RBC非1619，1591） |  |  |  |  |
| Appointment |  |  |  |  |
| Instructor |  |  |  |  |
| 168．Norma R．Torkelson（Non－tenure） （RBC非1818） | 1／16－5／31 | 33 | 9 | 11，500 |
| Professor |  |  |  |  |
| 169．Roy M．Mersky（Tenure） | 1／16－5／31 | 33 | 9 | 28，266 |
| Source of Funds：Transfer from Unallocated Faculty Salaries |  |  |  |  |
| Concurrent Employment： School of Law |  |  |  |  |
| Professor | 1／16－5／31 | 33 | 9 | 28，266 |
| Library－Law Library <br> Law Librarian <br> （RBC非1620，1627，1591） | 1／16－5／31 | 33 | 9 | 28，266 |


| Item，Department，Title，Name | Period of Appointment | $\begin{gathered} \% \\ \text { Time } \\ \hline \end{gathered}$ | Fu11 <br> No． <br> Mos． | ne | Salary Rate |
| :---: | :---: | :---: | :---: | :---: | :---: |
| GRADUATE SCHOOL OF LIBRARY SCIENCE（Continued） |  |  |  |  |  |
| Appointment |  |  |  |  |  |
| Lecturer |  |  |  |  |  |
| Source of Funds：Departmental Faculty Salaries and Transfer from Unallocated Faculty Salaries |  |  |  |  |  |
| Concurrent Employment： <br> Library |  |  |  |  |  |
| Librarian，Archivist， <br> Barker Texas History Center | 9／1－1／15 | 100 | 12 |  | 19，802 |
|  | 1／16－5／31 | 67 |  |  |  |
|  | 6／1－8／31 | 100 |  |  |  |
| （RBC非 1844，1817，1704） |  |  |  |  |  |
| Instructor |  |  |  |  |  |
| 171．Olive E．G．Forbes（Non－tenure） | 1／16－5／31 | 33 | 9 |  | 11，000 |
| Source of Funds：Transfer from Unallocated Faculty Salaries （RBC非1905，1919） |  |  |  |  |  |
| MILITARY SCIENCE |  |  |  |  |  |
| Appointment |  |  |  |  |  |
| Assistant Professor |  |  |  |  |  |
| Salary paid by U．S．Army． （RBC非 1707） |  |  |  |  |  |
| Assistant Professor |  |  |  |  |  |
| 173．Roger F．Poulin（Non－tenure） | 1／5－5／31 | 100 | －－ |  | －－－ |
| Salary paid by U．S．Army． （RBC\＃1623） |  |  |  |  |  |
| MEASUREMENT AND EVALUATION CENTER |  |  |  |  |  |
| Change of Status |  |  |  |  |  |
| Associate Director |  |  |  |  |  |
| 174．Paul G．Liberty，Jr． |  |  |  |  |  |
| To： | 6／1－7／15 | 100 | 12 |  | 31，719 |
| From： <br> （RBC非 1652） | 6／1－8／31 | 100 | 12 |  | 31，719 |
| Associate Director |  |  |  |  |  |
| 175．Susan Hereford |  |  |  |  |  |
| To： | 1／16－5／31 | 100 | 12 |  | 18，653 |
|  | 7／16－8／31 | 100 |  |  |  |
| From： <br> （RBC非 1653） | 1／16－8／31 | 100 | 12 |  | 18，653 |


| Item，Department，Title，Name | Period of Appointment | $\begin{gathered} \% \\ \text { Time } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Full. } \\ & \text { No. } \\ & \text { Mos. } \end{aligned}$ | Salary <br> Rate |
| :---: | :---: | :---: | :---: | :---: |
| IIBRARY |  |  |  |  |
| Appointment |  |  |  |  |
| Librarian，Automated Cataloging Unit $\quad 1 / 26-8 / 31-100 \quad 12$ \＄ 311.35 |  |  |  |  |
| Assistant Archivist，Barker |  |  |  |  |
| Texas History Center <br> 177．Victoria D．Reed （RBC⿰⿰三丨⿰丨三一11926） | 2／1－8／31 | 100 | 12 | 11，357 |
| Salary Increase |  |  |  |  |
| Associate Director of General |  |  |  |  |
| Libraries，Collection Development |  |  |  |  |
| To： | 9／1－12／31 | 100 | 12 | 26，934 |
|  | 1／1－8／31 | 100 | 12 | 28，334 |
| From： | 9／1－8／31 | 100 | 12 | 26，934 |
| Rate Increase （RBC非1634） |  |  | 12 | 1.400 |
| Assistant Director for Collection |  |  |  |  |
| Development |  |  |  |  |
| 179．Carolyn F．Bucknall |  |  |  |  |
| To： | 9／1－12／31 | 100 | 12 | 21，798 |
|  | 1／1－8／31 | 100 | 12 | 23，300 |
| From： | 9／1－8／31 | 100 | 12 | 21，798 |
| （RBC非1632） |  |  |  |  |
| Assistant Director for Public Services |  |  |  |  |
| 180．Gary L．Menges |  |  |  |  |
| To： | 9／1－12／31 | 100 | 12 | 21，257 |
|  | 1／1－8／31 | 100 | 12 | 23， 300 |
| From： | 9／1－8／31 | 100 | 12 | 21，257 |
| Rate Increase <br> （RBC非1633） |  |  | 12 | 1，773 |
| Head Librarian，Biology Library |  |  |  |  |
| TO： | 9／1－12／31 | 100 | 12 | 13，926 |
|  | 1／1－8／31 | 100 | 12 | 14，926 |
| From： | 9／1－8／31 | 100 | 12 | 13，926 |
| Rate Increase （RBC非1631） | ． |  | 12 | 1，000 |



## LAW LIBRARY

Transfer Between Dissimilar Appropriations
185. Amount of Transfer - \$ 11,923

To: Books, Periodicals and Bindings
From: Maintenance and Operation ( $\$ 5,923$ )
Classified Personnel ( $\$ 6,000$ )
To return to the Books, Periodicals and Bindings account funds previously transferred from it in error.
(RBC非1901, 1900)



## Medium Energy Programs

Transfer of Funds
192. Amount of Transfer - $\$ 10,000$

To: Medium Energy Programs Development
From: Unallocated Academic Development Fund
Funds are to be used in support of medium energy program development at Los Alamos for fiscal 1975-76.
(RBC非 1917)




```
Marine Science Institute - Galveston
Transfer Between Dissimilar Appropriations
    204. Amount of Transfer - $ 6,000
                    To: Wages
From: Administrative and Professional Salaries
To provide for temporary funding of salaries of two members of the
staff until contract funds for the project on which they are working
become available.
(RBC## 1947)
```


## REVOLVING FUNDS

Industrial and Business Training Bureau
Reappointment
205. Norvell W. Northcutt

| Project Administrator - Office <br> of Education Contract Funds | $1 / 1-1 / 31$ | 100 | 12 | 25,044 |
| :--- | :--- | :--- | :--- | :--- |
| Previous appointment was at <br> the same rate. |  |  |  |  |
| Assistant Director - Revolving <br> Training Funds <br> (RBC\# 1719,1915$)$ | $2 / 1-8 / 31$ | 100 | 12 | 21,000 |

## SPONSORED PROJECTS

Astronomy
Reappointment

| Research Scientist (Non-faculty) |
| :--- |
| 206. Robert G. Tull |
| Source of Funds: NSF Contract |


| Concurrent Employment: |
| :--- | :--- | :--- | :--- | :--- |
| McDonald Observatory |
| Research Scientist (Non-faculty) |
| (RBC非 1797) |



| Item，Department，Title，Name | Period of Appointment | $\begin{aligned} & \% \\ & \text { Time } \end{aligned}$ | Full－time Salary |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SPONSORED PROJECTS（Continued） |  |  |  |  |  |
| Special Education |  |  |  |  |  |
| Appointment Lecturer |  |  |  |  |  |
| 212．Ralph Hanna | 1／16－5／31 | 25 | 9 | \＄ | 15，609 |
| Source of Funds：Office of Education Contract （RBC＃1953） |  |  |  |  |  |

School of Law
Appointment
Social Science Research Associate
213．Mark G．Yudof
Source of Funds：
Spencer Foundation
Academic Status：
Professor（School of Law）
（RBC非 1663）

Center for Research in Water Resources
Reappointment
Technical Director
214．Leo R．Beard
Source of Funds：U．S． Department of Interior Grant
Concurrent Employment：
Center for Research in Water Resources－General Budget Funds

| Technical Director $\quad 9 / 1-8 / 31$ | 40 | 12 | 33,169 |
| :--- | :--- | :--- | :--- | :--- |

Civil Engineering
Lecturer
（RBC非1951）

Center for the Study of Human Resources

| Reappointment <br> Project Director <br> 215．F．Ray Marshall <br> Source of Funds：Robert <br> Wood Johnson Foundation | $1 / 16-1 / 31$ | 50 | 9 | 37,236 |
| :--- | :--- | :--- | :--- | :--- |
| Previous appointments were <br> at the same rate． <br> Concurrent Employment： <br> Economics <br> Professor <br> （RBC非 1720 ） | $1 / 16-5 / 31$ | 50 | 9 | 37,236 |


| Item，Department，Title，Name | Period of Appointment | $\begin{gathered} \% \\ \text { Time } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Full. } \\ & \text { No. } \\ & \text { Mos. } \end{aligned}$ |  | Salary Rate |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SPONSORED PROJECTS（Continued） |  |  |  |  |  |
| Center for Teaching Effectiveness |  |  |  |  |  |
| Change of Status Research Scientist（Faculty） 216．Shirley N．Hutchison |  |  |  |  |  |
| To： | 9／1－12／31 | 25 | 9 | \＄ | 13，536 |
| From： | 9／1－1／15 | 25 | 9 |  | 13，536 |
| Concurrent Employment： <br> Home Economics <br> Assistant Professor <br> （RBC非 1956） | $\begin{aligned} & 9 / 1-1 / 15 \\ & 1 / 16-5 / 31 \end{aligned}$ | $\begin{array}{r} 75 \\ 100 \end{array}$ | 9 |  | 13，536 |
| Electrical Engineering Research Laboratories |  |  |  |  |  |
| Appointment <br> Research Engineer（Faculty） |  |  |  |  |  |
| 217．Wolfhard Vogel | 1／16－5／31 | 50 | 9 |  | 13，000 |
| Concurrent Employment： Electrical Engineering Assistant Professor （RBC非 1659） | 1／16－5／31 | 50 | 9 |  | 13，000 |
| Energy Storage Group |  |  |  |  |  |
|  |  |  |  |  |  |
| Research Engineer（Faculty） 218．Mircea D．Driga | 1／1－5／31 | 67 | 9 |  | 18，500 |
| ```Concurrent Employment: Electrical Engineering Lecturer (RBC非 1714)``` | 11／1－5／31 | 33 | 9 |  | 18，500 |
| Fusion Research Center |  |  |  |  |  |
| Reappointment Research Engineer |  |  |  |  |  |
| 219．Otto M．Friedrich，Jr． <br> Source of Funds：Texas Atomic Energy Research Foundation Funds <br> Previous appointments were at the same rate． <br> （RBC非1790） | 1／1－4／30 | 75 | 12 |  | 23，894 |
| Research Scientist（Faculty） |  |  |  |  |  |
| ```Source of Funds: Texas Atomic Energy Research Foundation Funds Concurrent Employment: Physics``` |  |  |  |  |  |
| Professor <br> （RBC非1769，1662） | 9／1－5／31 | 50 | 9 |  | 39，796 |



| Item，Department，Title，Name | Period of Appointment | $\begin{gathered} \text { \% } \\ \text { Time } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Full } \\ & \text { No. } \\ & \text { Mos. } \end{aligned}$ |  | Salary Rate |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SPONSORED PROJECTS（Continued） |  |  |  |  |  |
| Fusion Research Center（Continued） |  |  |  |  |  |
| Reappointment <br> Assistant Director－Theoretical Programs |  |  |  |  |  |
|  | 1／16－3／31 | 75 |  |  |  |
| Source of Funds：ERDA Contract |  |  |  |  |  |
| Previous appointment was at the same rate． |  |  |  |  |  |
| Concurrent Employment： Physics |  |  |  |  |  |
| $\begin{aligned} & \text { Lecturer } \\ & \text { (RBC非 1788, 1826) } \end{aligned}$ | 1／16－5／31 | 25 | 9 |  | 24，601 |
| Research Engineer |  |  |  |  |  |
| 228．Tapas Mukutmoni | $\begin{aligned} & 1 / 1-1 / 15 \\ & 1 / 16-4 / 30 \end{aligned}$ | $\begin{array}{r} 67 \\ 100 \end{array}$ | 12 |  | 30，030 |
| Source of Funds：ERDA Contract |  |  |  |  |  |
| ```Concurrent Employment: Electrical Engineering Lecturer (RBC非 1801, 1881, 1952)``` | 9／1－1／15 | 33 | 9 |  | 22，518 |
| Institute of Latin American Studies |  |  |  |  |  |
| Appointment |  |  |  |  |  |
| Visiting Associate Professor |  |  |  |  |  |
| Source of Funds：Office of Education Contract <br> （RBC非 1793） |  |  |  |  |  |
| Research and Development Center |  |  |  |  |  |
| for Teacher Education |  |  |  |  |  |
| Reappointment |  |  |  |  |  |
| Research Scientist（Faculty） |  |  |  |  |  |
| 230．Jere E．Brophy | 1／1－5／31 | 50 | 9 |  | 18，400 |
| Source of Funds：Office of Education Contract |  |  |  |  |  |
| Concurrent Employment： |  |  |  |  |  |
| University Research Institute |  |  |  |  |  |
| Psychology） |  |  |  |  |  |
| Faculty Research Assignment <br> （RBC非 1718） | 9／1－5／31 | 50 | 9 |  | 18，400 |


| Item，Department，Title，Name | Period of Appointment | $\begin{gathered} \% \\ \text { Time } \end{gathered}$ | $\begin{aligned} & \text { Full. } \\ & \text { No. } \\ & \text { Mos. } \end{aligned}$ | $\begin{gathered} \text { ne Salary } \\ \text { Rate } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| SPONSORED PROJECTS（Continued） |  |  |  |  |
| LBJ School of Public Affairs |  |  |  |  |
| Appointment <br> Research Associate（Faculty） |  |  |  |  |
| 231．Sidney Weintraub | 12／16－1／15 | 100 | 9 | \＄37，000 |
| Source of Funds：Ford |  |  |  |  |
| Academic Status： |  |  |  |  |
| Dean Rusk Professor <br> （LBJ School of Public Affairs） <br> Effective 1／16／76 <br> （RBC非 1878） |  |  |  |  |
| Marine Science Institute－Galveston |  |  |  |  |
| Reappointment |  |  |  |  |
| Research Scientist（Non－faculty） |  |  |  |  |
| Source of Funds：NASA Contract |  |  |  |  |
| Previous appointment was at the same rate． <br> （RBC非 1677） |  |  |  |  |
| Change of Status <br> Research Scientist（Non－faculty） |  |  |  |  |
|  |  |  |  |  |
| 233．Toshimatso Matsumoto |  |  |  |  |
| To：NASA Contract Funds | 9／1－1／17 | 100 | 12 | 24，307 |
| I．C．E．Funds | 1／18－3／31 | 100 | 12 | 24，307 |
| From：NASA Contract Funds （RBC非1675，1676） | 9／1－1／31 | 100 | 12 | 24，307 |
| AUXILIARY ENTERPRISES |  |  |  |  |
| Student Health Center |  |  |  |  |
| Appointment |  |  |  |  |
| Consultant（Physician， |  |  |  |  |
| Specialist－Psychiatry） |  |  |  |  |
| 234．Henry H．Crank （RBC非1587） | 11／1－8／31 | PT | －＊ | －－－ |
| Leave of Absence |  |  |  |  |
| Physician，General Medicine |  |  |  |  |
| 235．Mildred K．Terrill | 9／1－8／31 | 100 | 12 | 24，000 |
| Term of Leave <br> （RBC非 1920） | 2／1－8／31 |  |  |  |



## Student Government Offices

Transfer of Funds
237. Amount of Transfer - $\$ 1,000$

To: Operating Expenses
From: Allocation for Budget Adjustments

Additional operating funds were needed. (RBC非 1921)

## Student Co-op Housing System

```
Transfer of Funds
    238. Amount of Transfer - $ 4,000
```

                    To: Student Co-op Housing System
    From: Reserve - Major Repairs, Remodeling and Replacement, and Operating Reserve

To reappropriate to the $1975-76$ Budget funds appropriated but not used in 1974-75 for this project.
(RBCH1724)

## Gymnasium Store

| Appointment |
| :--- |
| Manager <br> 239. Robert G. Childress <br> Concurrent Employment: <br> Recreational Sports <br> Recreational Sports Specialist <br> $($ RBC非 1825) |

Item，Department，Title，Name

## CURRENT RESTRICTED

## Finance

Appointment
Associate Professor
240．Stephen A．Phyrr
Source of Funds：Texas
Realtors Trust
Concurrent Employment：
Finance－General Budget Funds Associate Professor
（RBC非 1615，1616）

## Management

Change of Status
Alice G．K．Kleberg Professor 241．Eugene B．Konecci

To：
From：
Source of Funds：CBA
Foundation－Alice G．K． Kleberg Professorship （RBC\＃1622）

Management Development Program
Change of Status
Director，Management Development Program 242．Robert E．Anderson

To：
From：
Source of Funds：Current
Restricted Funds for the
College of Business
Administration－
Professional Continuing
Education Account．
Concurrent Employment：
Advertising
Lecturer
（RBC非 1696）

## Institute of Latin American Studies

Appointment
Visiting Tinker Professor
243．Juarez R．B．Lopes

Source of Funds：Tinker Visiting Professorship in Latin American Studies Account． （RBC非 1819）

|  |  | Full－time Salary |  |
| :---: | :---: | :--- | :--- |
| Period of | $\%$ | No． |  |
| Appointment | Time | Mos．$\quad$ Rate |  |

$$
9 / 1-5 / 31 \quad 8.5 \quad \frac{\text { Stipend }}{\$ 1,800}
$$

$$
9 / 1-1 / 15 \quad 50 \quad 9 \quad \$ 19,400
$$

$1 / 16-5 / 3191.5$

| $6 / 1-7 / 15$ | 100 | 9 | 31,500 |
| :--- | :--- | :--- | :--- |
| $6 / 1-8 / 31$ | 100 | 9 | 31,500 |


| $9 / 1-5 / 31$ | 67 | 12 | 19,850 |
| :--- | :--- | :--- | :--- |
| $9 / 1-1 / 15$ | 67 | 12 | 19,850 |

9／1－5／31 $33 \quad 9 \quad 19,850$
$1 / 16-5 / 31 \quad 100 \quad 9 \quad 25,000$

| Item，Department，Title，Name | Period of <br> AppointmentFull－time Salary <br> No． |
| :--- | :--- | :--- |

CURRENT RESTRICTED（Continued）
Administrative Charges to Trust Funds
Transfer of Funds
244．Amount of Transfer－\＄5，000
To：Account No．19－0619－1262
From：Account No．19－0619－1200
（RBC非 1712）

## PLANT FUNDS

## Major Repairs and Rehabilitation Projects

Transfer of Funds
245．Amount of Transfer－$\$ 37,181$
Transfers were made from the Major Repairs and Rehabilitation Projects Allotment account for various projects，as follows：
（1）Additional Security for Texas Memorial Museum （RBC非 1589）
（2）Installation of Security System on Stairwell Doors，Library Section，Main Building （RBC非 1027）

（3）Remodeling 3rd and 4th floors of Walter Webb Hall for offices

14，110 （RBC非1869）
（4）Sale and Removal of Personnel Building 9，971 （RBC非 1868）

1975－76 BUDGET
SALARY RATE INCREASES OF $\$ 2,000$ OR MORE INVOLVING APPOINTMENTS to a different position and new and different duties

Source of Funds：Departmental Salaries unless otherwise specified．

| Item No，and Explanation | Present Status | Proposed Status | Effective Dates |
| :---: | :---: | :---: | :---: |
| 1．Virginia E．Charlton International Office | Program Specialist I | Program Specialist II |  |
| Salary Rate | \＄7，632 | \＄10，308 | 1／7－3／19 |
| Source of Funds： <br> Agency Funds－Intensive English Program <br> （RBC非 1859） |  |  |  |
| 2．Russell J．Fleming Aerospace Engineering and Engineering Mechanics | Research Engineer Assistant II | Research Engineer Associate II |  |
| Salary Rate <br> Source of Funds： <br> Sandia Laboratories Grant <br> （RBC非 1877） | 10，308 | 14，376 | 1／22－5／31 |
| 3．John H．Gully Energy Storage Group | Drafting Technician I （1／2T） | Research Engineer Associate I（F．T．） |  |
| ```Salary Rate Source of Funds: Government Contract - Payroll Clearing Account (RBC非 1806)``` | 8，724 | 11，772 | 1／1／76 |
| 4．James M．Harless （Non－tenure） Center for Energy Studies | Postdoctoral <br> Research Associate （F．T．） | Postdoctoral <br> Research Associate <br> （1／2T） |  |
| Salary Rate－ 12 mos． Chemistry | 10，308 | $\begin{aligned} & \quad 10,308 \\ & \text { Instructor (Spring } \\ & 1976 \text { Only) } \end{aligned}$ |  |
| Academic Rate－ 9 mos． (RBC非 1814) | $\begin{gathered} 7,731 \\ \text { (equiv.) } \end{gathered}$ | 11，000 | 1／16／76 |


| Item No．and Explanation | Present Status | Proposed Status | Effective $\qquad$ |
| :---: | :---: | :---: | :---: |
| 5．Leonard F．Hebert，Jr． Applied Research Laboratories | Photographic Technician I （70\％T） | Photographer I （F．T．） |  |
| Salary Rate | \＄6，036 | \＄8，436 | 1／1／76 |
| Source of Funds： <br> Government Contract－ Payroll Clearing Account （RBC非1807） |  |  |  |
| 6．John I．Jones，III Applied Research Laboratories | Research Engineer Associate I | Research Engineer Associate II |  |
| Salary Rate | 12，168 | 14，898 | 1／15／76 |
| Source of Funds： <br> Government Contract－ Payroll Clearing Account （RBC非1808） |  |  |  |
| 7．Ghislaine D．Kozuh （Non－tenure） Germanic Languages | Teaching Assistant $(1 / 3 \mathrm{~T})$ | Instructor $(1 / 3 \mathrm{~T})$ |  |
| Academic Rate | 8，000 | 10，000 | 1／16／76 |
| ```Source of Funds: Transfer from Unallocated Faculty Salaries (RBC非 1904, 1949)``` |  |  |  |
| 8．Sue L．Lagerquist International Office | Program Specialist I （52．5\％T） | Program Specialist II （ $60 \% \mathrm{~T}$ ） |  |
| Salary Rate | 7，380 | 10，308 | 1／7－3／18 |
| Source of Funds： Agency Funds－ International Office Intensive English Program （RBC\＃1969） |  |  |  |
| 9．Roy B．McCammon Astronomy | Research Scientist <br> Assistant I（ $1 / 4 \mathrm{~T}$ ） | Research Scientist <br> Associate II（F．T．） |  |
| Salary Rate | 9，648 | 13，908 | 1／5－2／29 |
| Source of Funds： NASA Grant （RBC非 1831） |  |  |  |

Item No．and Explanation $\qquad$ Proposed Status

## Effective

Dates

10．Harry S．Martin
（Non－tenure）
Law Library
Professional Associate Law
Librarian（90\％T）Librarian（90\％T）9／1－5／31
$(100 \% \mathrm{~T}) \quad(100 \% \mathrm{~T}) 6 / 1-8 / 31$
Salary Rate－ 12 mos．
\＄16，459
$\$ 22,000$
2／1／76
School of Law
Lecturer（ $10 \% \mathrm{~T}$ ）
Lecturer（ $10 \% \mathrm{~T}$ ）
9／1－5／31
Academic Rate－ 9 mos．
14,570
16，500
2／1／76
Source of Funds：
Transfer from
Unallocated Faculty
Salaries
（RBC非1910，1911，1912，1948）
11．Steven P．Nichols
Center for Energy Studies

Research Engineer Research Engineer Assistant III Associate IV F．T．－9／1－10／31（F．T．）
LWOP－11／1－12／31
11,772
17,580
$1 / 1-2 / 29$
Source of Funds： ERDA Contract （RBC非 1971）

12．Leslie A．Priebe （Non－tenure） Biomedical Engineering－ U．S．Air Force Contract Funds

| Research Engineer <br> Assistant III <br> （F．T．） | Research Engineer <br> （Faculty） <br> （F．T．） <br> （1／2T） | $\begin{aligned} & 1 / 1-1 / 15 \\ & 1 / 16-5 / 31 \end{aligned}$ |
| :---: | :---: | :---: |
| 13，008 |  |  |
|  | 14，000 | 1／1／76 |
|  | Assistant <br> Professor（1／2T） | 1／16－5／31 |
| $\begin{gathered} 9,756 \\ \text { (equiv.) } \end{gathered}$ | 14，000 | 1／16／76 |

（RBC\＃1090，1945，1946）
13．Charles L．Rushing
Applied Research Laboratories

Salary Rate
Source of Funds：
Government Contract－ Payroll Clearing
Account （RBC非1970）

| Laboratory | Research Engineer <br> Research |  |
| :--- | :--- | :--- |
| Assistant II | Associate II |  |
| （F．T．） |  |  |
| （LWOP） $9 / 1-1 / 31$ |  |  |
| 6,456 |  | 12,168 |


| Item No. and Explanation |  | Present Status | Proposed Status | Effective Dates |
| :---: | :---: | :---: | :---: | :---: |
| 14. Ernest A. Sharpe (Tenure) , Journalism Professor (83\% T) $\begin{aligned} & \text { Jesse H. Jones } \\ & \text { Professor ( } 86 \% \text { T) }\end{aligned}$ |  |  |  |  |
| Source of Funds: <br> General Budget Funds (69\%), Current Restricted Funds - Jesse H. Jones Professorship (17\%) |  |  |  |  |
| Advertising |  | Professor (17\% T) | Professor (14\% T) |  |
| Academic Rate - 9 mos |  | \$ 24,686 | \$ 24,686 |  |
| Total Salary - 9 mos. (Rate) 24,686 (RBC非1838, 1839, 1840) |  |  | 29,686 | 1/16/76 |

The following Summer Session Budget is allocated within funds set aside for this purpose. The Summer Session includes generally two terms -- the First Term running June 1 through July 15, and the Second Term from July 16 through August 31. Certain courses are scheduled on an overlapping nine weeks basis (June 1 through July 31), and others are on a full twelve weeks basis (June 1 through August 31). No merit salary rate increases are permitted in the Summer Session Budget.

THE UNIVERSITY OF TEXAS AT AUSTIN
EDUCATIONAL AND GENERAL
ALLOCATION FOR 1976 SUMMER SESSION

# THE UNIVERSITY OF TEXAS AT AUSTIN <br> EDUCATIONAL AND GENERAL <br> ALLOCATION FOR 1976 SUMMER SESSION 

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# THE UNIVERSITY OF TEXAS AT AUSTIN 

EDUCATIONAL AND GENERAL
1976 SUMMER SESSION ALLOCATION

| Appropriation for 1976 Summer Sessionfransfer from Unallocated Faculty Salaries |  | \$ 3,924,682 |
| :---: | :---: | :---: |
|  |  | +671,289 |
| Allocations for 1976 Sunmer Session 4,595,971 |  |  |
| 3. Resident Instruction |  |  |
| 3a Faculty Salaries | \$4,555,971 |  |
| 3 b Departmental Operating Costs | 15,000 | \$4,570,971 |
| Unallocated Summer Session Balance |  | \$ 25,000 |

THE UNIVERSITY OF TEXAS AT AUSTIN
1976 SUMMER SESSION ALLOCATION
(Elements of Institutional Cost)
3. RESIDENT INSTRUCTION

HOOL OF ARCHITECTURE
LEGE OF HUMANITIES
lean's Reserve
tassics
inglish
French \& Italian Sermanic Languages Iriental \& African Languages \&
Literatures philosophy blavic Languages ppanish \& Portuguese Sub-total

LLEGE OF SOCIAL AND BEHAVIORAL CIENCES Dean's Reserve Anthropology Economics Geography Government History Linguistics Psychology Sociology

Sub-total
llege of natural sciences
Dean's Reserve As tronomy Biological Sciences Botany

```
Chemistry
```

Computer Sciences
Geological Sciences
Home Economics
Marine Studies
Mathematics
Microbiology
Physics
Zoology

Sub-total


3,596
54,527
200,836
64,748
56,924
33,775
35,285
20,383
116,714
586,788
FACULTY
SALARIES

## DEPARTMENTAL <br> OPERATING COSTS

$\$$
$\qquad$
$\$$

3,596
54,527
200,836
64,748
56,924
33,775
35,285
20,383
116,714
586,788 $\qquad$

1,670
32,833
53,626
32,485
100,881
100,046
17,857
77,401
42,563

3. RESIDENT INSTRUCTION (Continued)

|  | TOTAL RESIDENT INSTRUCTION |  | $\begin{aligned} & \text { FACULTY } \\ & \text { SALARIES } \\ & \hline \end{aligned}$ |  | DEPARTMENTAL OPERATING COSTS |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ЭLLEGE OF BUSINESS ADMINISTRATION |  |  |  |  |  |  |
| Dean's Reserve | \$ | 13,137 | \$ | 13,137 | \$ |  |
| Accounting |  | 112,066 |  | 112,066 |  |  |
| Finance |  | 68,389 |  | 68,389 |  |  |
| General Business |  | 100,382 |  | 100,382 |  |  |
| Management |  | 73,332 |  | 73,332 |  |  |
| Marketing Administration |  | 69,048 |  | 69,048 |  |  |
| S Sub-total |  | 436,354 |  | 436,354 |  |  |
| HOOL OF COMMUNICATION |  |  |  |  |  |  |
| Dean's Reserve |  | -0- |  | -0- |  |  |
| Advertising |  | 23,527 |  | 23,527 |  |  |
| Journalism |  | 76,548 |  | 76,548 |  |  |
| Radio-Television-Film |  | 53,621 |  | 53,621 |  |  |
| Speech Communication |  | 81,876 |  | 81,876 |  |  |
| Sub-total |  | 235,572 |  | 235,572 |  |  |
| pllege of EDucation |  |  |  |  |  |  |
| Dean's Reserve |  | -0- |  | -0- |  |  |
| Curriculum and Instruction |  | 218,770 |  | 218,770 |  |  |
| Educational Administration |  | 75,812 |  | 75,812 |  |  |
| Educational Psychology |  | 121,587 |  | 121,587 |  |  |
| Health, Physical Education \& Recreat |  | 77,816 |  | 77,816 |  |  |
| Special Education |  | 99,388 |  | 99,388 |  |  |
| Sub-total |  | 593,373 |  | 593,373 |  |  |
| OLLEGE OF ENGINEERING |  |  |  |  |  |  |
| Dean's Reserve |  | -0- |  | -0- |  |  |
| Aerospace Engineering \& Engineering |  |  |  |  |  |  |
| Mechanics |  | 51,527 |  | 51,527 |  |  |
| Engineering Mechanics Division |  | 37,999 |  | 37,999 |  |  |
| Chemical Engineering |  | 35,540 |  | 35,540 |  |  |
| Civil Engineering |  | 138,696 |  | 138,696 |  |  |
| Electrical Engineering |  | 98,189 |  | 98,189 |  |  |
| Mechanical Engineering |  | 97,840 |  | 97,840 |  |  |
| Petroleum Engineering |  | 21,067 |  | 21,067 |  |  |
| Sub-total |  | 480,858 |  | 480,858 |  |  |
| LOLLEGE OF FINE ARTS |  |  |  |  |  |  |
| Dean's Reserve |  | 2,814 |  | 2,814 |  |  |
| Art |  | 116,839 |  | 116,839 |  |  |
| Drama |  | 56,758 |  | 56,758 |  |  |
| Music |  | 192,495 |  | 177,495 |  | 15,000 |
| Sub-total |  | 368,906 |  | 353,906 |  | 15,000 |
| CHOOL OF LAW |  | 180,000 |  | 180,000 |  |  |
| RADUATE SCHOOL OF LIBRARY SCIENCE |  | 69,994 |  | 69,994 |  |  |
| OLLEGE OF PHARMACY |  | 172,999 |  | 172,999 |  |  |
| RADUATE SCHOOL OF SOCIAL WORK |  | 49,455 |  | 49,455 |  |  |
| TOTAL RESIDENT INSTRUCTION |  | 570,971 |  | 555,971 | \$ | 15,000 |

# Pages 2354-2457 are intentionally left blank <br> (Noted: June 6, 2010) 

February 25, 1976

Deputy Chancellor E. D. Walker
The University of Texas System 601 Colorado Street
Austin, Texas 78701
Dear Deputy Chancellor Walker:
The docket of the March 26,1976 meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.
Sincerely,
ORfale :
Bryce Jordan
President

BJ/kam
Attachment

## GIFTS

The following gifts have been received and I recommend acceptance by the Board Two asteriks following the dollar amount indicate a non-monetary gift.

DONOR PURPOSE AND CONDITIONS AMOUNT

1. Lena E. Callier Trust First National Bank in Dallas
2. Lena E. Callier Trust First National Bank in Dallas
3. Foundation for Callier Center \& Communication Disorders 3300 Republic Bank Tower Dallas, Texas 75201
4. Mr. \& Mrs. Cecil H. Green 3908 Lexington Avenue Dallas, Texas 75205
5. The Jonsson Foundation 3300 Republic Bank Tower Dallas, Texas 75201
6. Mrs. Eugene McDermott

4701 Drexel Drive Dallas, Texas 75205

In support of the Callier $\$ 8,000.00$ Center.

In support of the Callier $\$ 8,000.00$ Center.

In support of the Callier $\$ 6,248.99$ Center.
and ida Green Honors Chair. and Ida Green Honors Chair.

In support of the Callier $\$ 11,666.00$ Center.

In support of art acquisitions $\$ 10,000.00$ for the McDermott Library.

Geological Information Library \$ 5,643.00** of Dallas. 1325 Fidelity Union Life Building
Dallas, Texas 75201
8. United Fund of In support of the Callier $\$ 21,344$

Metropolitan Dallas, Inc.
901 Ross Avenue Dallas, Texas 75202
9. United Fund of In support of Callier \$ 21,354.00

Metropolitan Dallas, Inc.
901 Ross Avenue Dallas, Texas 75202

## ABSENCE FROM USUAL AND REGULAR DUTIES

In accordance with Part Two, Chapter III, Section 13, of the Rules and Regulations of the Board of Regents of The University of Texas System, I recommen, and the Chancellor's Office has approved, the following requests for absence from usual and regular duties:

1. Steve Hammond for the period January 22, 1976 through February 2, 1976 to travel to Honolulu, Hawaii and to Western United States to collect samples related to and supported by Grant El355-1. No state funds are involved.
2. Maureen Steiner for the period January 26, 1976 through April 30, 1976 to travel to Minneapolis, Minnesota to use specialized rock magnetic facilities at the University of Minnesota in pursuit of research under Grant E1370-1. No state funds are involved.
3. Jim Combs for the period January 30, 1976 through February 3, 1976 to travel to Nicaragua at the request of the Federal Power Commission to provide technical assistance to their stalled geothermal project. No state funds are involved.
4. J. C. Brown for the period February 18, 1976 through March 3, 1976 to travel to Fairbanks, Alaska for the pre-launch testing and launch of NASA rocket 18.164 from Poker Flat Research Range per NASA contract. No state funds are involved.
5. Larry L. Harmon for the period February 18, 1976 through March 3, 1976 to travel to Fairbanks, Alaska for the pre-launch testing and launch of NASA rocket 18.164 from Poker Flat Research Range per NASA contract. No state funds are involved.
6. Benny J. Holt for the period February 18, 1976 through March 3, 1976 to travel to Fairbanks, Alaska for the pre-launch testing and launch of NASA rocket 18.164 from Poker Flat Research Range per NASA contract. No state funds are involved.
7. Loyd A. Swaim for the period February 18, 1976 through March 3, 1976 to travel to Fairbanks, Alaska for the pre-launch testing and launch of NASA rocket 18.164 from Poker Flat Research Range per NASA contract. No state funds are involved.
8. Donald R. Zuccaro for the period February 18, 1976 through March 3, 1976 to travel to Fairbanks, Alaska for the pre-launch testing and launch of NASA rocket 18.164 from Poker Flat Research Range per NASA contract. No state funds are involved.
9. Andrew B. Christensen for the period February 20, 1976 through March 8, 1976 to travel to Fairbanks, Alaska to perform duties as project scientist responsible for the launch of the Nike-Tomahawk scientific payload designed for the study of the extreme ultraviolet radiation in the aurora. No state funds are involved.

## THE UNIVERSITY OF TEXAS AT DALLAS

## ABSENCE FROM USUAL AND REGULAR DUTIES (continued)

10. Charles R. Lippincott for the period February 21, 1976 through March 3, 1976 to travel to Fairbanks, Alaska for the pre-1aunch testing and launch of NASA rocket 18.164 from Poker Flat Research Range per NASA contract. No state funds are involved.
11. Francis S. Johnson for the period February 28, 1976 through March 14, 1976 to travel to London, England to attend a meeting of the European Space Science Board and travel to Paris, France to attend a COSPAR Program Committee meeting. No state funds are involved.

## NON-STUDENT ATHLETIC FACILITIES USE FEES

I recommend ratification of the following:

1. Faculty and Staff
2. Guest privilege card May be purchased by students, faculty, and staff members; permits individuals to bring guests at any time during semester.
3. Guest fee

Permits individuals to bring guests on a per use basis.
\$ 10/semester
\$ 5/summer session
\$ 5/semester
\$ $2.50 /$ summer session

\$ 1.00/court
4. Non-University related persons may use the facilities at $\$ 1.00 /$ person on a walk-on basis only. No reservations are accepted.

THE UNIVERSITY OF TEXAS AT DALLAS

ACADEMIC AND BUSINESS CONTRACTS AND AGREEMENTS

I recommend ratification of the following:


1. An agreement signed by the Vice President S. C. Fallis, whereby the National Laboratories Incorporated will furnish to the University of Texas at Dallas clinical assays, technical consultation and training programs.

GRANTS, CONTRACTS AND AGREEMENTS (NON-GOVERNMENTAL)

The following grants and agreements have been executed by the appropriate official, and $I$ recommend ratification:

1. Agency:

Contract No.: Principal
Investigator:
New Funds:
Date:
Description:
County of
Expenditure:
2. Agency:

Contract No.:
Principal
Investigator:
New Funds:
Date:
Description:

County of
Expenditure:

Electric Power Research Institute, Inc. RP375-1, Amendment No. 1 (UTD E1366)

James B. Combs
None
November 1, 1974 through February 29, 1976
Geothermal Exploration Methods and Techniques
Dallas/Collin

Pacific Northwest Laboratories
Battelle Memorial Institute
B-05407-A-L (UTD E1391)

James B. Combs
\$66,000
November 16, 1975 through June 30, 1976
Heat Flow Investigation and Detailed Microearthquake Monitoring in Coso Geothermal Area, California

Dallas/Collin

The following contracts, grants and amendments have been signed by the appropriate official upon the recommendation of the respective technical director, fiscal officers, and the Director of the Office of Sponsored Projects.

Expenditures from these contracts and grants will be made in accordance with regular University operating procedures and contractual limitations. Personnel appointments and changes will be in accordance with University salary rates and approvals. Travel and purchasing conform to established procedures.

| 1. Agency: | Environmental Protection Agency |
| :---: | :---: |
| Grant No.: | R803356-01, Amendment No. 3 (UTD No. E1359) |
| Principal |  |
| Investigator: | G. Fred Lee |
| New Funds: | None |
| Date: | July 22, 1974 through June 30, 1976 |
| Description: | Review and Synthesis of US-OECD Eutrophication Data |
| County of |  |
| Expenditure: | Dallas/Collin |

2. Agency: NASA/Headquarters

Grant No.: NGL 44-004-130, Supplement No. 4 (UTD No. E1306)
Principal
Investigator: Francis S. Johnson
New Funds: $\quad \$ 200,000$
Date: April 1, 1976 through March 31, 1977
Description: Research in Space Sciences and Technology
County of
Expenditure: Dallas/Collin
3. Agency: NASA/Headquarters

Grant No.: NGR 44-004-030, Supplement No. 12 (UTD No. E1447)
Principal
Investigator: W. J. Heikkila
New Funds: $\quad \$ 15,000$
Date: $\quad$ November 1, 1975 through October 31, 1976
Description: Continuation of Laboratory Plasma Probe Studies
County of
Expenditure: Dallas/Co11in
4. Agency: NASA/Headquarters

Grant No.: NSG 7034, Supplement No. 2 (UTD No. E1347)
Principal
Investigator: R. Richard Hodges, Jr.
New Funds: $\$ 50,000$
Date:
Description
County of
Expenditure: Dallas/Collin

## THE UNIVERSITY OF TEXAS AT DALLAS

GRANTS, CONTRACTS AND AGREEMENTS (FEDERAL) (continued)


THE UNIVERSITY OF TEXAS AT DALLAS

GRANTS, CONTRACTS AND AGREEMENTS (FEDERAL) (continued)

| 10. | Agency: | National Institutes of Health, DHEW |
| :---: | :---: | :---: |
|  | Grant No.: | 5 R01 NS 07925-05 (UTD No. E1536-02) |
|  | Principal |  |
|  | Investigator: | George Moushegian |
|  | New Funds: | None |
|  | Date: | September 1, 1975 through December 31, 1976 |
|  | Description: | Binaural Neurophysiology |
|  | County of |  |
|  | Expenditure: | Dallas/Collin |
| 11. | Agency: | National Science Foundation |
|  | Grant No. : | EAR74-22950, Amendment No. A02 (UTD No. El360) |
|  | Principal |  |
|  | Investigator: | Charles E. Helsley |
|  | New Funds: | None |
|  | Date: | September 1, 1974 through August 31, 1976 |
|  | Description: | Modeling of Deep Crustal and Upper Mantle Conductivities in the Western U. S. Utilizing Both Low Frequency |
|  |  | Controlled Source Electromagnetic Sounding and Geomagnetic |
|  |  | Variation Data |
|  | County of |  |
|  | Expenditure: | Dallas/Collin |

## THE UNIVERSITY OF TEXAS AT DALLAS

AMENDMENTS TO THE $1975 / 76$ OPERATING BUDGET
BOARD OF REGENTS MEETING - MARCH 26, 1976

## GENERAL ADMINISTRATION

Office of the Vice President for Business Affairs

1. Transfer of Funds

Amount of Transfer - $\$ 3,640$
From: Unallocated General Administration Maintenance and Operation
\$ 3,640
To: Classified Salaries
\$ 3,640
To provide for the establishment of a clerk typist position. (D186)

## Student Services

2. Appoint Ann M. Harris, Assistant to the Director of Student Services-Class Code 1000 , $100 \%$ time for the period $1 / 06 / 76$ thru $8 / 31 / 76$, annual
salary rate $\$ 13,200$. Funds for this appointment available from
Unallocated General Administration Maintenance and Operation. (D201)
GENERAL INSTITUTIONAL
Council of Presidents
3. Transfer of Funds

Amount of Transfer - $\$ 4,681$
From: Unallocated General Administration Maintenance and Operation

To: Maintenance and Operation $\$ 4,681$
To provide for the Interagency Agreement whereby The University of Texas at Dallas reimburses The University of Texas Health Science Center for one-third of the costs of the Office of the Council of Presidents. (D240)

## RESIDENT INSTRUCTION

Office of the Executive Dean for Undergraduate Studies
4. Resign John J. Cunningham, Assistant to the Dean--Class Code 1000, in the Office of the Executive Dean for Undergraduate Studies, effective 12/31/75. (D190)

Office of the Executive Dean for Graduate Studies and Research
5. Transfer of Funds

Amount of Transfer - $\$ 1,500$

| From: | Maintenance and Operation | $\$ 1,500$ |
| :--- | :--- | :--- |
| To: | Travel | $\$ 1,500$ |

To provide funds for travel in connection with negotiation of awards and processing research programs through the various government agencies. (D243)

THE UNIVERSITY OF TEXAS AT DALLAS
AMENDMENTS TO THE 1975/76 OPERATING BUDGET (continued)
RESIDENT INSTRUCTION (continued)

## Office of Teacher Education

6. Transfer of Funds

Amount of Transfer - $\$ 1,701$

| From: | Unallocated Resident <br> and Operation | $\$ 1,701$ |
| :--- | :--- | :--- |
| To: | $\$ 1,701$ |  |

To provide funds to increase percent of time of the Teacher Certification Officer classified position. (D194)

## School of Arts and Humanities

7. Appoint C. E. Cooley, Lecturer without tenure, to the School of Arts and Humanities, $25 \%$ time for the period $1 / 16 / 76$ thru $5 / 31 / 76$, academic salary rate $\$ 9,600$. Funds for this appointment available from Unallocated Faculty Salaries. (D241)
8. Transfer of Funds

Amount of Transfer - $\$ 1,800$

| From: | Office of the Executive Dean for Undergraduate |
| :--- | :--- | :--- |
|  | Studies Administrative \& Professional Salaries |$\quad \$ 1,800$

To provide for the wages of student employees. (D220)
School of Human Development
9. Reappoint Jo Hitt, Lecturer without tenure, to the School of Human Development, $25 \%$ time for the period $1 / 16 / 76$ thru $5 / 31 / 76$, academic salary rate $\$ 9,600$. Funds for this appointment available from Lecturer Salaries. (D200)

## School of Management and Administration

10. Appoint Adolf J: Enthoven, Professor with initial tenure, to the School of Management and Administration, $100 \%$ time for the period 1/01/76 thru $5 / 31 / 76$, academic salary rate $\$ 25,500$. Funds for this appointment available from Faculty Salaries. (D198)
11. Reappoint Bill Van Dyke, Lecturer without tenure, to the School of Management and Administration, $25 \%$ time for the period $1 / 16 / 76$ thru $5 / 31 / 76$, academic salary rate $\$ 9,450$. Funds for this appointment available from Unallocated Faculty Salaries. (D211)
12. Appoint Michael O'Shea, Lecturer without tenure, to the School of Management and Administration, $25 \%$ time for the period $1 / 16 / 76$ thru $5 / 31 / 76$, academic salary rate $\$ 9,450$. Funds for this appointment available from Unallocated Faculty Salaries. (D212)
13. Appoint Al Robins, Lecturer without tenure, to the School of Management and Administration, $13 \%$ time for the period $1 / 16 / 76$ thru $5 / 31 / 76$, academic salary rate $\$ 9,450$. Funds for this appointment available from Unallocated Faculty Salaries. (D213)
14. Appoint Jose M. Rubi, Lecturer without tenure, to the School of Management and Administration, $13 \%$ time for the period $1 / 16 / 76$ thru $5 / 31 / 76$, academic salary rate $\$ 9,450$. Funds for this appointment available from Unallocated Faculty Salaries. (D214)

# THE UNIVERSITY OF TEXAS AT DALLAS 

AMENDMENTS TO THE $1975 / 76$ OPERATING BUDGET (continued)

## RESIDENT INSTRUCTION (continued)

## School of Management and Administration (continued)

15. Appoint Ron Kephart, Lecturer without tenure, to the School of Management and Administration, $25 \%$ time for the period $1 / 16 / 76$ thru $5 / 31 / 76$, academic salary rate $\$ 9,450$. Funds for this appointment available from Unallocated Faculty Salaries. (D215)
16. Appoint Thomas J. Tschetter, Lecturer without tenure, to the School of Management and Administration, $50 \%$ time for the period $1 / 16 / 76$ thru 5/31/76, academic salary rate $\$ 9,450$. Funds for this appointment available from Unallocated Faculty Salaries. (D221)
17. Reappoint Lois C. Bacon, Lecturer without tenure, to the School of Management and Administration, $25 \%$ time for the period $1 / 16 / 76$ thru $5 / 31 / 76$, academic salary rate $\$ 9,450$. Funds for this appointment available from Unallocated Faculty Salaries. (D222)
18. Reappoint C. S. Choyce, Lecturer without tenure, to the School of Management and Administration, $25 \%$ time for the period $1 / 16 / 76$ thru 5/31/76, academic salary rate $\$ 9,450$. Funds for this appointment available from Unallocated Faculty Salaries. (D223)
19. Reappoint Lane M. McDaniel, Lecturer without tenure, to the School of Management and Administration, $25 \%$ time for the period $1 / 16 / 76$ thru 5/31/76, academic salary rate $\$ 9,450$. Funds for this appointment available from Unallocated Faculty Salaries. (D224)
20. Reappoint Arthur M. Sloan, Lecturer without tenure, to the School of Management and Administration, $50 \%$ time for the period $1 / 16 / 76$ thru 5/31/76, academic salary rate $\$ 9,450$. Funds for this appointment available from Unallocated Faculty Salaries. (D225)
21. Reappoint Wayne N. Williams, Lecturer without tenure, to the School of Management and Administration, $25 \%$ time for the period $1 / 16 / 76$ thru 5/31/76, academic salary rate $\$ 9,450$. Funds for this appointment available from Unallocated Faculty Salaries. (D226)
22. Reappoint Gerald Box, Lecturer without tenure, to the School of Management and Administration, $25 \%$ time for the period $1 / 16 / 76$ thru $5 / 31 / 76$, academic salary rate $\$ 9,450$. Funds for this appointment available from Unallocated Faculty Salaries. (D227)
23. Appoint D. Marion Wood, Lecturer without tenure, to the School of Management and Administration, $50 \%$ time for the period $1 / 16 / 76$ thru $5 / 31 / 76$, academic salary rate $\$ 9,450$. Funds for this appointment available from Unallocated Faculty Salaries. (D228)
24. Reappoint James C. Mosser, Lecturer without tenure, to the School of Management and Administration, $50 \%$ time for the period $1 / 16 / 76$ thru $5 / 31 / 76$, academic salary rate $\$ 9,450$. Funds for this appointment available from Unallocated Faculty Salaries. (D229)
25. Reappoint Ross A. Lumley, Lecturer without tenure, to the School of Management and Administration, $25 \%$ time for the period $1 / 16 / 76$ thru 5/31/76, academic salary rate $\$ 9,450$. Funds for this appointment available from Unallocated Faculty Salaries. (D230)

## THE UNIVERSITY OF TEXAS AT DALLAS

## RESIDENT INSTRUCTION (continued)

## School of Management and Administration (continued)

26. Reappoint Andrew B. Seidel, Lecturer without tenure, to the School of Management and Administration, $50 \%$ time for the period $1 / 16 / 76$ thru $5 / 31 / 76$, academic salary rate $\$ 9,450$. Funds for this appointment available from Unallocated Faculty Salaries. (D231)
27. Appoint Robert B. Cook, Jr., Lecturer without tenure, to the School of Management and Administration, $25 \%$ time for the period $1 / 16 / 76$ thru $5 / 31 / 76$, academic salary rate $\$ 9,450$. Funds for this appointment available from Unallocated Faculty Salaries. (D232)
28. Appoint Stephen Radvic, Lecturer without tenure, to the School of Management and Administration, $25 \%$ time for the period $1 / 16 / 76$ thru $5 / 31 / 76$, academic salary rate $\$ 9,450$. Funds for this appointment available from Unallocated Faculty Salaries. (D233)
29. Appoint Earl Bentley, Lecturer without tenure, to the School of Management and Administration, $25 \%$ time for the period $1 / 16 / 76$ thru $5 / 31 / 76$, academic salary rate $\$ 9,450$. Funds for this appointment available from Unallocated Faculty Salaries. (D234)

## School of Natural Sciences and Mathematics

30. Revise academic salary rate for John G. Fish, Lecturer without tenure, in the School of Natural Sciences and Mathematics, from $\$ 9,600$ to $\$ 10,000$ effective $1 / 16 / 76$. Additional funds available from Lecturer Salaries. (D188)
31. Revise title of Marvin D. Piwoni in the School of Natural Sciences and Mathematics from Instructor without tenure to Assistant Professor without tenure effective 1/01/76 with no change in academic salary rate. (D204)
32. Revise Patrick L. Odell, Professor with tenure, in the School of Natural Sciences and Mathematics from $25 \%$ to $100 \%$ time effective $1 / 01 / 76$ because of his resignation as Executive Dean of Graduate Studies. Funds available from Unallocated Faculty Salaries. (D218)
33. Revise academic salary rate for Augustine J. Cunningham, Associate Professor with tenure and Program Head, in the School of Natural Sciences and Mathematics from $\$ 14,500$ to $\$ 16,400$ effective $1 / 01 / 76$. Funds available from Unallocated Faculty Salaries. (D235)
34. Reappoint George B. Vaughan, Visiting Assistant Professor without tenure, to the School of Natural Sciences and Mathematics, $25 \%$ time for the period $1 / 16 / 76$ thru $5 / 31 / 76$, academic salary rate $\$ 9,600$. Funds for this appointment available from Faculty Salaries. (D236)
35. Reappoint L. Dan Tucker, Lecturer without tenure, to the School of Natural Sciences and Mathematics, $13 \%$ time for the period $1 / 16 / 76$ thru $5 / 31 / 76$, academic salary rate $\$ 9,600$. Funds for this appointment available from Lecturer Salaries. (D237)
36. Reappoint Ronald V. Thurman, Lecturer without tenure, to the School of Natural Sciences and Mathematics, $13 \%$ time for the period 1/16/76 thru $5 / 31 / 76$, academic salary rate $\$ 9,600$. Funds for this appointment available from Lecturer Salaries. (D238)

## THE UNIVERSITY OF TEXAS AT DALLAS

AMENDMENTS TO THE 1975/76 OPERATING BUDGET (continued)

## RESIDENT INSTRUCTION (continued)

## School of Natural Sciences and Mathematics (continued)

37. Appoint Albion A. Norman, Assistant Instructor without tenure, to the School of Natural Sciences and Mathematics, $100 \%$ time for the period $1 / 16 / 76$ thru $5 / 31 / 76$, academic salary rate $\$ 12,000$. Funds for this appointment available from Faculty Salaries. (D239)

## School of Social Sciences

38. Reappoint William Amos, Lecturer without tenure, to the School of Social Sciences, $25 \%$ time for the period $1 / 16 / 76$ thru 5/31/76, academic salary rate $\$ 10,000$. Funds for this appointment available from Lecturer Salaries. (D192)
39. Reappoint Richard P. Boyle, Visiting Associate Professor without tenure, to the School of Social Sciences, $100 \%$ time for the period $1 / 16 / 76$ thru $5 / 31 / 76$, academic salary rate $\$ 18,000$. Funds for this appointment available from Faculty Salaries. (D193)
40. Reappoint Helen Reynolds, Lecturer without tenure, to the School of Social Sciences, $25 \%$ time for the period $1 / 16 / 76$ thru 5/31/76, academic salary rate $\$ 10,000$. Funds for this appointment available from Lecturer Salaries. (D197)
41. Appoint Joseph M. Bordelon, Lecturer without tenure, to the School of Social Sciences, $25 \%$ time for the period $1 / 16 / 76$ thru $5 / 31 / 76$, academic salary rate $\$ 10,800$. Funds for this appointment available from Lecturer Salaries. (D199)
42. Revise effective date of appointment for Pamela J. Heath, Assistant Professor without tenure, in the School of Social Sciences from 1/16/76 to $1 / 01 / 76$. Additional funds for this appointment available from Faculty Salaries. (D219)
43. Transfer of Funds

Amount of Transfer - $\$ 2,000$

| From: Unallocated Resident Instruction Maintenance |
| :--- |
| and Operation |$\$ 2,000$

To: Travel \$2,000

To provide travel expenses to the Downtown Center for the Social Sciences Faculty. (D167)

## Callier Center Deaf-Blind Program

44. Resign Daniel W. Ludewick, Program Coordinator--Class Code 1000, in the Callier Center Deaf-B1ind Program effective 1/31/76. (D202)
45. Resign John Williams, Associate Teacher--Class Code 1000, from the Callier Center Deaf-Blind Program effective 10/14/75. (D208)
46. Appoint Susan E. Moushegian, Associate Teacher--Class Code 1000, to the Callier Center Deaf-Blind Program, $100 \%$ time for the period 11/1/75 thru $5 / 31 / 76$, 9 -month salary rate $\$ 5,232$. Funds for this appointment available from Administrative and Professional Salaries. (D209)

## Callier Center Educational Programs

47. Appoint Karen A. Suty, Teacher of the Deaf--Class Code 1000, Callier Center Educational Programs, $100 \%$ time for the period 1/01/76 thru 5/31/76, 9 -month salary rate $\$ 9,932.40$. Funds for this appointment available from Administrative and Professional Salaries. (D196)
48. Resign Joel E. Regent, Teacher Aide--Class Code 1000 , from the Callier Center Educational Programs effective 10/01/75. (D205)
49. Appoint Susan S. Palmer, Teacher Aide--Class Code 1000, to the Callier Center Educational Programs, $100 \%$ time for the period 11/09/75 thru $5 / 31 / 76$, 9-month salary rate $\$ 5,220$. Funds for this appointment available from Administrative and Professional Salaries. (D206)
50. Promote Susan S. Palmer, Callier Center Educational Programs, from Teacher Aide-Class Code 1000 , 9 -month salary rate $\$ 5,220$, to Teacher of Deaf-Class Code 1000 , 9 -month salary rate $\$ 8,911.80$, effective $1 / 01 / 76$. Additional funds available from Administrative and Professional Salaries. (D207)
51. Appoint Karen P. Carr, Teacher Aide--Class Code 1000, to Callier Center Educational Programs, $100 \%$ time for the period $1 / 19 / 76$ thru $5 / 31 / 76$, 9 -month salary rate $\$ 5,796$. Funds for this appointment available from Administrative and Professional Salaries. (D210)

## UNIVERSITY LIBRARY

52. Transfer of Funds

Amount of Transfer - $\$ 4,000$

| From: | Instructional Support Classified Salaries | $\$ 4,000$ |
| :--- | :--- | :--- |
| To: | Classified Salaries | $\$ 4,000$ |

To provide funds for a clerk position in the Library Information Services. (D195)

## EXTENSION AND PUBLIC SERVICE

## Continuing Education

53. Appoint Patti W. Driskell, Assistant to the Director of Continuing Education-Class Code 1000, $100 \%$ time for the period $1 / 11 / 76$ thru $8 / 31 / 76$, annual salary rate $\$ 12,000$. Funds for this appointment available from Administrative and Professional Salaries. (D203)

## PHYSICAL PLANT

54. Transfer of Funds
Amount of Transfer - $\$ 3,000$

| From: Maintenance and Operation | $\$ 3,000$ |
| :--- | :--- | :--- |
| To: | Computer |

To provide additional computer time in Physical Plant. (D184)

## THE UNIVERSITY OF TEXAS AT DALLAS

## AMENDMENTS TO THE $1975 / 76$ OPERATING BUDGET (continued)

## PHYSICAL PLANT (continued)

55. Transfer of Funds

Amount of Transfer - $\$ 10,944$

| From: | Other Utilities Classified Salaries | $\$ 10,944$ |
| :--- | :--- | :--- |
| To: | Custodial Services Wages | $\$ 10,944$ |

To provide for the establishment of additional custodial worker positions. Funds available from the Utility Operations Supervisor position which is not to be filled. (D185)

CONTRACTS AND GRANTS

## Center for Environmental Studies

56. Reappoint Farida Y. Saleh, Research Scientist--Class Code 1000, to the Center for Environmental Studies, $100 \%$ time for the period 2/01/76 thru 4/30/76, annual salary rate $\$ 16,000$. Funds for this appointment available from Contracts and Grants. (D244)

## Natural Sciences and Mathematics

57. Appoint Tom C. Chiang, Research Associate-Class Code 1000, to Natural Sciences and Mathematics, $100 \%$ time for the period $11 / 01 / 75$ thru $8 / 31 / 76$, annual salary rate $\$ 11,268$. Funds for this appointment available from Contracts and Grants. (D183)
58. Revise percent of time for Maureen B. Steiner, Research Associate--Class Code 1000, in Natural Sciences and Mathematics, from leave of absence to $100 \%$ time for the period $1 / 15 / 76$ thru $4 / 30 / 76$, annual salary rate $\$ 13,824$. Her appointment from 5/01/76 thru 8/31/76 remains unchanged. Funds available from Contracts and Grants. (D242)

## Center for Quantum Electronics

59. Reappoint Carl B. Collins, Jr., Research Scientist--C1ass Code 1000, to the Center for Quantum Electronics, $100 \%$ time for the period 6/01/76 thru $8 / 31 / 76$, annual salary rate $\$ 27,866.67$. Funds for this appointment available from Contracts and Grants. (D189)

## Center for Space Studies

60. Promote Roderick A. Heelis, Center for Space Studies, from Research Scientist Associate IV--Class Code 4208 to Research Scientist--Class Code 1000 effective $12 / 01 / 75$ with no change in salary rate of $\$ 16,440$. (D187)

## AUXILIARY ENTERPRISES

## Student Government

61. Appoint Glenn W. Perser, President of Student Congress--Class Code 1000, to Student Government, $25 \%$ time for the period $12 / 02 / 75$ thru $8 / 31 / 76$, annual salary rate $\$ 9,600$. Funds for this appointment available from Maintenance and Operation. (D216)
62. Appoint Kathy McElveen, Vice President of Student Congress--Class Code 1000, to Student Government, $25 \%$ time for the period 12/02/75 thru 8/31/76, annual salary rate $\$ 7,200$. Funds for this appointment available from Maintenance and Operation. (D217)



## THE UNIVERSITY OF TEXAS AT DALLAS

AMENDMENTS TO CATALOGS CONTINUED

| July 10 (August-z) | Saturday (Menday). Last day for dropping Double |
| :---: | :---: |
|  | Term courses with automatic grade of W. |
| July 12 (Juły- ${ }^{\text {(3) }}$ | Monday. Classes continue for Double Term courses |
|  | and begin for Second Term courses. Late registra- |
|  | tion begins for Second Summer Term courses. |
| July 15 (Ju¥y-76) | Thursday (Fritay) Census day (Ferrth-ełase-day) |
|  | and the date on which the official enrollment |
|  | count is taken for Second Term courses. |
| July 31 (Auguat-2) | Saturday (Mendey). Last day for dropping Second |
|  | Term courses with automatic grade of W (or-Bouble |
|  | Term-eourses-with-autematitegrade-ef-W). |
| August 4 (Auguet-5) | Wednesday (fhuroday). Last day for presenting |
|  | final copies of Master's Thesis or Doctoral |
|  | Dissertation, approved by Comittee, to the |
|  | Graduate Dean. |
| August 12 | Thursday. Last class day Second and Double |
|  | Summer Term. |
| August 13 (Avguet-17---78) | Friday (fuesday-Wednesday). Reading period for |
|  | Second Term and Double Term courses. |

CORRESPONDENCE DIRECTORY

## The University of Texas at Dallas

 P.O. Box 688Richardson, Texas 75082

| FOR MORE INFORMATION ABOUT: | WRITE TO: | WHERE: |
| :---: | :---: | :---: |
| Admissions | Director of Admissions | McDermott Library |
| Financial Aid and Scholarship | ```Coordinator of Financial Aid``` | McDermott Library |
| Foreign Student Visas | Registrar | McDermott Library |
| Housing | Director of Student Services | Green Center |
| International Students Program | Director of Student Services | Green Center |
| Placement and Career Planning | Coordinator of Placement | McDermott Library |
| Registration | Registrar | McDermott Library |
| Resident Status | Registrar | McDermott Library |
| Selective Service and Veterans Affairs | Registrar | McDermott Library |
| Student Employment | ```Coordinator of Financial Aid``` | McDermott Library |
| Student Health and Medical Insurance | Health Center | McDermott Library |
| Student Organizations | Director of Student Services | Green Center |
| Student Publications | Director of Student Services | Green Center |
| Transcripts | Registrar | McDermott Library |



THE BULLETIN OF THE UNIVERSITY OF TEXAS AT DALLAS

## Undergraduate Catalog Issue 1976-1977

The benefits of education and of useful knowledge, generally diffused through a community, are essential to the preservation of a free government.

Sam Houston

Cultivated mind is the guardian genius of Democracy and, while guided and controlled by virtue, the noblest attribute of man. It is the only dictator that freemen acknowledge, and the only security which freemen desire.

Mirabeau B. Lamar

Statement on Equal Educational Opportunity
No person shall, on the basis of race, color, national origin, religion or sex, be excluded from participation in, and denied the benefits of, or be subject to discrimination under, any program or activity conducted by The University of Texas System or any of its component institutions.

BOARD OF REGENTSTHE UNIVERSITY OF TEXAS SYSTEMOFFICERSAllan Shivers, ChairmanDan C. Williams, Vice-ChairmanBetty Anne Thedford, Secretary
MEMBERS
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A. G. McNeese, Jr.
Weatherford
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James E. Bauerle, D.D.S. San Antonio
Edward Clark Austin
Terms Expire January, 1981
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Walter G. Sterling Houston
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## THE UNIVERSITY OF TEXAS SYSTEM

Officers of the Administration


Calendar of the Long Session, 1976-77
Fall Semester

## 15 Class Weeks Plus One Week for Final Examinations

| August 25-26 | Wednesday-Thursday. Registration, orientation and advisement for Fall Semester. |
| :---: | :---: |
| August 27 | Friday. Lyndon Baines Johnson's Birthday. University holiday. |
| August 30 | Monday. Classes begin. Late registration begins. |
| September 6 | Monday. Labor Day. University holiday. |
| September 15 | Wednesday. Census day and date on which the official enrollment is taken. |
| September 20 | Monday. Last day for making application for a degree. |
| October 23 | Saturday. Last day for dropping a course with an automatic grade of W . |
| November 25-27 | Thursday-Saturday. Thanksgiving holidays. |
| December 3 | Friday. Last day for presenting final copies of the Master's Thesis or Doctoral Dissertation, approved by Committee, to the Graduate Dean. |
| December 8 | Wednesday. Last day of classes. |
| December 9,10,11 | Thursday-Saturday - Reading period. |
| December 13-18 | Monday-Saturday. Fall semester final examinations. |
| December 21 | Tuesday. Graduation Day (no public exercises). |

## Spring Semester

15 Class Weeks Plus One Week for Final Examinations

| January 11-12 | Tuesday-Wednesday. Advisement and Registration for the <br> Spring Semester. |
| :--- | :--- |
| January 13 |  |
| January 28 |  |$\quad$| Thursday. Classes begin. Late registration begins. |
| :--- |
| Friday. Census day and the date on which the official |
| enrollment count is taken. |
| March 9 |$\quad$| Wednesday. Last day for making application for a degree. |
| :--- |
| Wednesday. Last day for dropping courses with automatic |
| grade of W. |

## Calendar for the Summer Session, 1977

> First Term (6 weeks) -- May 25 - July 5
> Second Term (6 weeks) -- July 8-August 17
> Double Term (12 weeks) -- May 25 - August 17

Wednesday. Registration. Students registering for any course on May 25 may register and pay fees for all other courses to be taken during the entire Summer Session.
May 26 Thursday. Classes begin. Late registration begins.
May 31 Tuesday. Census day and the date on which the official
June 2 Thursday. Last day for making application for a degree.
June 15 Wednesday. Last day for dropping First Term courses with automatic grade of W .
June 28 Tuesday. Last class day for First Summer Term.
June 29 Wednesday. Reading period for First Summer Term Final Examinations.
July 6 Wednesday. Last day for dropping Double Term courses with automatic grade of $W$.
June 30-July 8 Thursday-Saturday. Mid-session vacation for Double Term Courses.
June 30-July 5 Thursday, Friday, Tuesday. Final examinations for First
July 4
July 8
July 11
Term Courses (July 4 excluded).
Monday, Independence Day holiday.
Friday. Registration for Second Term courses.
Monday. Classes continue and begin late registration for Second Summer Term.
July 14 Thursday. Census day of Second Term and the date on which the official enrollment count is taken.
July 30 Last day for dropping Second Term courses with automatic grade of $W$.
August 3 Wednesday. Last day for presenting final copies of Master's Thesis or Doctoral Dissertation, approved by Committee, to the Graduate Dean.
August 11
August 12
August 15-17
August 19

Thursday. Last class day for Second Term and Double Term. Friday. Reading Period.
Monday-Wednesday. Final examinations in Second Term and Double Term courses.
Friday. Graduation Day (no public exercises).

The Academic Calendar may be subject to change or modification.

## THE UNIVERSITY OF TEXAS AT DALLAS

1976-1977
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    Classics
    Comparative Literature
    English
    French
    German
    History
    Journalism
    Language & Linguistics
    Music
    Philosophy
    Spanish
    Theatre
    Visual Arts
SCHOOL OF GENERAL STUDIES
```

    General Studies
    SCHOOL OF HUMAN DEVELOPMENT
Psychology
Special Education
Speech Pathology \& Audiology
SCHOOL OF MANAGEMENT \& ADMINISTRATION
Business \& Public Administration
SCHOOL OF NATURAL SCIENCE \& MATHEMATICS
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Chemistry
Geological Sciences
Mathematical Sciences
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Economics
Geography
Sociology
EDUCATION
INTERDISCIPLINARY STUDIES
PHYSICAL INSTRUCTION
THE UNIVERSITY OF TEXAS AT DALLAS - HISTORY

## INTRODUCTION

## INTRODUCING UT-DALLAS

Where did we come from?
Back in 1968 Time magazine showed a photograph of a solitary building and a huge television tower rising up in the middle of a plowed field of black farmland. "Cultivating Ph.D.'s in a Texas Cottonfield," the headline below the photograph read.

It told of the Southwest Center for Advanced Studies (SCAS), the private research and education institution that was the predecessor to The University of Texas at Dallas. The article explained how a group of area businessmen had begun the Center to try to stem the migration of the best potential scientists, engineers, and technicians from their native Texas plains to "academic pastures outside the area," and told of their concern to provide the manpower and womanpower on which the continued industrial, economic and cultural development of the Southwest depends.

The list of accomplishments of the faculty and research staff of SCAS during the decade of the 60's was impressive, and continues today in the growing expanding, exciting university that is UT-Dallas.

Where are we going?
The Texas Legislature created UT-Dallas in 1969. It asked us not only to carry on the research and graduate education activities of SCAS, but also to develop an upper-level undergraduate (junior and senior years) university. If you visited the campus now, you would see the same field of black farmland, but, this time, the lone building and the television tower are surrounded by other buildings. You would also sense an air of excitement at UTDallas. This feeling, this air of excitement-the sense of important things happening--may reach you through this booklet.

UT-Dallas has created a university for people of all ages. It offers an intellectual community in which students of various ages and backgrounds can learn from one another as well as from their teachers. We have built and will continue to build a university which integrates academic theory with the real world.

We have personalized the educational process. We belleve that education goes on in places other than the classroom. It can happen when two students meet over coffee, when a faculty member takes time to sit down and discuss something with a student, or at one of the cultural events the University brings to the campus.

How are we getting there?

[^0]
#### Abstract

When you enroll at the University you will become a member of a College. Many of the Colleges will be organized around related disciplines; others will perform special service functions, such as the college designed to assist the older student in the university. The College will be your intellectual and social home on campus.


Your College will be staffed by a Master and a team of Faculty Associates. They will be concerned with your total development, not just your academic achievement record. Within your College you will find counseling, career advisement, intra-mural athletic programs and a host of extracurricular and social activities that are part of anyone's college experience.

In your College you will also meet a number of External Associates, men and women from the Dallas-Fort Worth area who have a strong interest in the interdisciplinary aspect of the college. There will be business men and women, persons actively engaged in the arts, government officials, lawyers--a broad spectrum of the local coumunity. They are the ones who can provide you with the added dimension of reality about a particular specialization that you might not receive in a classroom or from a textbook.

Life is not divided neatly into separate compartments; nor should the knowledge about life that you receive in your college career be divided. If you are to become adept at thinking critically and creatively about the protlems and decisions you will have to make in your chosen career as well as in your own personal life, you must be able to look at the problem from as many perspectives as possible.

To help you gain the necessary perspective on your own work and to allow you a free and wide interchange of ideas with individuals in other fields, we have planned the College Interdiscipilnary Seminar. The seminars should be one of the most exciting aspects of your undergraduate studies at UT-Dallas. They will throw you into discussions with physicists, artists, anthropologists, philosophers--a wide range of the university community. These people are representative of the individuals you will be dealing with when you leave UT-Dallas to unlock your own doors or to find new ones in the world of work and ideas.

What about you?
Does this sound like the kind of educational experience you would like to share? If it does, the rest of the catalog will provide you with much of the information you need in order to make a decision; namely, general policies and procedures as well as descriptions of the different program areas we are planning. Come join us in growing and strengthening ourselves and our community.

NEED MORE INFORMATION? CHECK THE FOLLOWING:

- How do I apply for admission?
- What are the registration procedures?
- How much does it cost? See Expenses.
- How does UT-Dallas grade?
- What about lower division requirements?
- What kinds of services and facilities are available at UT-Dallas for students?
- How do I find my way around campus?
- Where do $I$ find descriptions of the degree programs?
- Where do I write for more information: Inside Front Cover.


# UNDERGRADUATE ADMISSIONS POLICIES AND PROCEDURES 

## ADMISSION TO UNDERGRADUATE PROGRAMS


#### Abstract

Admission

Admission by transfer is the primary means of entering UT-Dallas as an undergraduate. Any student with fifty-four semester hours, or seventy-two quarter hours of *acceptable lower-division work may transfer to UT-Dallas providing that the student presents a cumulative minimum grade point average equivalent to a 2.0 or higher on a 4.0 system, is/was a student in good standing at the previous school(s), and providing that prerequisites for the major program have been satisfied. The previous college work must have been from an institution which is approved by an appropriate regional or national accrediting agency.

Contact Affiliation Through Admissions Counseling Any student, whether in high school currently enrolled in a two or four year college, or with previous college credit and not currently enrolled in school, may be placed on our contact file by expressing an interest in transferring to UT-Dallas. Students thus affiliating will receive help from one UT-D Admissions Counselors, who will outline the Freshman-Sophomore requirements for transfer eligibility. Some advantages of contact affiliation include access to UT-Dallas Admissions Counseling, regular receipt of UTD news and information, and continuous update of UTD academic and student services information. High school juniors, seniors, and junior college freshmen are especially encouraged to take advantage of this counseling in order to make optimum use of course selection prior to enrollment at UT-Dallas.

Admission by Examination Any student establishing a score on all sections of the College Level Examination Program (CLEP) general examination in the 75 th percentile is eligible to be considered for admission to Junior standing at UT-Dallas.


*Courses not applicable to be applied to any associate degree credit at college of previous attendance may not be used as applied credit for admissions to UT-Dallas.

## INDIVIDUAL APPROVAL ADMISSION

The opportunity for review of individual training and experience is designed to assist the older student who wishes to complete a baccalaureate degree. The University will review unique combinations of training and experience as possibly satisfying part of the admission requirements, with the intent of assisting the older student who wishes to complete a baccalaureate degree. Many combinations may be presented for review, such as formal training taken through college courses, schools, industry, military, etc., as well as test results, life experiences, and any other relevant background the applicant would like to submit for consideration. The student applying for admission under the individual approval program must submit the application and supportive materials not less than three months in advance of the expected date of enrollment. These materials will be forwarded to the appropriate program director who, in consultation with the Executive Dean for Undergraduate Studies, will decide upon the amount of credit to be awarded. The application form and portfolio instructions are available at the Office of Admissions.

Special (Non-Degree) Students
The intent of special student status is to give the qualified person with an equivalent of 54 semester hours or more of college work an opportunity for part time enrollment (usually not to exceed six hours per semester) in courses that can be of special benefit to the student. Persons who have an interest in this part time enrollment plan, that is, special interest in a course, but with no intent to earn a degree at UT-Dallas, may be granted enrollment approval by the Director of Admissions. The enrollment plan is also designed to assist students enrolled in other colleges who would like to take courses at UT-Dallas for the purpose of transferring credit to the college where the degree will be earned. Students seeking admission for this program must be certified as in good standing by the institution last attended.

The total number of credit hours which may be taken by a Special Student in any given University program may be limited according to the policy of each program.

## Application

Each applicant must submit an application for admission, transcripts of all academic work since high school, and, in those instances where such is required, test scores on the Scholastic Aptitude Test (SAT) or the American College Test (ACT). The application for admission forms may be obtained from the Office of Admissions. It must be completed in full, signed, and returned to the Director of Admissions. Students are encouraged to submit the application at least 30 days prior to the beginning of classes. Because of the work necessary to evaluate the record of a transfer applicant, no committment can be made to assure that late applications will be processed in time for the expected date of enrollment. All correspondence regarding admission should be addressed to:

```
    DIRECTOR OF ADMISSIONS
THE UNIVERSITY OF TEXAS AT DALIAS
    P.O. BOX 688
    RICHARDSON, TEXAS }7508
```


## Transcripts

The term "transcript of records" refers to the recorded results of the student's academic work. This statement will contain all the important facts pertaining to the student's academic level, scholarship, and degrees. Official transcripts from each college or university attended are required. Copies of transcripts from other universities will not be issued. All materials submitted in the process of making application become the property of the University and will not be returned to the applicant.*
*Chapter 675, Acts of the 61st Texas Legislature, 1969 Regular Session, provides legal penalties for any alteration of academic records or transcripts with the intent to use such a document fraudulently or permit the fraudulent use of such a document.
"A person who violates this Act or who aids another in violating this Act is guilty of a misdemeanor and upon conviction is punishable by a fine of not more than $\$ 1,000$, and/or confinement in the county jail for a period not to exceed one year."

## Medical History

Each new student is required to complete the medical history form and undergo a physical examination by a licensed physician. (For complete information, see page $\qquad$ .)

Tests normally given to students seeking admission to a university (such as the Scholastic Aptitude Test and American College Test) are not required by UT-Dallas. The undergraduate applicant will be evaluated on the basis of previous college records, with special attention being given to general achievement plus academic strength in subject areas related to the major field of study. (See The Degree Plan, page $\qquad$ .)

## Transfer and Evaluation of Upper-Level Credits

All upper level courses taken at another accredited post-secondary institution, and for which a passing grade of $C$ or better is received, will be evaluated as equivalent or undistributed credit by the Office of Admissions. The applicability of such credit, in part or in full, to fulfill UT-Dallas graduation requirements will be determined by the program area in cooperation with the Office of Admissions. All students, regardless of the number of hours available for transfer, will be required to take a minimum of 30 semester hours in the degree plan of study in residence at UT-Dallas.

Correspondence Courses
As a general rule, not more than six semester hours of correspondence credit may be applied to upper-division requirements.

Classification of Students
The student's classification should reflect the progress made toward completing the course requirements of the degree plan of study in which the student is enrolled. This classification is assigned by the Office of Admissions and Registrar.

## Former Students

A former student is one who has been enrolled at UT-Dallas prior to but not including the preceding long semester.

Former students wishing to re-enroll at UT-Dallas must apply for readmission. The application for reentry or readmission must be completely filled out, signed, and filed with the Director of Admissions. Students who have attended another college or university since they were last enrolled at UT-Dallas must submit an official transcript of that work with the application to the Director of Admissions.

## EXPENSES

As a state-supported institution of higher education, The University of Texas at Dallas is required to comply with all state laws in the assessment and collection of tuition, fees, and deposits. The tuition, fees, and deposits listed herein are subject to change by subsequent amendments to existing state laws. It is the student's responsibility to establish, prior to registration, the correct residence classification. This classification may be determined through the Office of the Director of Admissions and Registrar.

In accordance with state law, students are not entitled to enter class or laboratory until they have registered and all tuition, fees, and deposits have been paid. The University cannot accept personal checks for amounts in excess of the total registration cost.

## Tuition

Pursuant to Chapter 54, Texas Education Code, each student who registers is required to pay tuition appropriate to the residence classification, as set forth in the following table, according to the number of semester hours for which registration is completed.

REGULAR SESSION AND
12 WEEK SUMMER TERM


Each Additional
Hour 4.00
A student who registers in absentia shall pay a registration fee of $\$ 15.00$.

Texas
Semester Hours

| 1 | $\$ 25.00$ |
| :--- | ---: |
| 2 | 25.00 |
| 3 | 25.00 |
| 4 | 25.00 |
| 5 | 25.00 |
| 6 | 25.00 |
| 7 | 28.00 |
| 8 | 32.00 |


| Non-Resident |
| :--- |
| U,S. Citizens and |
| Foreign Students* |
| Enrolled After |
| 6-19-75 |
| per Note 1. |

$\$ 40.00$
80.00
120.00
160.00
200.00
240.00
280.00
320.00

Foreign Students* Enrolled Prior to 6-20-75 and Enrolled per Note 2.
$\$ 100.00$
100.00
100.00
100.00
100.00
100.00
100.00
112.00

absentia registration is required during the Semester or Summer Term in which the student intends to earn the degree.
*Subject to Rules and Regulations as promulgated by the Coordinating Board, Texas College and University System, and The Board of Regents of The University of Texas System. Note 1. - Foreign students enrolled for the first time after June 19, 1975 in The University of Texas at Dallas who are citizens of a country that charges citizens of the United States tuition at publicly funded academic institutions more than $\$ 200$ per semester shall be charged the same tuition as required of other non-resident students ( $\$ 40$ per semester credit hour), EXCEPT THAT, where financial need is demonstrated, lower fees as stated in Note 2 shall be applicable. Note 2. - Foreign students enrolled for the first time prior to June 20, 1975, or after June 19, 1975 BUT who are citizens of a country that charges citizens of the United States tuition at publicly funded academic institutions an amount equal to or less than $\$ 200$ per semester shall be charged $\$ 14$ per semester hour but not less than $\$ 200$ per semester or 12 -week summer session and not less than $\$ 100$ for a 6 -week summer term.

General Fees
Every student who registers in The University of Texas at Dallas, unless registered in absentia, shall pay the following fees:

REGULAR SESSION AND
12 WEEK SUMMER TERM

| Semester <br> Hours | Student <br> Use Fee | Student <br> Service <br> Fee |
| :--- | :---: | :---: |
| 1 | $\$ 6.00$ | $\$ 2.50$ |
| 2 | 12.00 | 5.00 |
| 3 | 18.00 | 7.50 |
| 4 | 24.00 | 10.00 |


| Semester <br> Hours | Student <br> Use Fee | Student <br> Service <br> Fee |
| :--- | ---: | ---: |
| 5 | $\$ 30.00$ | $\$ 12.50$ <br> 6 |
| 7 | 36.00 | 15.00 |
| 8 | 42.00 | 17.50 |
| 9 | 48.00 | 20.00 |
| 10 | 54.00 | 22.50 |
| 11 | 60.00 | 25.00 |
| 12 | 66.00 | 27.50 |
| 13 | 72.00 | 30.00 |
| 14 | 78.00 | 30.00 |
| 15 | 84.00 | 30.00 |
| Each Additional | 90.00 | 30.00 |
| Hour | 6.00 | $-0-$ |

SUMMER SESSION (Six-Week Term)

| Semester <br> Hours | Student <br> Use Fee | Student <br> Service <br> Fee |
| :--- | :---: | :---: |
| 1 | $\$ 6.00$ | $\$ 2.50$ |
| 2 | 12.00 | 5.00 |
| 3 | 18.00 | 7.50 |
| 4 | 24.00 | 10.00 |
| 5 | 30.00 | 12.50 |
| 6 | 36.00 | 15.00 |
| 7 | 42.00 | 15.00 |
| 8 | 48.00 | 15.00 |

A Medical Service Fee of $\$ 15.00$ for each semester of the Long Session and Twelve Week Summer Term or $\$ 7.50$ for each Six-Week Term of the Summer Session shall be assessed each student who enrolls, unless such student is registered in absentia.

Upon notification of official withdrawal from the Director of Admis sions and Registrar, the Business Office shall refund tuition and applicable fees as follows:

For the Long Session (Fall and Spring Semesters) and 12-Week Summer Term:
(a) before the first week of class, 100 percent;
(b) during the first week of class work, 70 per cent of the applicable portion of the tuition and applicable fees;
(c) during the second week, 60 per cent;
(d) during the third week, 40 per cent;
(e) during the fourth week, 20 per cent;
(f) during the fifth week and thereafter, nothing.

For the Six-Week Summer Term:
(a) before the first day of class, 100 per cent;
(b) during the first three days of class work of a six-week term, a refund of 60 per cent of the applicable portion of the tuition and applicable fees;
(c) during the fourth, fifth and sixth day, 50 per cent; thereafter nothing.

Cash refunds will not be made to students who request refunds, instead refund checks will be mailed to the address left with the Registrar.

A student who enters the Spring Semester before receiving Fall Semester grades, and who is required to withdraw because of failure in the work of the Fall Semester, will have all fees for the Spring Semester refunded.

No refunds will be granted unless application is made within one year after official withdrawal.

OTHER CHARGES
Supplementary Fees for Individual Music Instruction
If you are registered for a course, or courses, in music where individual teaching or coaching is the usual method of instruction, you will pay a fee in addition to the regular tuition. For those courses titled Individual Instruction in Performance,
weeks). For courses the is $\$ 30.00$ per semester or per Sunmer Session (12 fee is $\$ 15.00$ per sen

Supplementary Fees for Use of Practice Room
If you are registered for courses titled Individual Instruction in Performance, a supplementary fee of $\$ 5.00$ per semester or Summer Session (12 weeks) will be charged for the use of a practice room for one hour per day. The fee for use of the practice room two hours per day will be $\$ 10.00$ per semester or Summer Session ( 12 weeks).

Supplementary Fees for Certain Art Classes
Supplementary fees will be charged to cover the cost of materials in certain studio art courses. For those courses listed in the catalog under the rubric Studio Arts, the fee is $\$ 10.00$ per semester or Summer Term ( 6 weeks). Except for those courses involving photography, a fee of $\$ 10.00$ per semester or Summer Term ( 6 weeks) is also charged for courses listed under Visual and Environmental Design. The fee is $\$ 15.00$ per semester or Summer Term ( 6 weeks) for photography courses.

Laboratory Fees for Courses in Computer Science
For all courses in computer science, a laboratory fee of $\$ 5.00$ per semester or Summer Term ( 6 weeks) will be charged.

Laboratory Fees in the Sciences
A fee of $\$ 8.00$ shall be assessed for each laboratory course in the Sciences, except that special fees may be assessed where transportation costs are involved.

Supplementary Fees for Field Trips
As a general rule, students are expected to furnish their own transportation, food, and lodging for required field trips. In the event a University vehicle is used for transportation, a supplementary transportation fee will be assessed. The amount of the transportation fee will vary depending on the destination of the field trip. Students will be advised of the transportation cost associated with a particular course at the time of registration, and appropriate transportation fees will be assessed at that time. Refund provisions do not apply to this fee.

## Audit Fee

Students at The University of Texas at Dallas may, with the approval of the instructor and of the Registrar, audit courses. Auditing grants only the privilege of hearing and observing and does not grant credit. When approval has been granted, the applicant pays a fee of $\$ 5.00$ per course if currently enrolled for course work and $\$ 25.00$ per course if not presently enrolled for course work in residence. A student may withdraw from an audit course, but the fee will not be refunded. Persons over 65 are permitted to audit without paying a fee. They must, however, complete the audit form and have the consent of the instructor.

## Graduation Fee

A fee of $\$ 8.00$ is charged for cap and gown rental and each baccalaureate degree candidate pays a $\$ 6.00$ diploma fee.

## Transcript Fee

The fee for each official transcript is $\$ 1.00$. No partial or incomplete transcript will be issued, nor will copies of documents from other universities. See "Transcripts" entry under admission for information regarding alteration of records.

General Property Deposit
Every student must make a general property deposit of $\$ 10.00$. This deposit is subject to charges for property loss, damage or breakage, or violation of rules in any University library or laboratory; for faflure to return keys furnished by the University; or for damage to, or loss of, any other university property. When a student no longer has a balance in the property deposit account, the student, upon notice from the University, will be required to restore the deposit to the original amount by an immediate payment. Students having charges in excess of the deposit must pay the excess immediately upon notice. Pending payment, no credit shall be allowed on the work of that semester or term, and the student will not be permitted to register for the following semester at The University of Texas at Dallas.

This deposit, less charges, will be returned upon request at the end of the student's career at The University of Texas at Dallas. A general property deposit that remains without call for refund for a period of four years from the date of last attendance at UT-Dallas shall be forfeited, and the deposit shall become part of the Student Property Deposit Scholarship Fund.

## Parking Fees

Students will register their cars in a single payment for the entire year or for the balance of the school year in which they register, whichever is applicable (school year is September 1 through August 31). The following fees will be charged at the initial period of registration:

| Fall Semester | $\$ 15.00$ |
| :--- | ---: |
| Spring Semester | 8.00 |
| First Sumer Term | 4.00 |
| Second Summer Term | 2.00 |

Students have found that carpools are an economical way to travel between home and the university. However, if the carpool rotates cars, each vehicle must be registered with the UT-Dallas Police Department.

In the event a student wishes to register two vehicles in his own name, he must present proof of ownership of both vehicles, plus a receipt from the Bursar's Office for the required amount of registration for the first car and a receipt for $\$ 1.00$ for the second car. The campus Department of Police (in the Green Center) is open daily from 8:00 a.m. to 10:00 p.m.

Students who are graduated at the end of the Fall Semester or who terminate their enrollment for other reasons before the beginning of the Spring Semester may receive a partial refund of the parking fee provided they return the remnants of their decal to the campus Department of Police by the 12th class day of the Spring Semester.

## Bad Checks

A $\$ 2.00$ service charge will be levied on all returned checks if the bank is not at fault. A student who gives The University of Texas at Dallas a bad check is subject to being dropped from the University unless he or she provides payment within five days after official notification by the Bursar's Office.

## Identification Cards

All students, faculty, and staff will be issued an identification card package containing a photograph card and a machine readable card. The cards are required for use of the Library and the Health Center, and for attendance at various campus activities and events.

The cards will be issued at the time of first registration and are nontransferrable. The cards are the property of UT-Dallas and shall not be loaned to others. An individual lending identification cards for fraudulent purposes, or using identification cards which belong to another person, will be subject to disciplinary proceedings. In addition, cards used fraudulently will be confiscated at the time of use or attempted use. If a student requires replacement cards, they will be issued at the cost of $\$ 5.00$.

## Class Hours

Classes are scheduled from 8:00 a.m. to 10:00 p.m. Ordinarily, classes meet three times a week for fifty minutes or for some equivalent thereof. The division of time and number of meetings will be determined by the nature of class (lecture, lecture and discussion, laboratory, seminar, etc.).

Student Semester Hour Load
There is not general minimum course load requirement but, in order to be considered full-time, the under-graduate student shall be enrolled in at least twelve semester hours in each semester of the Long Session. The average full-time course load is fifteen to eighteen hours. Students with a grade point average of 3.0 or above may register for a maximum of twenty-one credit hours.

The maximum semester course load for a Summer Session is not more than eight semester hours for each six week session or fourteen semester hours for the twelve week session. Special arrangements may be made for a student enrolled in the twelve week Summer Session, if he or she needs not more than sixteen hours to graduate at the end of the Summer Session. Auditing

An undergraduate course may be audited upon completion of the Registrar's audit form and upon obtaining permission from the instructor of the course. Permission to audit will be granted only during the late registration period of each semester or session. Auditing grants the privilege of hearing and observing cnly and does not provide for University credit. Fees are outlined under the section on Audit Fees. Auditing students will be expected to meet the standards for admission to the university.

## Pass-Fail Program

Students may take some courses outside of their major area on a pass-fail basis. Students are encouraged to use this opportunity to take courses which will broaden their education with less emphasis on the need to achieve grade points. In order to take any course on a pass-fail basis, the student must obtain permission of the course instructor and receive institutional approval prior to the twelfth class day.

## Schedule Changes

Students wishing to drop or add a course should apply to the Registrar. A student may drop a course before midsemester with a grade of $W$ after consulting with and receiving the signed approval of the Academic Advisor. After mid-semester, a student becomes responsible for the course and may drop the course with a grade of $W$, if passing, or $F$ if failing. This will require the signatures of the instructor and the dean of the school. No student shall receive a grade of $W$ except for resigning or dropping in the prescribed manner. Students who cease to attend class without officially withdrawing through the Registrar's Office may receive a grade of $F$. With appropriate changes in deadines, these requirements also apply to the Summer Sessions. The following regulations apply to drops and adds:

1. The Registrar may require a student to drop a course at any time upon the recommendation of the instructor.
2. A student who desires to drop all courses in a given semester is reminded that such action results in withdrawal from the University. Withdrawing students should indicate their intention to withdraw and drop all courses by filing a properly executed resignation form in the Registrar's Office.

## Withdrawals

A student who wishes to withdraw (resign) voluntarily from the University must execute the proper resignation form in the Registrar's Office. Withdrawal after mid-semester entalls responsibility for meeting the conditions of satisfactory scholastic progress. Students who withdraw from the University must return ID and library cards to the Registrar on the date of withdrawal.

Grades, Grade Points and Grade Reports
The following grading scale is used at UT-Dallas:

| Grade | Description | Grade Points per <br> Semester Hour |
| :--- | :--- | :---: |
|  | Excellent | 4 |
| B | Good | 3 |
| C | Fair | 2 |
| D | Passing | 1 |
| F | Failure | 0 |
| X | Incomplete |  |
| W | Withdrawn |  |
| P | Pass |  |

## SCHOLASTIC <br> PROGRESS

If a final examination is required in a course, a student must take that examination in order to receive a grade other than $W, X$, or $F$. Final examinations are conducted by the faculty at the end of each term. The grade of $X$ will designate a temporary grade.

An incomplete course (grade of $X$ ) must be completed within 12 months from the grade report for a student to receive credit. If the incomplete grade is not removed, it will be changed to $F$. A student should not re-enroll in a course where a grade of $X$ has been given.

The general requirements for obtaining a bachelor's degree at UT-Dallas stipulate an overall grade point average (GPA) of 2.0 (C average) and a GPA of 2.0 in the major field. A student's GPA is determined by dividing the total number of grade points earned by the number of semester hours for which a grade other than $X, W$ or $P$ is received. In addition, the following academic rules specifically apply:

1. A semester grade for a course is based upon the student's accomplishment of assignments, including a final examination, if one is required for the course. Final examinations are conducted according to a schedule published by the Registrar prior to the end of each semester.
2. A student may repeat a course for a grade only if a grade lower than $\mathcal{C}$ has been earned. The new grade will be used in computing the GPA.
3. Grades are reported at the conclusion of each semester and at the end of each Summer Term. The grade reported at the end of a semester or term is the official and permanent evaluation of a student's performance in a given course.
4. A student's grades are not subject to transfer to another institution from UT-Dallas until the student has satisfied all obligations to the University, including financial and property obligations.

SCHOLASTIC PROGRESS

## Satisfactory Scholastic Progress

A student is considered to be making satisfactory scholastic progress when he is carrying an approved schedule of classes, is not on probation, not failing a course, and has a GPA of at least 2.0 (C) in both the current semester and in overall average to date.

Dean's Honors Lists
At the end of each semester an honors list will be published commending those students, registered for at least 12 hours, whose grades place them in the top $10 \%$ of the student body.

## Graduation With Honors

UT-Dallas wishes to honor in a special way students who have shown particular distinction in the accomplishment of their studies at UT-Dallas. We recognize three degrees of honors: summa cum laude, magna cum laude, and cum laude. The requirements for each of these distinctions are listed below.

1. Summa cum laude:
a. An overall GPA of 3.8 with a GPA of 3.8 in the major field.
b. At least 4 A's in areas of study outside of the major field. If the major field of the student is one of the sciences, the student should have done outstanding work in some combination of the social sciences, the humantities, and the Interdisciplinary Seminar.
c. The completion of the sentor honors examination in the major field with an evaluation of summa.
2. Magna cum alude:
a. An overall GPA of 3.8 with a GPA of 3.8 in the major field.
b. At least 2 A's in areas of study outside of the major field.
c. The completion of the senior honors examination in the major field with an evaluation of magna.
3. cum laude:
a. An overall GPA in all work of 3.0 with a GPA of 3.5 in the major field. If the student has a GPA in the major field between 3.0 and 3.4 , the student may be eligible for cum laude honors if an evaluation of at least cum is received on the appropriate senior honors exam set by the degree program.
b. At least one $A$ in an area of study outside the major field.

Scholastic Probation Policy
A student has a grade point deficiency when the total number of grade points earned is less than two times the total number of semester hours attempted. Such a student is placed on probation. For each semester on probation the student must, in subsequent semesters, earn a minimum 2.2 GPA to remain in school until the grade point deficiency is removed.

Grades and grade points earned at another college or university are not used in the academic evaluation at UT - Dallas. Any deficiency incurred at UTDallas must be removed through additional course work at UT-Dallas. A student who leaves the University on scholastic probation will be readmitted on scholastic probation even if the student has attended another institution in the interim.

Terms of Scholastic Probation
A student who is on scholastic probation may not register for more than fourteen semester hours. Violation of this regulation will be considered a violation of the student's probationary status.

If a student withdraws (resigns) from the University while on scholastic probation, and if this action results in an additional grade point deficiency, the student has failed to meet the minimum requirements for removal of scholastic probation and will be suspended.

A student who is on scholastic probation and who incurs absences which are unauthorized, may be suspended from the University.

If a student shows lack of ability to meet the scholastic standards of the University, the student may be suspended.

A student who is under scholastic suspension may not enroll in, audit, or visit a class.

## Students Dropped for Failure to Meet Terms of Probation

A student who is dropped from the University for the first time will be suspended for the succeeding semester or term as follows:

1. If the student is dropped at the end of the Fall Semester, enrollment is permitted in the sueceeding Sumer Term.
2. If the student is dropped at the end of the Spring Semester, enroliment is permitted in the succeeding Fall Semester.
3. If the student is dropped at the end of the Summer Term, enrollment is permitted in the succeeding Spring Semester.
4. A student who is dropped more than once will remain suspended for a minimum of twelve months and may be readmitted only by permission of the Executive Dean of Undergraduate Studies.
5. A student who reenters the University after having been dropped for failure to meet terms of probation will reenter on scholastic probation.

## Students Dropped for Grade Point Deficiency

At any time a student's grade point deficiency amounts to thirty or more, he or she will be dropped from the University for an indefinite period of time and will be readmitted only by special permission from the Executive Dean of Undergraduate Studies.

A student who reenters the University after having been dropped for a grade point deficiency will reenter on scholastic probation.

## DEGREE PLANNING

## DEGREE PLANNING INFORMATION

## General Information

1. Conmencement ceremonies are held at the conclusion of each Spring Semester. No formal exercises are held at the end of the Fall Semester or the Summer terms. Students who graduate during these periods may participate in the following Spring exercises by filing a written notice with the Registrar at the time of the completion of degree requirements.
2. Each candidate for a degree must complete in residence:* Thirty (30) semester hours of credit, twelve (12) hours of which must be advanced courses in the major subject.
3. A minimum overall grade-point average of 2.0 (C average) is required in the major area.
4. By Texas law, all students must have six semester hours of American history (or three semester hours of American history and three semester hours of Texas history), and six semester hours in government courses which include consideration of the United States and the Texus Constitutions.
5. A candidate for a degree must be enrolled at this institution during the semester or term in which the Office of the Registrar certifies completion of the degree requirements.
6. To qualify for a second bachelor's degree, a student must complete all the degree requirements for that degree as stated in the catalog for that degree, and in no instance may such students complete fewer than 30 semester hours. The additional hours must be taken in residence at UT-Dallas.
7. A fee for graduation is charged.
*The term "in residence" is defined as meaning in residence at the university which ultimately grants the degree. Residence credit does not include courses taken by extension or correspondence, but may include courses taught by regularly appointed faculty at locations other than on campus.
8. A resident student should apply for his or her degree by filing the application with the Office of the Registrar, preferably prior to registration in the last semester. Students who are eligible to graduate at the end of the Fall or Spring Semester must make application no later than two months before the end of the semester. Summer candidates must make application no later than May 31, 1977.
9. Students may obtain a degree according to the requirements of the catalog under which they first entered the University, provided the requisite courses are still being offered; or, they may choose to graduate under any catalog requirements that are in effect during any subsequent year in which they are registered. A student registering for the first time in the Summer Session may obtain a degree according to the requirements of the catalog of the previous long session or the catalog requirements of the next long session. These provisions, however, are subject to the restriction that all requirements for a degree must be completed in ten years from the date of the catalog chosen.

The Degree Plan
A student entering UT-Dallas at the junior level will normally complete sixty semester hours at the University. A student entering at the senior level will normally complete thirty semester hours of individually approved course work at UT-Dallas.

Courses taken in the first two years of college should be chosen to provide the student with sound preparation for upper level work

Lower Division General Education Guidelines - Option I
A. Courses recommended for all students (Institutional and State requirements):

1. A course of instruction in Government or Political Science which includes consideration of the Constitution of the United States and the constitutions of the states, with special emphasis on that of Texas. This course shall have a credit value of not less than six semester hours or the equivalent thereof.
2. Six semester hours or its equivalent in American History. A student is entitled to submit as much as three semester hours of credit or the equivalent in Texas History in partial satisfaction of this requirement.
3. Six semester hours of English (twelve semester hours are necessary for Teacher Certification).

## B. Program Requirements

In addition to the above listed institutional and state requirements, the applicant should have satisfactorily completed the lower division prerequisites for the selected major program as listed in this catalog. Students considering teacher preparation programs should also complete the lower division prerequisites as listed on pages $\qquad$ and $\qquad$ of this catalog.

## C. Breadth Guidelines

In addition to and/or within the institutional, state, and prerequisite requirements, the transferring student shall have completed at least six credit hours of course work by instruction or examination in each of the following three major areas, amounting to a combined total of at least 36 semester hours:
(1) Humanities (English, Languages, Linguistics, Speech), Fine Arts (Music, Theater, Visual Arts), Classics, History and Philosophy.
(2) Social and Behavioral Sciences (Anthropology, Economics, Geography, Political Science, Psychology, Sociology), Education, Criminology and Cultural Studies.
(3) Natural Sciences (Biology, Chemistry, Geoscience, Physics), Engineering and Mathematical Sciences (including Computer Science), Systems Analysis, and Management Systems.

The sum of the requirements for (A) Institution and State, (B) Program Prerequisites, (C) Breadth Guidelines and other courses shall be a minimum of 54 semester hours of acceptable lower division college credit.

Lower Division General Education Guidelines - Option II

| The University of Texas at Dallas will honor - for transfer admission the core curricula as approved by the Coordinating Board, Texas College and University System, as followed in any accredited Texas public junior college provided such credits are within the core curricula of the student's declared major field at the junior college and providing the student is seeking transfer to the same declared major field at UT-Dallas. |  |  |
| :---: | :---: | :---: |
| The approved core curricula are as follows: |  |  |
| Major Field I <br> Bachelor of Arts Degree in Arts and Sciences Bachelor of Science Degree in Mathematics and Natural Sciences |  | Major Field II Bachelor's Degree in Business Administration (including accounting) |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Subject:

| A. Freshman English | 6 hours | 6 hours |
| :--- | :--- | :--- |
| B. Literature | 6 hours | 6 hours |



* In courses in the natural sciences and mathematics, due regard should be given to course selection for science and mathematics as designed for science and mathematics majors.

Admission to General Studies - Option III
Any student with fifty-four semester hours or the equivalent of acceptable college credit, with a cumulative grade point average of 2.0 or higher on a 4.0 system, is/was a student in good standing at previous school(s), is eligible to be admitted to the upper level General Studies program.

Students who qualify for admission through Option I or Option II, through admission by examination, or through Individual Approval Admission are also eligible to be admitted to General Studies. The guidelines for credit by examination may be obtained from the Office of Admissions and Registrar.

## Upper Division Degree Requirements

## A. Major Requirements ( 36 semester hours)

To receive a bachelor's degree from UT-Dallas, a student must complete satisfactorily a program of study approved by the University. Such a program will normally require thirty-six (36) hours of upper-division work, including the major area of concentration and related courses. Students should consult the section of the catalog in which the requirements for the student's major are listed.
B. Interdisciplinary Requirements (6 semester hours)

A student is required to complete interdisciplinary courses as part of the degree program at UT-Dallas. Students enrolling as first or second semester juniors will be required to complete six (6) semester hours from among the College Seminars and courses listed in the Interdisciplinary Studies section of the catalog. "Students enrolling as seniors will receive appropriate Interdisciplinary Study advisement on an inaividual basis. All students will be encouraged to take at least one Interdisciplinary course within the student's area of concentration and one outside of the student's area of concentration. Individual areas of concentration are defined as Arts and Humanities, Business and Public Administration, Natural Sciences and Mathematics, and Social and Behavioral Sciences."

## C. Electives (18 semester hours)

The choice of electives is free unless the student is not adequately prepared for further studies. Students interested in specialized certification (Teacher Certification, CPA, etc.), in addition to their degrees may find it necessary to use the elective hours to fulfill certification requirements.

## D. Senior Transfer Students

Students transferring to UT-Dallas in their senior year will have their requirements for graduation determined on an individual basis.
Degree Plan Procedure
Each student enrolled as a regular student will identify with a degree plan of study. While there are prescribed core courses for many programs, the degree plan will be developed by the student and an academic adviser with the intent of meeting the student's needs and interests. Course changes within the developed degree plan may be made with the concurrence of an academic advisor, while changes in a major degree program of study must be initiated through the Office of the Registrar. The former requires a completion of a degree plan modification form, while the latter requires completion of the Change of Degree request form.

## Teacher Certification

Students who wish to gain certification to teach at the secondary level and in certain areas at all levels in Texas may do so at UT-Dallas. Students must be admitted individually to the academic program of their choice. They must also seek admission to the teacher certification program in the office of Teacher Education. Students in the Concurrent Admission Program should contact the office of Teacher Education as early as possible in their relationship with the University.

Professional studies and student teaching experiences of at least eighteen (18) semester hours are prescribed to meet state certification regulations and to develop the competencies needed to perform effectively in the classroom. Certification requirements may increase the number of semester hours required for graducation. Careful planning and utilization of electives can reduce such an increase.

Teaching fields in which secondary certification may be earned include:
Biology, Chemistry, Computer Information Science, Drama, Earth Science, English, French, Generic Special Education, Geography, German, Government, History, Latin, Mathematics, Physics, Psychology, Sociology, Spanish, Composite Science and Composite Social Studies, All-Level Music, and Speech and Hearing Therapy.

All students interested in teacher certification should consult the section on Professional Education in the catalog, as well as the appropriate subject area.

## The Health-Related Professions

Medical, dental and allied health schools admission committees do not state a preference about an undergraduate major field, leaving a student free to choose a degree program that responds to special abilities and interests Students interested in the health professions may choose any major as long as they meet the minimum requirements stated by the various professional schools. Students who wish to continue their education in one of the medicine or dentistry fields should register with the Health Professions Advisory Committee as early as possible. This committee is associated with the Science College I, Berkner Hall. The comittee chairman is currently Dr. R. A. Caldwell, Berkner 2.502, ext. 2902.

Law
Law School admission conmittees, like those in the health professions, do not normally state a preference regarding an undergraduate major field of study. Students interested in a career in a law should consult the Pre-Law Advisory Committee, associated with Social Science College VI, located in Green Center.

## FINANCIAL AID AND STUDENT EMPLOYMENT

The University encourages all academically qualified students to continue their education through the upper-division and graduate programs. In doing so, the University recognizes the difficulties of meeting the monetary demands of extended education and has developed a comprehensive program in student financial assistance that includes loans, grants, jobs, and scholarships.

Students are encouraged to contact the Coordinator of Financial Aid for assistance in determining their estimated financial need and to work out the method of meeting that need through a combination of types of aid. Applications for aid and detailed information are available from the Coordinator of Financial Aid.

The office also coordinates both on and off-campus employment of UT-Dallas students. Any student seeking part-time employment should register with the Financial Aid Office located in 1.310 McDermott Library.

State and Federally funded programs are subject to change without notice. The following financial aid programs are currently available to undergraduate students. Applications for all programs are available in the Financial Aid office.
A. Grants

1. Basic Educational Opportunity Grant

This federally funded program is designed to provide funds for students who began their post-secondary education after April 1, 1973. The amount of a Basic Grant award an eligible student can receive is determined from the difference between the cost of attending college and the student's expected family contribution. To apply, a student must submit a Basic Educational Opportunity Grant application form.
2. Law Enforcement Education Program

The LEEP program is federally funded and provides grant funds for the amount of mandatory fees, tuition and an allowance for books to full-time and part-time students who are already employed in law enforcement or are on official education leave of absence from such an agency.

## 3. Supplementary Educational Opportunity Grant

This federally funded program provides funds which range up to $\$ 1,500$ per academic year to students from families of "exceptional financial need." The Supplementary Educational Opportunity Grant award cannot exceed more than one-half of the student's demonstrated financial need and must be matched with an equal amount of some other type of a financial assistance. To apply, a student must submit either a Parents' Confidential Statement or a Student's Financial Statement and be enrolled in six or more semester hours.

## 4. Texas Public Educational Grant

Under a 1975 Act of the 64 th Texas Legislature a grant program was established to provide financial assistance to students. The program is funded by taking twenty-five cents out of each hourly charge for resident students, and $\$ 1.50$ per hour for each non-resident students. to apply, a student must submit either a Student's Financial Statement or Parents' Confidential Statement

## B. Long Term Loans

There are several low interest loan programs available to students. Repayment on these loan programs will begin 9 months after the student graduates or when the student's enrollment becomes less than 6 hours for a semester.

## 1. Federally Insured Student Loan Program

Funds from this program are made available to the studert from lending institutions such as banks, savings and loan associations, and credit unions. The loans are made at seven percent interest and the maximum that can be borrowed for one academic year is $\$ 2,500$. The total amount that can be borrowed for a student's undergraduate and graduate education is $\$ 10,000$. If the applicant's parents' or family's adjusted gross income is less thatn $\$ 15,000$ per year, the Federal government will pay the seven percent interest per year on the loan while the applicant is attending school for at least 6 hours per semester.
2. Hinson-Hazelwood College Student Loan Program

To apply for this loan, the individual must be a legal resident of Texas, be accepted for enrollment or enrolled for at least eight semester hours, be meeting the academic requirements of the institution, and demonstrate that his or her financial resources are insufficient to finance his or her education. The current interest rate from this program is seven percent per annum. Students may borrow up to $\$ 1,500$ per 9 month academic year and $\$ 500$ for summer school. The maximum amount which may be borrowed under this program may not exceed $\$ 7,500$. Prepayment begins 9 months after the student classes to be enrolled for at least one-half a normal course load. Minimum repayment is $\$ 30$ per month and the repayment period may not exceed 10 years.

## 3. National Direct Student Loan Program

This program provides a combination of Federal and Institutional funds to be loaned to eligible students at three percent interest. Eligible students may borrow up to $\$ 5,000$ for an undergraduate degree or up to a total of $\$ 10,000$ for a graduate degree. Repayment begins 9 months after the student graduates or when the student's enrollment becomes less than eight semester hours. The minimum rate of repayment is $\$ 30$ per month.
C. Scholarships

1. Private Scholarships

Several privately funded scholarship programs are available to undergraduate students. Interested students should contact the Coordinator of Financial Aid and Placement for specific information and application forms for the following scholarship funds:
a. The University of Texas at Dallas Women's Club Amelia A. Lundell Textbook Scholarship Fund
b. The Richardson Environmental Action League Scholarship Fund
c. The Strauss Scholarship of The University of Texas at Dallas
2. State Scholarship and Tuition Waiver Programs

There are a variety of scholarship programs available which are funded by the State of Texas. It is strongly recommended that all students who are residents of the State contact the Coordinator of Financial Aid and Placement for a copy of the pamphlet entitled "Financial Aid for Texas Students". This pamphlet provides the criteria for several State funded scholarship and tuition waiver programs.
D. Short Term Emergency Loan Funds

This program makes availabie funds to students on a short-term basis to cover emergency expenses. The loans made from this program are to be repaid within the semester they are borrowed. Contributions to these funds have been made by Mrs. Lloyd V. Berkner, Kiwanis Club of Richardson, Richardson Savings and Loan Association.

## E. Employment Opportunities

The University will provide a variety of part-time employment opportunities for undergraduate students including College Work Study and institutional employment. Students interested in the College Work Study program must submit either a Parents' Confidential Statement or a Student's Financial Statement to determine their eligibility for this program. Information regarding part-time institutional and off-campus employment is available through the Financial Aid office.

## COUNSELING SERVICES

The Student Counseling Service provides personal, socia1, and career counseling on both an individual and group basis to enrolled students. The staff consists of counselors, student development specialists, and psychologists. Consulting psychiatrists are available on a referral basis.

Special workshops and programs are offered throughout the year. Examples of the themes of these workshops and programs are aggression/assertion, self-awareness, leadership development, effective human relations, test anxiety reduction, and career exploration.

All counseling services are confidential. To make an appointment, call $690-2940$ or come by McDermott 1.310.

## health services

The Student Health Service provides routine medical treatment to all regularly enrolled students. On-campus treatment is on an out-patient basis only. In the event of emergency, ambulance service is available and the Student Health Service physician will treat students at the Richardson General Hospital emergency room. Special clinics dealing with specific medical problems are scheduled throughout the year.

The staff consists of professionally trained medical personnel who provide medical treatment and conduct workshops and seminars. These workshops and seminars deal with such areas as drug and alcohol usage, weight control, nutrition, smoking, and human sexuality. Services include private consultation on various health matters.

All health services are confidential. The Student Health Service is located in McDermott 1.502.

An optional student group insurance plan is available to all students on an annual basis. This plan supplements coverage provided by the Student Health Service, and covers the entire year, even though the student may be off-campus or enrolled for only a portion of the year.

Health Records - Prior to registration, each student will be required to submit:

1. A report of medical history, recorded on the UT-Dallas health form;
2. Proof of immunizations required by law, signed by a physician; and
3. An up-to-date physical examination or a signed statement that the student is in good health.

The Health Service mails the forms to each student following the student's formal admission to the University.

EFFECTIVE TECHNIQUES CENTER
The Effective Techniques Center is a service area devoted to reading, writing, and study skills. Students can improve, extend, or enrich these skills while meeting course demands by contacting the Center located on the first level of McDermott or calling 690-2746.

## TUTORING SERVICES

Students seeking assistance in specific academic areas may engage a tutor by making application at the Information Services Desk on the first level of McDermott Library. Students are referred to qualified tutors for individual academic assistance.

## CAREER PLANNING and Placement

The Career Planning and Placement Service is located in the McDermott library. Students are encouraged to contact this office early in their academic careers in order to utilize the service fully in the development of their long range planning.

The Service maintains a library on a wide variety of career options open to today's graduate. The collection of material includes books and pamphlets on a variety of careers, brochures describing areas of public service, catalogs of major graduate and professional schools, and the literature of companies and agencies. Information is also available on numerous Summer Training programs, teaching internship and travel programs, and other educational opportunities offered during the Summer or vacation periods.

Various workshops and seminars dealing with career choice, resume preparation, and other topics are avilable during the year for student participation.

The Placement Service assists students who are completing their degrees and looking for employment. An extensive program of visits by representatives of business firms, government, educational and social agencies is available to assist students and alumni who have active credential files maintained by the office. Assistance is provided in the development of a resume and the establishment of a credential file. The credential file will be reproduced and forwarded to interested employers upon request of the student. There is a $\$ 1.00$ fee to cover the costs of reproduction and postage each time the file is reproduced and mailed.

## INTERNATIONAL STUDENTS

The Assistant to the Registrar, in the Office of the Director of Admissions and Registrar, is responsible for student visas at The University of Texas at Dallas. All questions regarding student visas should be addressed to this office.

Foreign student advising is made available to international students through the Office of Student Services. The foreign student advisor will provide assistance in the interpretation of University policies, campus life and activities, American customs, assistance with personal concerns, insurance and medical problems. A number of international student organizations and social activities are planned during each academic year. Various programs designed to acquaint the student with the campus and the community are also available.

The Host Family Program, sponsored by the Dallas Council on World Affairs, is available to international students while they are attending UTD. The host family invites the student to share in family activities, particularly holiday gatherings. Students may request a host family by contacting the foreign student advisor in the Student Services office, McDermott 1.402, 690-2945.

International students who are not proficient in the English language may enroll in special classes in English as a Second Language until their proficiency has been certified. Classes on campus are sponsored by the Effective Techniques Center and individual tutoring may be arranged. Foreign students are required to present evidence that they have adequate health insurance coverage for themselves and their dependents. They may purchase group student health insurance on campus or purchase (in their home country) an individual policy that will provide coverage while in the United States.

## CO-CURRICULAR ACTIVITIES

The University of Texas at Dallas recognizes that a balanced program of individual activities which provides an opportunity for the expression and development of student interests will stimulate the student to do well academically and aid in the total development of the person. Activities advisors work with the undergraduate colleges, student organizations, and the all-campus programs to assist students in the planning and execution of cultural, social, and recreational activities for the campus. These programs range from concerts to major and current events, lecture series, and symposiums on major topics.

These programs are designed to make free-time activities a valid part of the education process. Students are encouraged to enter activities in the organized student life both for their personal value and for the unique contribution each student can make to the campus community.

## STUDENT CONGRESS

The Student Congress of The University of Texas at Dallas is the officially recognized body of student self-government on campus. The Student Congress was established to serve as the official channel of representing student interests and opinions to the faculty and the administration.

Through various student committees and student representation on University committees, students are involved in almost all forms of campus activities and endeavors.

## STUDENT TRAVEL BUREAU

The Student Travel Bureau is sponsored by the Student Congress to assist students with their travel plans, both in the United States and abroad. The Bureau maintains a library of information, issues International Student Identification Cards, sponsors charter flights, and plans special vacation packages at reduced rates.

## STUDENT ORGANIZATIONS

The University encourages the development and registration of organizations whose purposes further co-curricular interests in literary, musical, professional, social and athletic activities. All students are urged to participate in recognized clubs or societies.

These recognized groups include scholastic honor societies, departmental and professional societies, service clubs, religious groups, and numerous other organizations. Detailed information about this aspect of campus life is available from the Office of Student Services, 1.402 McDermott, and from the various activity advisors.

## SPORTS AND RECREATION

The program in sports and recreation includes individual usage of the facilities organized intramurals for individuals and teams, skill instruction, and special clinic sessions.

The University has designed the activities to emphasize lifetime sports and to encourage student participation. Individuals seeking information regarding specific sports or recreational activities should contact the Physical Instruction Staff, 690-2090.

## SPECIAL SERVICES

The Office of Student Services maintains a list of area apartments and other living accomodations available in the community in an attempt to assist students in making suitable living arrangements.

A list of day care facilities in the area is available from The Office of Student Services. This office also maintains information regarding transportation and will assist in the formation of student car pools.

## STUDENT DISCIPLINE

At the campus of The University of Texas at Dallas the judicial coordinator is primarily responsible for administration of student discipline. Students are referred to the Student Handbook and the Office of Student Services for further information on student standards of conduct and disciplinary actions and procedures.

## LOCKERS

The University has a limited number of lockers available for student use while on campus for storage of books and personal belongings. Students who are interested in the rental of a locker should contact the Office of Student Services during registration. Lockers will be available on a first come, first serve basis and will rent for $\$ 1.00$ per semester.

Lockers in the physical instruction building will be available at no charge to those students involved in physical instruction course work during the semesters in which they are enrolled. The use of athletic lockers by other students will be available on a first come, first serve basis for the rental rate of $\$ 1.00$ per semester.

## CLARK FOUNDATION SUMMER PROGRAM

This program, supported by the Anson L. Clark Foundation, offers positions to selected students as Research Participants in summer programs at UT-Dallas. The chief objectives are to give each participant a realistic view of research in their chosen field of scholarly endeavor.

Students will be selected from high school graduates (not yet enrolled in college) and freshman, sophomores and junfors. High school seniors and college students who have demonstrated outstanding academic achievement are encouraged to apply for selection to this program.

For further information, contact:

## Director

UTD/Clark Foundation Summer Program
The University of Texas at Dallas
P. O. Box 688

Richardson, Texas 75082

## CONTINUING EDUCATION

The University, through its center for Continuing and Comunity Education, offers courses designed primarily for persons interested in continuing their education but who do not desire to enroll in a formal degree program. These programs are non-credit and are offered under a variety of formats, such as one- or two-day seminars, one- to three-week concentrated short courses, and the more usual evening courses scheduled once a week for $8-15$ weeks. These are primarily professionally-oriented programs designed to offer the opportumity to update or broaden ones educational experiences. Registration fees for all participants are determined by the cost of the programs. In certain approved courses, Continuing Education Units (CEU's) are awarded.

## THE SOUTHWESTERN LEGAL FOUNDATION

One of the country's most prestigious organizations in continuing advanced education and research has recently located on the campus of The University of Texas at Dallas. The Southwestern Legal Foundation sponsors seminars, institutes, short courses, academies, and schools for attorneys, petroleum executives and other businessmen, law enforcement officers, and municipal employees from throughout the United States and many foreign nations. The Foundation operates through several centers, including the Continuing Legal Education Center, the International and Comparative Law Center, the International $0 i 1$ and Gas Educational Center, the Southwestern Law Enforcement Institute, and the Municipal Legal Studies Center.

ENROLLMENT OF UTD
STUDENTS IN SMU AFROTC

Students from The University of Texas at Dallas can now participate in the Air Force ROTC program at Southern Methodist University.

Students register for the SMU Aerospace Studies courses at the same time and in the same manner that they register for their UTD courses. The AFROTC courses are fully accredited, three semester hour courses which are taken as electives. Tuition for the courses is charged at a rate of $\$ 33.33$ per semester hour ( $\$ 100$ per course) and is in addition to normal tuition costs.

All students receive a $\$ 100$ per month tax-free allowance during their junior and senior years. Participating students may also compete for AFROTC two year scholarships which pay tuition, books, and fees in addition to the $\$ 100$ per month allowance.

Students must make application for the AFROTC program during their sophomore year and must attend a summer encampment prior to the start of their junior year. To make application, contact either

AFROTC Det. 815
Southern Methodist University Dallas, Texas 75275
or the closest AFROTC detachment.
For additional information call 692-2183.

## THE GRADUATE PROGRAMS

The University of Texas at Dallas has had a distinguished and highly acclaimed program of graduate study and research since the establishment of the Southwest Center for Advanced Studies. The nature of this activity has ranged widely, from the key instrumentation of recent lunar exploration to a search for new energy sources to problems in the biochemical repair of animal cells.

This legacy of superior teaching and research will continue in new graduate areas as UT-Dallas grows to meet the educational and societal needs of the area and the nation. Some of the programs will be highly interdisciplinary in nature (as is the case in Environmental Sciences). Others will reflect a single area of study (Physics, for example). If you are interested in one of the following fields of graduate study you will be assured of contined excellence in your education at that level at UT-Dallas.

Graduate Programs Currently Offered:

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Biology (M.S., Ph.D.)
Chemistry (M.S.)
Communication Disorders (M.S., Ph.D.)
Environmental Sciences (M.S., Ph.D.)
Geosciences (M.S., Ph.D.)
Humanities (M.A., M.A.T., Ph.D.)
Interdisciplinary Studies (M.A., M.S.)
International Management Studies (M.A., Ph.D.)
Management and Administrative Sciences (M.S., Ph.D.)
Mathematical Sciences (M.S., M.A.T., Ph.D.)
Physics (M.S., Ph.D.)
Political Economy (M.A., Ph.D.)
Science Education (M.A.T.)
Special Education (M.S.)
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For additional information in planning your graduate career at UT-Dallas, please refer to the information in The University of Texas at Dallas Graduate Catalog.

## PROGRAMS AND COURSES

UT-Dallas Course Numbering System.

## UT-Dallas uses a four digit numeric code.

UT-Dallas uses a four-digit numeric code. The first digit denotes the general level at which the course is usually taken (a 3 or a 4 indicates an upper-division undergraduate course; graduate courses are indicated by the numbers 5 through 8). The second digit indicates the semester hour credit associated with the course. The final two digits are used to identify each unique course within a subject area.

## CLASSICS*

## OFFICE: Jonsson

The Greeks and the Romans have endowed the whole of Western civilization with a set of models yet to be surpassed. As we look back in time, seeking to grasp in detail the particulars of a former world, we are also pointing forward, realizing, perhaps for the first time, the importance and timelessness of our inheritance. Today's tragedies, epics, and comedies are uncannily similar to the prototypes; our government, laws, and social order reflect the original; our art and architecture still bear the touchmarks of the ancients. While the Greeks were primarily concerned with basic human positions on fate and the gods, the Romans were actively recording the rub of daily living. One is perhaps rational; the other more experiential. Both are still the core of human existence.

## LOWER DIVISION PREREQUISITES

Four semesters or its equivalent of Latin or Greek.
UPPER DIVISION CORE REQUIREMENTS: (15 hours)
Classical Civilization: Greece OR
Classical Civilization: Rome
Advanced Latin OR Advanced Greek (two semesters)
Problems of Translation (3 hours)
Senior Seminar in Classical Studies (3 hours)

## THE OPTIONS

The student majoring in the Classics may choose to specialize in one of several options. Specialization in an option requires 21 hours of advanced courses in the Classics and related studies beyond the core requirements.

1. Classical Civilizations: Studies of Greece and Rome in the context of other ancient cultures.
2. Comparative Literature: Comparative studies in classical and contemporary literature.

## THE CLASSIC COURSES

Course Description
CLASSICS 3321 Classical Civilization: Greece (3 semester hours)
Greek antiquity viewed as fact and myth in the Western tradition: Mycenean Greece and the emergence of the heroic mind: the world-view of the Archaic Age; the fifth century and Classicism; the breakdown of the city-state; coalescen ee of oriental and Greek cultures; and the growth of the Hellenistic monarchies. (3-0)

[^1]CLASSICS 3331 Classical Civilization: Rome (3 semester hours)
Emphasis on cultural and institutional analysis; the anthropology of Roman origins; Republican political institutions and imperial growth; the Augustan principate as a reactionary revolution; the Empire and growing alienation; the myth of the Fall of Rome. (3-0)

PHIL 3330 Aesthetics (3 semester hours)
COMP LIT 4301 Problems of Translation (3 semester hours)
CLASSICS 3610 Intensive Elementary Latin (6 semester hours)
The intensive course in Latin will cover all the declensions of nouns and adjectives, all conjugations in the indicative mood and the primary uses of the subjunctive mood. Emphasis will be given to the development of the ability to read easy selections of classical prose. (6-0)

CLASSICS 3312 Intermediate Latin ( 3 semester hours)
Review of grammar and syntax with readings from Latin prose and poetry. (3-0)
CLASSICS 4313 Advanced Latin (3 semester hours)
Readings in Latin of such major authors as Lucretius, Tacitus, Horace, Livy, Ovid; connected writing in various styles. (3-0)

CLASSICS 4314 Latin Prose Composition (3 semester hours)
A study from selected readings of the development of Latin prose style. Passages for translation into Latin. (3-0)

CLASSICS 3315 The Latin Language ( 3 semester hours)
The evolution of Latin from Indo-European and essential notions of historical and comparative linguistics. (3-0)

CLASSICS 3332 History of Latin Literature ( 3 semester hours)
Studies in Latin Literature from its beginnings to the Age of the Antonines. Extensive readings in the original language. (3-0)

CLASSICS 3601 Intensive Elementary Greek (6 semester hours)
Drill in pronunciation and grammatical patterns: building-up of vocabulary; easy readings in literature. (6-0)

CLASSICS 3302 Intermediate Greek (3 semester hours)
Review of grammar and syntax, with selected readings from Herodotus, Euripides, Plato, and Homer. (3-0)

CLASSICS 4303 Advanced Greek (3 semester hours)
Readings from major authors such as Thucydides, Demosthenes, Aeschylus, Pinder, and the lyric poets; connected writing in various styles. (3-0)

CLASSICS 4304 Greek Prose Composition (3 semester hours)
Practice in the translation of sentences and connected prose passages into Attic Greek; review of forms and syntax; readings from Plato. (3-0)

CLASSICS 3305 The Greek Language (3 semester hours)
Fundamentals of Greek comparative and historical grammar; phonology, morphology and syntax. (3-0)

CLASSICS 3322 History of Greek Literature ( 3 semester hours)
Lectures on the history of Greek Literature, supplemented on the part of the student by the independent reading of Greek texts in the original. (3-0)

CLASSICAL MYTHOLOGY
Studies in classical mythology in terms of its cultural character and significance and its importance in literature, religion and fine arts. Authors will include Homer, Hesiod, Ovid.

## CLASSICAL DRAMA IN TRANSLATION

Close examination of representative plays of Aeschylus, Sophocles, Euripides, and Aristophanes in terms of the critical commentary and artistic expression each provided in fifth-century Athens. Detailed study of Plautus, Terence, and Seneca focussing on their Greek antecedents and on the investigation of the Roman tradition in post-classical drama.

## ANCIENT LITERARY CRITICISM

An analysis of major classical texts in terms of their literary traditions and their post-classical commentators. Readings from such major authors as Plato, Aristotle, Horace, Longinus.

CLASSICS 4190-4990 Special Topics in Classical Studies (1-9 semester hours, may be repeated for credit)
A study in depth of selected individuals, epochs and ideas in ancient Greece and Rome. Topics will vary from year to year. (1-9)

CLASSICS 4199-4999 Senior Seminar and Research Classical Studies (1-9 semester hours, may be repeated for credit)
This seminar, the integrating course for the concentrator, is designed to fit into broader perspective the knowledge already gained in individual courses, deepening it, and taking account of significant gaps in knowledge where such are found to exist. The seminar will fix it's emphasis to meet the needs of the students, and will involve independent research. (1-9)

THE COOPERATIVE CLASSICS PROGRAM (TAGER)
The Cooperative Classics Program, made possible through TAGER to its members over the Green Television Network, is a four-year program of study leading to majors in Greek, Latin and Classics. The courses offered will vary from year to year and listings are available in the Program Director's Office. See comparative Literature listings for additional appropriate courses.

## COMPARATIVE LITERATURE

There is no degree in comparative literature, but it is an option in any of the fields of literature in which degrees are offered. Most literature courses at UT Dallas are taught from a comparative perspective.

Literature deals with life in all of its manifestations. Comparative literature is a window to look into another time or place; a way of becoming famillar with the unfamiliar. In comparative literature courses you may study the development of a single genre, such as drama, or pursue a theme, perhaps that of Utopia and the man's dream of the past. You may focus on a particular period, studying the Renaissance in several European countries, or introduce yourself to a completely new area, such as Asian literature. Whatever you choose, it should help to deepen your understanding not just of the literature involved but also of the people and culture which gave it birth.

## COMPARATIVE LITERATURE COURSES

## Course Description

COMP LIT 3301 Literary Criticism (3 semester hours)
Studies in the theory of literature and literary criticism. Reading and analysis of central texts from Plato and Aristotle to the present.

## COMP LIT 3303 Literary Analysis

Close study of selected literary works, primarily short stories, longer fiction, and lyric poetry. Frequent short papers on problems of interpretation of literary texts. Taught in sections. Some sections may include readings in original French, Spanish, or German.

COMP LIT 4301 Problems in Translation (3 semester hours)
A course to develop special skills in the translation from one language into another through attention to finer shades of meaning. Attention will be given to the role of translation in the history of literature.

COMP LIT 3302 The Heritage of Western Literature (3 semester hours)
Studies in classical authors and the Bible in relation to the literature of Europe and America. Required of all concentrators in language and literature.

COMP LIT 3305 Studies in Mythology (3 semester hours)
Studies in literary myths and their recurrence and change in different periods and countries.

COMP LIT 3320 Oral and Early Literature (3 semester hours)
Literature from the period before the invention of writing and from the first generations after it. The roles of mythology and ritual in the formation and development of this literature; the techniques of its composition and oral transmission, and their legacy in literary style; how oral and early literature has come to be set down in writing.

COMP LIT 4321 Studies in the Epic. (3 semester hours)
The epic as a literary form, with an analysis of individual works in relation to their societies; some consideration of the differences between the oral and the literary epic.

COMP LIT 4322 Literature and Music (3 semester hours)
A study of the relationship between literature and music. The course will illustrate the twin themes of literature in music and music in literature. Texts which have musical settings and compositions which appear in ifterary works will be discussed. This course is designed to provide a general background to more than one period of the literature and music in England, Germany, Erance and Italy.

COMP LIT 4340 The Development of Dramatic Form: Tragedy ( 3 semester hours)
Studies in tragic drama and its latter-day analogues with emphasis on ancient Greece; the 16th and 17th centuries in England, Spain, and France; and the modern period from Goethe to Beckett. Includes a consideration of theories of tragedy.

COMP LIT 4341 The Development of Dramatic Form: Comedy (3 semester hours)
Studies in comic drama with emphasis on Plautus and Terence; the 16th and 17th centuries in England, France, Italy; and the 20th century. Includes a consideration of theories of comedy.

COMP LIT 3342 The Development of the European Novel ( 3 semester hours)
Studies in the development of the European novel, with special emphasis on the 19th century novel in France, England, and Russia.

COMP LIT 3350 The Literature and Thought of the European Renaissance (3 semester hours)

Comparative studies of the literature, thought, and art of England, France, Italy, and Spain in the Renaissance.

COMP LIT 4355 The Literature and Thought of the European Enlightenment (3 semester hours)

Comparative studies of the literature, thought, and art of England, France, and Germany during the Enlightenment.

COMP LIT 4358 Studies in Romanticism (3 semester hours)
Comparative readings in literary theory, fiction, drama, and lyric poetry by Romantic writers in Germany, France, England, and Spain.

COMP LIT 3381 Third World Literature (3 semester hours)
Special studies in the literature of Africa, Asia, and Latin America. Topics will vary from year to year.

COMP LIT 3382 Studies in African Literature (3 semester hours)
A study of the development of African literature, both anglophile and francophile, with lectures, discussions and readings from representative and aesthetics of African literature.

COMP LIT 3383 Studies in Caribbean Literature (3 semester hours)
A study of the development of the literature of the Caribbean, with lectures, discussions, and readings from representative texts. The course will include a consideration of the anthropology and aesthetics of African literature.

COMP LIT 3384 Studies in Chinese Literature (3 semester hours)
An introduction to Chinese literature in translation. The course will include a consideration of the other arts in relation to literature.

COMP LIT 3385 Studies in Japanese Literature ( 3 semester hours)
An introduction to Japanese Ifterature in translation. The course will include a consideration of the other arts in relation to literature.

COMP LIT 3388 Women in Comedy ( 3 semester hours)
Comedy has long been noted for the sparkling women who hold the stage and their men by a combination of intelligence, wit and courage. This course will explore some of the noted women from Shakespeare to Shaw, and will help to provide a history of comedy from the Renaissance to the Modern Period. Male attitudes to women will be examined, in addition to the particular nature of the genre itself, which allows women to succeed in a man's world.

COMP LIT 4385 Literature and Society (3 semester hours)
Literature in relation to the society which produces it; the function of the artist; the literary work as a reflection of society.

COMP LIT 4386 The Portrayal of Women in 19th Century Literature
A thematic course of wide implications which deals with the social history of the period as reflected in the literature. The focus is on the position of women in the family and in society, and psychological as well as literary problems are raised. The readings will include both novels and plays, European, English, and American literature.

COMP LIT 4387 The Novel and the Film (3 semester hours)
The film is perhaps today's major art form. It certainly reaches more people than the novel, yet many films are based on novels. The course will consider what this process does to the films, what happens to the content of a novel when it is given in the form of film. The film has also influenced the novel in surprising ways. Now novels based on films are appearing. The course will also include a consideration of the problems of social impact and the societal function of these art forms.

## COMP LIT 4388 Special Studies in Thematics (3 semester hours)

The study of various themes through the literature of different countries and time periods. (Topics for 1975-1976 may be obtained from the Program office.)

COMP LIT 4390 Advanced Topics in Comparative Literature (3 semester hours)
Students interested in Comparative Literature should also note particularly courses in history and philosophy, as well as the language and literature programs.

## ENGLISH LANGUAGE AND LITERATURE

OFFICE: Jonsson
Language is our key to other human relationships; if we are not masters of our own tongue, by the measure of that failure, we miss realizing ourselves. Through the intensive reading and writing of English, you learn to appreciate some of the great ungeneralized human qualities. Your journey through English and American literature will introduce you to several genres in depth, and will give you the opportunity to study one or more literary personalities in detail. It should be a fascinating journey indeed, for to read the great works of English and American geniuses is not to escape from reality, but to experience it at its fullest.

## LOWER DIVISION PREREQUISITES

English Composition (one semester)
English or American OR World Literature (one semester required, 2 semesters recommended)

UPPER DIVISION CORE REQUIREMENTS: (15 semester hours)
The Development of English Literature OR
The Development of American Literature
Studies in Individual English Authors OR
Studies in Individual American Authors
Literary Criticism or Literary Analysis
The Heritage of Western Literature
Shakespeare
THE OPTIONS
The student majoring in the Program in English and American Language and Literature may choose to specialize in one of several options.
Specialization in an option requires 21 hours of advanced courses in the Program in English and American Language and Literature and related studies beyond the core requirements.

1. English and American Language and Literature: The study of the English and American language and literature from a disciplinary perspective.
2. Comparative Literature: The study of two or more literatures, with special emphasis on a single genre or period.
3. History and Literature: An interdisciplinary study of the history and literature of a single country or area, or of a single cultural epoch.
4. Literature and the Arts: An interdisciplinary study of the literature and arts (music, the visual arts and theater) of a single country or areas, or of a single cultural epoch, with a special emphasis on aesthetics.

## COURSES IN ENGLISH AND AMERICAN LANGUAGE AND LITERATURE

Course Description
ENG 3301 The Development of English Literature (3 semester hours)
Studies in representative English authors from the Middle Ages to the present.

ENG 3305 The History and Structure of the English Language (3 semester hours)
Development of sounds, forms and vocabulary to the present; consideration given to the development from Indo-European through Germanic, and to the various ways in which English is related to other languages. No previous training in linguistics required.

COMP LIT 3302 The Heritage of Western Literature (3 semester hours)
COMP LIT 3301 Literary Criticism (3 semester hours)
ENG 4310 English Literature from Anglo-Saxon Period excluding Chaucer
(3 semester hours)
An introduction to the language and literature of the Anglo-Saxon. Reading will include "Beowulf" and the major extant short poems, including "The Wanderer", "The Seafarer", and "The Dream of the Rood".

ENG 4312 Chaucer (3 semester hours)
Readings from the Canterbury Tales with selections from other works.
ENG 3315 Shakespeare: The Tragedies and Romances ( 3 semester hours)
A general study of Shakespeare's tragedies and romances with attention to language, thematic concerns, character development, and aspects of Shakespearean performance in the Elizabethan and Modern theaters. Fulfills the core requirement.

ENG 3316 Shakespeare: The Comedies and Histories (3 semester hours)
A general study of Shakespeare's comedies and histories with attention to language, thematic concerns, character development, and aspects of Shakespearean performance in the Elizabethan and Modern Theaters. Fulfills the core requirement.

ENG 3350 The Literature and Thought of the European Renaissance (3 semester hours)

ENG 3321 English Literature: 1616-1700 (3 semester hours)
Bacon, Donne, Herbert, Browne, Dryden and others, with special emphasis on literary and intellectual history.

ENG 4322 Milton (3 semester hours)
The works of Milton studied in the light of the life, times and culture of the poet. Intensive study is made of "Paradise Lost", the shorter poems (especially "Comus", "Paradise Regained", and "Samson Agonistes") and of "Areopagitica".

COMP LIT 4358 Studies in Romanticism (3 semester hours)
COMP LIT 3342 The Development of the European Novel (3 semester hours)
ENG 4360 The Modern Period (3 semester hours)
An introduction to the poetry, fiction, intellectual prose and criticism of the period from 1890 to 1939.

ENG 4365 British and American Literature Since World War II (3 semester hours)
Selected readings from poetry and prose by contemporary writers from both sides of the Atlantic.

ENG 4390 Studies in Individual English Authors (3 semester hours)
Every concentrator must take one course. Authors will change from year to year. A list of authors for 1975-1976 may be obtained in the Program Office.

ENG 3370 The Development of American Literature ( 3 semester hours)
Studies in representative American authors and movements.
ENG 3372 American Literature and Thought: 1600-1840 (3 semester hours)
Early American literature as an embodiment of American thought and experience; such topics as European ideas in the New World; the political ideas of Hamilton, Jefferson and Jackson; nationalism and industrialism, as expressed in American literature of the period.

ENG 4375 The American Renaissance (3 semester hours)
Study of the classic American writers of the mid-nineteenth century:
Emerson, Thoreau, Poe, Hawthorne, Melvills and Whitman.
ENG 4377 American Literature in the 20th Century ( 3 semester hours)
Works by Robinson, Eliot, Frost, Hughes, 0 'Neill, Hemingway, Faulkner, Baldwin, and others. An attempt will be made to view the period as a whole and to trace patterns within it.

ENG 4379 Southern American Literature (3 semester hours)
The literary fmagination of the American South and its relationship to Southern history and society.

ENG 3375 Life and Literature of the Southwest (3 semester hours)
Verse, fiction, travels, and memoirs, to acquaint students with the literature reflecting the social inheritance of Texas and the neighboring territory.

ENG 4380 Afro-American Literature (3 semester hours)
Reading and discussion of the writings of Black Americans, with emphasis on the 20th century; includes major works of Richard Wright; Langston Hughes, James Baldwin, Ralph Ellison, and others.

ENG 4381 The Outsider in American Ethnic Literature (3 semester hours)
A study of the outsider in American ethnic literature, as depicted in the works of Black, Chicano, Native American, Puerto Rican, and Asian-American writers.

ENG 4390 Special Topics in American Literature (3 semester hours)
ENG 4391 Studies in Individual American Authors (3 semester hours)
Every concentrator must take one course. Authors will change from year to year. A list of authors for 1975-76 may be obtained in the Program Office.

ENG 3395 English Composition: Writing Laboratory (3 semester hours)
An intermediate course for students who wish practice and guidance in the writing of verse, fiction, or nonfictional prose. Taught in sections with emphasis on one form of writing varying from section to section. Students should submit an example of their writing to the professor in charge of the course the semester before taking it. Sections limited to 15.

ENG 3396 Arts Criticism I: Writing Laboratory (3 semester hours)
A workshop in the writing of arts criticism. Sections 1imited to 20.
ENG 4396 Arts Criticism II: Writing Laboratory (3 semester hours)
Advanced workshop and internship in arts criticism. Prerequisite: English or the permission of the instructor. Sections limited to 20.

ENG 4197-4997 Independent Study (1-9 semester hours, may be repeated for credit)

ENG 4198-4998 Senior Seminar (1-9 semester hours, may be repeated for credit)

ENG 4399 Senior Research (3 semester hours)
Courses in several other degree programs are relevant to the major in
English. You should note especially the listings in history, music, theater, philosophy, classics, and the visual arts. All courses in Comparative Literature may be counted toward the major in English.

## FRENCH LANGUAGE AND LITERATURE

OFFICE: Jonsson
French has traditionally been the language of culture, of international diplomacy and of love. Like the English and the Spanish, the French have been world colonizers, leaving the unmistakable marks of their culture as well as of their language wherever the tricolor has flown. As an international tongue, French has become a passport into a wide variety of occupations; it is spoken as fluently in the world of fashion as in the world of finance. Your knowledge of French will include much more than the command of universally understood phrases; rather it will encompass the literature of many Frenchspeaking countries. You may choose to study a certain period of history, a particular genre (the ballad, poem or essay, for example), or you may enjoy reading thoroughly the works of one French literary genius. No matter what path you explore, you will find that in reading it in French, you have tapped meanings and subtleties that will enrich your own thoughts and ideas.

## LOWER DIVISION PREREQUISITES

Four semesters or its equivalent of French language and/or literature.

## UPPER DIVISION CORE REQUIREMENTS

The Development of French Literature
Studies in Individual French Authors
Literary Criticism
The Heritage of Western Literature

## THE OPTIONS

The student majoring in French Language and Literature may choose to specialize in one of several options. Specialization in an option requires 18 hours of advanced courses in French Language and Literature and related studies beyond the core requirements.

1. French Language and Literature: The study of the French language and literature from a disciplinary perspective.
2. Comparative Literature: The study of two or more literatures, with special emphasis on a single genre or period. The second literature must be studied in the original language. Four semesters or the equivalent are required.
3. History and Literature: An interdisciplinary study of the literature and arts (music, the visual arts, and theater) of a single country or area, or of a single cultural epoch.
4. Literature and the Arts: An interdisciplinary study of the literature and arts (music, the visual arts, and theater) of a single country or area, or of a single cultural epoch, with special emphasis on aesthetics.


French 3325 Studies in the French Novel (3 semester hours)

Readings in representative French novels from Rabelais to Sartre.
Comp. Lit. 4355 The Literature and Thought of the European Enlightenment (3 semester hours)

Comp. Lit. 4301 Problems in Translation (3 semester hours)
French 4198-4998 Independent Study (1-9 semester hours, may be repeated for credit).

French 4199-4999 Senior Research (1-9 semester hours, may be repeated for credit).

RELEVANT COURSES IN OTHER PROGRAMS
See comparative literature listings for other appropriate courses. A list of approved courses from other programs which may count toward the French major may be obtained from the Program Office.

## german language and literature*

## OFFICE: Jonsson

Christmas trees and kindergartens are but two of the German traditions and customs that have become so intermingled within our own that their origins have become obscured. To explore the richness of our German heritage required the most basic of tools -- the language. It is only with a thorough knowledge of German that the variety and profusion of the country's thought and culture may be experienced. There are many areas of Germanic endeavor to explore music, art, philosophy -- but it is through literature that we comprehend the concepts and images that are unique to the German people. Intimate contact with the originals of German masters can take many forms. We may explore a favorite author's works, a particularly intriguing period of time, or a single genre. In comparing these works with our own, we add perspective to life, and insight into the fullness of human experience.

## LOWER DIVISION PREREQUISITES

Four semesters or its equivalent of German language and/or literature.
UPPER DIVISION CORE REQUIREMENTS (9 semester hours)
The Development of German Literature
Literary Criticism or Literary Analysis
The Heritage of Western Literature

## THE OPTIONS

The student majoring to German Language and Literature may choose to specialize in one of several options. Specialization in an option requires 18 hours of advanced courses in German Language and Literature and related studies beyond the core requirements.

1. German Language and Literature: The study of the German Language and Literature from a disciplinary perspective.
2. History and Literature: An interdisciplinary study of the history and literature of a single country or area, or of a single cultural epoch.
3. Comparative Literature: The study of two or more literatures, with special emphasis on a single genre or period. The second literature must be in the original language. Four semesters or the equivalent are required.
4. Literature and the Arts: An interdisciplinary study of the literature and arts (music, the visual arts and theater) of a single country or area, or of a single cultural epoch, with a special emphasis on aesthetics.
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COURSES IN GERMAN LANGUAGE AND LITERATURE
Course Description
GER 3601 Intensive Elementary German (6 semester hours)
GER 3301 Beginning German I (3 semester hours)
GER 3302 Intermediate German II (3 semester hours)
GER 4301 Advanced German I (3 semester hours)
GER 4302 Advanced German II (3 semester hours)
GER 4305 History of the German Literature (3 semester hours)
    A study of the development and characteristics of the German language.
COMP LIT 3302 The Heritage of Western Literature (3 semester hours)
COMP LIT 3301 Literary Criticism (3 semester hours)
GER 3310 The Development of German Literature (3 semester hours)
    Readings in representative German authors from the Middle Ages to the
present. Required for Teacher Certification.
GER 3308 Applied Linguistics (3 semester hours)
    Required for Teacher Certification.
GER 4365 Studies in Modern German Literature (3 semester hours)
    Required for Teacher Certification. Topics vary each semester. May be
repeated for credit.
COMP LIT 4301 Problems in Translation (3 semester hours)
GER 3320 Studies in German Literature Before 1750 (3 semester hours)
    Reading and analysis of major works from the Middle Ages to the Baroque.
GER 4340 Goethe (3 semester hours)
    Reading and discussion of representative works.
COMP LIT 4355 The Literature and Thought of the European Enlightenment
    (3 semester hours)
GER 3380 German Literature in Translation. (3 semester hours)
    An introduction to a selection of masterpieces of German literature.
GER 4198-4998 Independent Study (1-9 semester hours, may be repeated for
    credit)
    See the Comparative Literature listings for other appropriate courses. A
list of approved courses from other programs which may count toward the major
in German may be obtained from the Program Office.
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## HISTORY

## OFFICE: Jonsson

The modern historian is an inquisitive investigator. In attempting to unravel the past, the historian seeks to place the present in perspective, At UT-Dallas, the emphasis is less on strictly political events and more on the developmental study of ideas and social movements. As such, the efforts of the historian serve as an invaluable tool for understanding the varieties of human experience. It might be aaid that history is as necessary to man and society as memories are to the individual.

## LOWER DIVISION PREREQUISITES

Two semesters of American history
UPPER DIVISION CORE REQUIREMENTS (12 hours)
History 3301 or History 3302 or History 3303
One course selected from each of three of the following four groups:

1. European history
2. Asian or African history
3. Social or economic history
4. Intellectual history or history of science \& technology

## THE OPTIONS

The student majoring in history may choose to specialize in one of aeveral options. Specialization in an option requires 24 hours of advanced courses in history and related studies beyond the core requirements. The student's option should be worked out carefully with his or her adviser.

1. History: The study of history, offering students an opportunity to concentrate in any one of a variety of areas or fields. Students should consult their academic advisers for a IIst of these areas and fields.
2. History and the Social Sciences: Interdisciplinary studies with anthropology, economics, geography, political science, psychology, or sociology.
3. History and Philosophy of Science \& Technology: Interdisciplinary studies with philosophy and the social sciences.
4. History of Ideas: The role of thought and culture in history.
5. History and Literature: Interdisciplinary studies with English, French, German, Spanish, Classics, and other avallable literatures.

## HISTORY COURSES

## Methodological and Comparative Courses

## Course Description

HIST 3301 Introduction to Historical Themes and Problems ( 3 semester hours).
Readings, commentary, and discussion addressed to some major ways of studying, interpreting, and writing history.

HIST 3302 Introduction to Comparative History ( 3 semester hours)
This course introduces students to comparative history. Emphasis will be on the study of a topic or problem whose range cuts across traditional geographical and chronological limits. Topics may vary, but will be selected to be properly introductory and appropriate for demonstrating techniques available to the comparatist.

HIST 3303 New Modes of Historical Analysis (3 semester hours)
New methods in history and their application to a wide range of historical problems, traditional and fnnovative. Emphasis on social science concepts, the place of theory in history, the interrelationship of social sciences and the humanities.

HIST 4302 Advanced Topics in Comparative History (3 semester hours)
HIST 4311 The Family and Social Structure in History I (3 semester hours).
HIST 4312 The Family and Social Structure in History II (3 semester hours).
History 4311 and 4312 together constitute a full-year reading and research course with a major project, preferably one which requires quantitative work. Topics will include the history of family, childhood, growing up, the aged, women, birth and death, migrations, population growth, social changes, kinship, all within a comparative perspective, Stress will be on social science concepts, new interpretations, new methods. There will be a stress on local research.

HIST 4313 The Family and History (3 semester hours).
HIST 4314 Population in Fistory ( 3 semester hours)
Studies in the history of population, stressing demographic analysis, the components of population growth and their meaning for modernization, urbanization, fmigration, industrialization, and other topics.

HIST 4317 Psychohistory and Blography (3 semester hours).
Studies the roles of selected individuals in history. Emphasis will be on social and psychological interpretations of their lives and careers. The focus will be on personages in European history (Martin Luther, Louis XIV, Johannes Kepler, Leopold III, Adolf Hitler, Josef Stalin, and so forth). Figures from other parts of the world will be studied for purposes of comparison.

HIST 4318 Workshop in Oral History (3 semester hours).
The functions and methodology of oral history, with emphasis on
Dallas and Texas. Individual projects in oral history, Limited to 20 students in each section.

HIST 4319 Science and Revolution (3 semester hours).
The use of scientific ideas and theories in revolutionary ideologies;
the mole of scientists as participants in revolutionary movements;
revolutionary transformations of scientific institutions; the
place of science in post-revolutionary societies. Reading and
discussion will focus on the classical revolutions, Britain,
France, Russia, and China.
HIST 4399- Independent Research in History (3-9 semester hours) 4999 May be repeated for credit.

European History
Course
Description

HIST 3320 Toples in Anclent History (3 semester hours)
The topics, chosen from Greek and Roman civilization, will vary.
HIST 3321 Political and Soctal Development in Europe during the Medieval and Early Modern Periods (3 semester hours)
Surveys major themes in the political and social life of Europe
In comparative perspective. The emphasis will be on the period
from the eleventh century to the early eighteenth century.
(Recomaended for students with no previous courses in European
history or Western Civilization)
HIST 3322 Political and Social Development in Europe during the Modern and Contemporary Periods (3 semester hours)
Surveys major themes in the political and social life of Europe in comparative perspective. The emphasis will be on the period from the early eighteenth century to the fmediate post-Worid War II era. (Recommended for students with no previous courses in European history or Western Civilization)

HIST 3323 Renaissance and Reformation Europe (3 semester hours) Studies various aspects of these two processes which marked the end of many of the elements of life and thought which had characterized medieval civilization. At the instructor's discretion emphasis may shift as between the political, soctal, economic, and intellectual approaches to the course material.

HIST 3325 The Expansion of Europe from the Fifteenth to the Seventeenth Century (3 semester hours)
Studies the techniques, economic organization, and institutional development of European colonialization in the Americas, Africa, and Asta. Emphasizes the history of the age of discovery and the origins of an extensive activity in world trade as undertaken by Europeans.

HIST 3326 The Expansion of Europe from the Eighteenth to the Twentieth
Century (3 semester hours)
Studies the European colonial empires of the period, as well as those of Russia and the United States. The course will include an emphasis on the growth of colonial nationalist movements and the processes of decolonization.

HIST 3328 Europe in the Age of World History ( 3 semester hours). Using a comparative approach to contemporary history, the course studies Europe's role in the world since 1914. Wor1d Wars I and II as well as the issue of economic change and realignment will be topics of the course. Emphasis will be on Europe since 1945, considering such issues as the impact of the loss of overseas empire, the role of the Common Market, the division of Germany, and western Europe's relations to the U.S.A. and the U.S.S.R.

HIST 4321 Modern European Intellectual History (3 semester hours).
A study of major thinkers and deas from the early eighteenth century to the late nineteenth century. Paphasizes contributions to the sphere of political, soctal, and economic ideas. Rationalismin in the eighteenth century, aspects of social thought in romanticism, utopian and scientific socialism, nationalism, and Soctal Darwinism will be among the topics considered.

HIST 4322 Contemporaxy European Intellectual History ( 3 semester hours).
A study of major thinkers and ldeas in the twentieth century.
Emphasis will be on writings which speak primarily to the disintegration of the rationalist tradition in European culture. Issues to be studied in historical perspective include: the role of reason in human action, issues of consciousness and commitment, and the search for values in a secular socfety.

HIST 4323 Advanced Topics in Medieval and Renaissance History (3 semester hours)

HIST 4325 Advanced Topics in Early Modern European History (3 semester hours)
EIST 4327 Advanced Topics in Modern and Contemporary European History
(3 semester hours)

## African History

Course Description
HIST 3341 The History of Africa to 1800 (3 semester hours), Weaver
A survey of premcolonial Africa, with emphasis on the role of
Islam in African history and on early comerctal relations between Africa and Europe,

HIST 3342 The History of Africa, 1800 to the Present ( 3 semester hours).
A survey of sub-Saharan Africa in the age of colonial domination,
with emphasis upon the consequences of the Ruropean presence,
economic development, and the emergence of modern nationalist movements.

HIST 4341 Advanced Topics in African History (3 semester hours).

## Asian History

## Course Description

HIST 3351 The History of Iran to 1500 ( 3 semester hours). A survey of Iranian (Persian) history from the Aryan invasians to the rise of the Safavids, with emphasis on social and cultural continuities and the Irantan heritage in the arts. (To be given In fall, 1977)

HIST 3352 The History of Iran, 1500 to the Present ( 3 semester hours).
A continuation of History 3351, with emphasis upon Iran's inter-
action with other areas of the Middle East, India, and Central
Asia, the challenge of European fmpertalism, and the quest for moderaity, (To be given in spring, 1978)

HIST 3353 The History of India to 1707 (3 semester hours).
A survey of the history and civilization of the Indian sub-continent to 1707, with emphasis upon the period of Nuslim rule (1206-1707) and the emergence of an Indo-Islamic cultural tradition. (To be given in fall, 1976)

HIST 3354 The History of India, 1707 to the Present ( 3 semester hours).
A survey of the history of the Indian sub-continent from the eighteenth century to the present, with emphasis on the disintegration of Mughul rule, the establishment of British rule, the emergence of Indian nationalism, and the transition to independence. (To be given in spring, 1977)

HLST 3355 The History of China to the Seventeenth Century ( 3 semester hours)
A survey of traditional Chinese society, fnstitutions, and culture, down to the establishment of the Manchu dynasty.

HIST 3356 The History of China from the Seventeenth Century to the Present
(3 semester hours)
The evolution of modern China, from the foundation of the Manchu empire down to the establishment of Comunist rule and the energence of China as a world power.

HIST 3357 The History of Japan to the Seventeenth Century ( 3 semester hours)
A survey of traditional Japanese society, institutions, and culture, down to the Tokugawa period.

HIST 3358 The History of Japan from the Seventeenth Century to the Present (3 semester hours)
The evolution of modern Japan, from the Tokugawa period down to the Second World War and to the establishment of Japan as a leading industrial nation.

HIST 4351 Advanced Topics in Iranian History (3 semester hours).
HIST 4353 Advanced Topics in Indian History ( 3 semester hours).
HIST 4355 Advanced Topics in Chinese History ( 3 semester hours)
HIST 4357 Adyanced Topics in Japanese History (3 semester hours)

## American H1story

## Course Description

HIST 3361 Advanced Studies in United States History to 1865 (3 semester hours)
HIST 3362 Advanced Studies in United States History since 1865 (3 semester hours)
History 3361 and 3362 explore-through lectures, readings, and dis-cussions-key interpretations of the political, social, economic, and cultural development of the United States. Each of these courses fulfills one-half of the Texas legislative requirement for six hours in American history; the courses are also appropriate for the student who has met that requirement and desires more advanced work in American history.

HIST 3363 The History of Texas (3 semester hours)
The political, social, economic, and cultural development of Texas.
History 3363 fulfills one-half of the Texas legislative requirement
for six hours in Amertcan history.
HIST 3364 The History of Education in the United States ( 3 semester hours).
Studies in educational history, with a social history focus.
HIST 3367 American Economic History (3 semester hours).
A survey of the problems of development in the American economy.
HIST 3368 American Labor History ( 3 semester hours).
A survey of the development of the American labor movement from colonial times to the present, with a special emphasis on the role of cultural, demographic, and technological forces acting upon the development of the American working class.

HIST 3371 Introduction to Afro-American History (3 semester hours)
HIST 3377 Latin-American History (3 semester hours)
HIST 3378 Mexico and the Mexican-Americans (3 semester hours)
HIST 4361 American Thought and Culture, 1600-1900 ( 3 semester hours).
HIST 4362 American Thought and Culture in the Twentieth Century (3 semester
hours).
History 4361 and 4362 explore the relationship between America's
creative thinkers and artists, on the one hand, and the dominant patterns of American culture and behavior, on the other.

HIST 4363 Education and Social Change in North America I ( 3 semester hours)
(same as Education 4315).
A study of the social aspects of education; development of
Institutions for mass schooling; social reform and education;
education of blacks and inmigrants; social changes and educational development; patterns of school attendance and other related themes. An intensive course in reading and research.

[^3]HIST 3383 Technology in Western Civilization ( 3 semester hours).
A survey of the role played by technology in shaping Western culture from antiquity through the Industrial Revolution, This counts as a course in European history for the purposes of meeting the History Core requirement.

HIST 3384 American Technological Development ( 3 semester hours). A survey of the role played by technology in shaping American culture from colonial times to the present.

HIST 3385 The Scientific Revolution and Its Consequences (3 semester hours). Scientific ideas in Western culture and society, 1500-1800: changing views of man and nature. Specific topics covered: technology, magic, and mathematics in the Renalssance; seventeenth-century natural philosophy; medicine and society in early modern Europe; Newtonian science and the Enlightemment.

HIST 3389 Topics in the History of Science (3 semester hours)
HIST 4381 History of the Social Sciences (3 semester hours).
The natural sciences and social theory from the seventeenth to the twentieth century; critical examination of the use of the natural sciences as models for social research and explanation; social and political dimensions of natural scientific knowledge.

HIST 4383 The Philosophy of Technology ( 3 semester hours).
A historical and philosophical study of the fundamental character of technology and its impact on culture,

HIST 4384 Technology and Society (3 semester hours).
A study of the various interactions between technology and contemporary society,

HIST 4385 Science and Society in the United States ( 3 semester hours). Changing relationships between science and American society
in the nineteenth and twentieth centuries; science and social reform; science and the state; professionalization and spectalization in the sciences.

HIST 4386 Science and Society in China ( 3 semester hours). Traditional Chinese views of scholarship, technology, and knowledge; the introduction of Western science into China in the nineteenth century; medicine and medical missionaries in the nineteenth century; science as an ideology during the first Chinese revolution; Maoist approaches to science and scientists; science and medicine during the Cultural Revolution,

HIST 4387 History of Medicine and the Biological Sciences (3 semester hours)
HIST 4388 History of the Physical Sciences (3 semester hours)
HIST 4389 Advanced Topics in the History of Science (3 semester hours)
HIST 4390 Advanced Topics in the History of Technology (3 semester hours)

Students should consult their academic advisers for a list of Topics and Advanced Topics courses being offered each semester. Topics and Advanced Topics courses may be repeated for credit, with the permission of the instructor and the student's academic adviser.

## Special Interdisciplinary Studies in the History and Philosophy of Science and Technology

Human beings have always attempted to understand the natural world and their relations to it. The development of modern acience and technology in the last four centuries has had profound consequences for the whole of our culture and civilization. As knowledge of the natural world has increased, conceptions of the world and of human society have changed dramatically, as have views of the nature of human existence and knowledge. Even ethical and aesthetic values have demanded reassessment.

These studies are designed to inform the student about the historical and philosophical context of the growth of science and technology. With this, one acquires the capacity for intelligent criticism and evaluation of the important issues concerning our technological and scientific era.

The program consists in a sequence of courses which may be taken as part of a major in efther philosophy or history, or both. The courses carry no specific prerequisites in science, mathematics, or technology.

Completion of the basic program entails a minimum of 12 semester hours. These courses are taken in conjunction with the courses required for the major, and some may count directly toward that major. Details of the major requirements are available in this catalogue under the History and the Philosophy degree program descriptions. Faculty in both History and Philosophy are available for advising.

## COURSE DESCRIPTIONS:

HIST 3381/PHIL 3380 (Topic 3) Introduction to the History and Philosophy of Science and Technology
An interdisciplinary approach to the issues of science and technology. Major scientific and technological developments and the important philosophical dimensions of them will be considered, along with various ways of interpreting the nature of science and technology.

HIST 3383 Technology in Western Civilization
A survey of the role played by technology in shaping Western culture from antiquity through the Industrial Revolution.

HIST 3384 American Technological Development
A survey of the role played by technology in shaping American culture from colonial times to the present.

HIST 3385 The Scientific Revolution and Its Consequences
Scientific ideas in Western culture and society, 1500-1800, changing views of man and nature. Specific topics covered: technology, magic, and mathematics in the Renaissance; 17th century natural philosophy; medicine and society in early modern Europe; Newtonian science and the Enlightenment.

HIST 3389 Topics in the History of Science
(May be repeated for credit as topics vary,)
HIST 4319 Science and Revolution
The use of scientific ideas and theories in revolutionary ideologies;
the role of scientists as participants in reyolutionary movements; revolutionary transformations of scientific institutions; the place of science in post-revolutionary societies, Reading and discussion will focus on the classical revolutions, Britain, France, Russia, and Chian,

PHIL 4380 The Development of Ideas in Science ( 3 semester hours) Studies in the philosophical and historical aspects of the natural and social sciences. Course may be repeated for credit as topics vary. Topics which may be offered include:

Topic 1. The Mathematization of Nature in Early Modern Science and Philosophy

A study of the steps by which the various processes of nature were brought within the scope of mathematical treatment. Particular attention will be paid to the philosophical presuppositions of the early modern scientists and to the consequences of these positions.

Topic 2. Conceptual Change in Science
The problem of what sorts of changes take place in science, and why, has been a major source of discussion since the work by Thomas Kuhn on scientific revolutions appeared. This course will examine several theories of concept change, such as objectivist and formalist theories, and relativist and historical context theories.

Topic 3. Concepts of Space and Time
An historical and philosophical study of the development of various theories of space and tine, from mythopoeic thought to the present. Mathematical and physical theories will be discussed in a relatively non-technical manner.

Topic 4. Physics and Metaphysics,
Basic concepts in physics will be compared with those from philosophical metaphysics. Examples might include the notions of continuity and discreteness, the constancy of nature, change and causality, energy, potential energy, conservation laws, etc.

HIST 4381 History of the Social Sciences
The natural sciences and social theory from the 17th to the 20th century; critical examination of the use of the natural sciences as models for social research and explanation; social and political dimensions of natural scientific knowledge.

EIST 4383 The Philosophy of Technology
A historical and philosophical study of the fundamental character of technology and its impact on culture.

HIST 4384 Technology and Society
A study of the yarious interactions between technology and contemporary society,

HIST 4385 Science and Society in the United States
Changing relationships between science and American society in the 19th and 20th centuries; science and social reform; science and the state; professionalization and speciallzation in the sciences.

HIST 4386 Science and Society in China
Traditional Chinese views of scholarship, technology, and knowledge; the Introduction of Western science Into China in the 19th century; medicine and medical missionaries in the 19th century; science as an ideology during the first Chinese revolution; Maoist approaches to science and scientists; science and medicine during the Cultural Revolution.

HIST 4388 History of the Physical Sciences
HIST 4387 History of Medicine and the Biological Sciences
HIST 4389 Advanced Topics in the History of Science
(May be repeated for credit as topics vary,)
HIST 4390 Advanced Topics in the History of Technology
Topics to be announced.

## JOURNALISM

There is no degree in journalism, but the course sequence is designed to complement such fields as economics, political science, business administration, the arts and literature. At UT-Dallas, you will approach mass communication as a science, an art and a service. You are encouraged to gain practical experience through internships and part-time positions with the various mass media of the University and of the city. By integrating your course work in journalism with that of your major field, you will gain not only a broad cultural base for your future career, but will also acquire some of the technical and professional competence necessary for work in the field of journalism upon graduation.

## JOURNALISM COURSES

## Course Description

JOURN 3301 General Reporting I (3 semester hours)
Thorough groundwork in news gathering and writing. Topics will include news gathering methods; discussion and exercises in organizing and writing print and broadcast stories.

## JOURN 3302 General Reporting II (3 semester hours)

Study and practice of investigative and in-depth reporting. Intensive training in narrative, expository and descriptive writing.

JOURN 3303 General Editing ( 3 semester hours)
Intensive practice in copyreading and headline writing. Develcpment of clear, concise English, accuracy, and speed in handling copy. Principles of copy editing and make up will be covered.
JOURN $4310 \quad$ Business and Economic Reporting (3 semester hours)
Investigation of economic trends with emphasis on their meaning for the
journalist. Focus on such topics as the business-government-labor triangle.
the modern corporation, corporate responsibility in the community, and the
impact of economic developments on management and labor.
Journ $4320 \quad$ Political Reporting ( 3 semester hours)
Consideration of procedures, problems and trends of federal, state and
local governments; their relationships to each other; press responsibilities
in coverage of their activities.

Art Criticism I: Writing Laboratory (3 semester hours)
ENG 4396 Art Criticism II: Writing Laboratory (3 semester hours)
JOURN 4380 Journalism Practicum: Reporting of Public Affairs (3 semester hours)
A laboratory course in public affairs; internship with local newspapers, magazines, radio and television stations. Coverage of (1) urban problems, (2) politics and government, (3) the economy and business, (4) science and technology, (5) the arts, (6) the educational system. The student will choose one area for concentration when possible. May be repeated for credit.

## LaNGUAGE AND LINGUISTICS

This section of the catalog lists courses in inguistics, courses in language areas which do not have a separate degree program, and courses in language and cultural studies developed for business and industry. These will vary from year to year depending on the needs of the various programs.

LINGUISTICS

LING 3301 | Introduction to Linguistics I (3 semester hours) |
| :--- |
| A general survey of theory and method in linguistics. The basic |
| tools of lingulistic analysis will be introduced for the fields of |
| phonetics, phonology, syntax and semantics. Special topics will |
| include language families, historical linguistics, psycholinguis- |
| tics, anthropological and sociolinguistics, language and the |
| brain, poetics, and animal communication. |

LING 3302 | Introduction to Linguistics II (3 semester hours) |
| :--- |
| A detailed study of problem-solving in the areas of phonology, |
| syntax and semantics, Historical and comparative analysis will |
| be practiced, as well as fnternal analysis of modern language. |

LING 4398 Independent study in Linguistics (3 semester hours)

## Language/CULTURAL COURSES FOR BUSINESS

These courses have been specifically designed for the student of business and the businessman working or planning to work in a country in which one of these languages is the native tongue. They are interdisciplinary in nature and combine basic language studies with an intensive cultural, sociological, and economic survey of the country concerned.


Students interested in doing special research projects in conjunction with any of these courses for an additional 2 hours credit should consult with the instructor in each course. Various projects will be avallable each semester.

ADDITIONAL LANGUAGE OURSES

| Jap 3301 | Japanese I | (3 semester hours) |
| :--- | :--- | :--- |
| Jap 3302 | Japanese II | $(3$ semester hours) |
| Jap 4301 | Japanese III | $(3$ semester hours $)$ |
| Jap 4302 | Japanese IV | $(3$ semester hours ) |

Chinese 3301 Chinese I (3 semester hours)
Chinese 3302 Chinese II (3 semester hours)
Chinese 3303 Chinese III (3 semester hours)
Chinese 4302 Chinese IV (3 semester hours)

## MUSIC

OFFICE: Jonsson

Music is an art of emotion and of intellect, of feeling and of form. Because it seeks the expression of beauty and meaning, it is a fine art; because it traces the long skein of man's existence, it is a humanistic pursuit.

To create, perform, or listen to a work of musical art successfully requires sensitivity, skill, and understanding. The gaining of those attributes, whether by the artist at one level, or the layman at another, is an education in music.

## LOWER DIVISION PREREQUISITES

Four semesters (12-16 hours or the equivalent) of freshman and sophomore theory and musicianship (ear training, music theory, harmony, and keyboard harmony).

One semester (2 or 3 semester hours or the equivalent) of music literature or music appreciation.

If piano is not the principal instrument: Four semesters (4-8 semester hours or the equivalent) in class or private piano instruction.

Two semesters (preferably four semesters or the equivalent) of principal instrument study.

Four semesters (or the equivalent) of major ensemble (band, orchestra, chorus).

Entrance examinations will be given to aid students in determining their proficiency in each of the above areas. Students who do not meet music entrance requirements will be provided with appropriate review courses.

UPPER DIVISION CORE REQUIREMENTS (23 hours) (for Music Majors)
History and Literature of Music I and II (6 hours)
Style Analysis I (3 hours)
Counterpoint I (3 hours)
Advanced Ear Training (3 hours)
Individual Instruction in Performance V and VI (4 hours)
Large Ensemble (University Chorus, University Orchestra, or University Wind Ensemble) V, VI, VII, VIII (4 hours)

THE OPTIONS

By careful choice of advanced courses in Music or Music Education, the music major may structure his or her degree program so as to reflect one of the following options:

1. History and Literature of Music: The history of the art of music, with particular reference to the development of musical styles and genres.


#### Abstract

2. Music Theory: A curriculum designed to develop skills in the materials of music. (Additional requirement: a supervised senior project in analysis or orchestration). 3. Music Composition: A curriculum designed to develop skills in the materials of music, with particular reference to composition. (Additional requirements: submission in score of representative score before admission to the program and the presentation of a public composition recital - or the equivalent - before graduation.) 4. Applied Music (Vocal and Instrumental): A curriculum designed to develop and emphasize the necessary standards and skills in vocal or instrumental performances, leading to a junior and senior recital before a faculty jury.


5. Music Education: This course of study is designed to meet the requirements of the BA in music, as well as those of the State of Texas for alllevel Teacher Certification. In addition to the basic music core courses, this option offers techniques and methods for teaching public school music in the elementary and secondary levels.

THE MATERIALS AND THEORY OF MUSIC
For Non-Majors
Course Description
Music 3300 Fundamentals of Music I (3 semester hours)
Basic theory and materials of music for non-majors. No know1edge of music necessary.

For Majors (and non-majors with permission)

## Course Description

Music 3310-3311 Elements of Musical Style I and II (3 semester hours)
Analytical, aural, keyboard, and written work in the harmony, texture, color and forms of traditional styles. Integrated lecture-1aboratory presentation.

Music 3312-3313 Elements of Musical Style III and IV (3 semester hours) Analytical, aural, keyboard, and written work in the harmony, texture, color, and forms of traditional and recent styles. Integrated lecturelaboratory presentation.

Music 4310 Orchestration ( 3 semester hours)
Scoring and score reading. Lecture-laboratory instruction in applied
instrumental techniques.
Music 4311 Orchestration II (3 semester hours)
Advanced scoring and score reading. Lecture-laboratory instruction in applied instrumental techniques.

Music 4312 Counterpoint I ( 3 semester hours)
Contrapuntal writing in various styles. Correlated lecture-1aboratory instruction in Keyboard Harmony, (3-0)

Music 4313 Counterpoint II (3 semester hours)
Advanced contrapuntal writing in various styles. Correlated lecture-
laboratory instruction in advanced keyboard harmony.
Music 3210-3211 Composition I and II (2 semester hours)
Introduction to the principles of musical composition. Written work modeled on analysis of representative styles and forms. Examination of representative scores, particularly those of the 20th Century. (2-0)

Music 4210-4211 Composition III and IV (3 semester hours)
Original work in traditional and non-traditional forms of musical
composition. Preparation and presentation of a recital (or equivalent) of the students' original compositions. (3-0)

Music 3314-3315 Style Analysis I and II (3 semester hours)
The development of aural, written, and analytical skills stemming from the examination of selected examples of music literature from various traditional and non-traditional forms. (3-0)

## Music Advanced Ear Training I and II (3 semester hours)

Upper-division studies in musicianship. Laboratory work in sight-singing, dictation, and related skills. (3-0)

History and Literature of Music
For Non-Majors (and Majors with permission)
Course
Description
Music 3320 Introduction to Music (3 semester hours)
Elements, styles, and forms in representative masterworks. No knowledge of music necessary.

Music 3321-3322 Music Literature I and II (3 semester hours)
Studies in the style and history of music of a particular genre (i.e., vocal, orchestral, opera, keyboard.) (Eliminate prerequisite.) (3-0)

Music 3323 Ethnomusicology I (3 semester hours)
An introduction to non-Western musical traditions and the methods of studying them. (3-0)

Music 3324 Ethnomusicology II: The Anthropology of Music (3 semester hours)
The study of the role of music in the context of the larger society.
Western non-classical music will be studies as well as non-Western traditions.
Field research in the Dallas community will be encouraged. (3-0)
Music 3325 Folk Music of the Western World (3 semester hours)
A study of the folk music styles of selected areas of the Western world. Particular attention will be paid to the social, political and psychological foundations of such music. (3-0)

Music 3326 Introduction to Jazz (3 semester hours)
An introduction to the stylistic history, social impact, and psychological origins of jazz. (3-0)

For Majors (and non-Majors with permission)

## Course Description

Music 3330 History and Literature of Music I (3 semester hours)
Stylistic, historical, and sociological considerations of the music of the Primitive, Medieval, and Renaissance periods. (3-0)

Music 3331 History and Literature of Music II (3 semester hours)
Stylistic, historical, and sociological considerations of the music of the Baroque, classical, Romantic, and Contemporary periods. (3-0)

Music 4332 History and Literature of Music III (3 semester hours)
Stylistic, historical, and sociological considerations of the music of a specific period of music history. (3-0)

Music 4333 History and Literature of Music IV (3 semester hours)
Advanced stylistic and historical studies in the music of a particular composer or group of composers. (3-0)

Music 4334 History and Literature of Music V (3 semester hours)
Advanced stylistic and historical studies in the music of a particular genre (orchestral music, choral music, or chamber music, for example). (3-0)

Music 4335 History and Literature of Music VI (3 semester hours)
The history of musical instruments, with consideration of their social origins and their influence on musical style. (3-0)

Music 4340-4341 Problems in Aesthetics and Music Criticism I and II
( 3 semester hours)
Advanced work in aesthetics and music criticism, with emphasis on the problems of evaluating music and its performance. (3-0)

SPECIAL STUDIES
Music 4336 Special Project in Music (3 semester hours)
An advanced conference course, dealing with one or more topics of special interest to the student. (3-0)

PERFORMANCE COURSES
For Majors and Non-Majors
Course Description
Music 3250*, 3251*, Individual Instruction in Performance, I, II, III, IV, V,VI 3252*, 3253*, 4250*, VII, VIII (2 semester hours)
4251*, 4252*, 4253* Studio Instruction in all individual performance media.
*The following instrument designations are applicable for each of the courses: (a) Flute, (b) Oboe, (3)Clarinet (d) Bassoon, (e) Saxophone, (f) Trumpet,
(g) French Horn, (h) Trombone or Euphonium, (i) Tuba, (j) Violin, (k)Viola,
(1) Violoncello, (m) Contrabass, (n) Percussion, (o) Voice, (p) Piano,
(q) Harp (offered only by special arrangement.), ( $r$ ) Harpsichord (offered only by special arrangement.), (s) Organ, ( $t$ ) Classical Guitar (offered only by special arrangement.)

|  | Music 3254-3255 Class Instruction in Piano I and II (for non-pianists) (2 semester hours) |
| :---: | :---: |
|  | Music 3256-3257 Class Instruction in Voice I and II (for beginning singers) (2 semester hours) |
|  | Music 3258-3259 Conducting I and II (2 semester hours) |
|  | Music 4254-4255 Recital I and II (2 semester hours) <br> Coaching in program building, and in the performance of repertoire of a specific solo medium, leading to the presentation of a junior and senior recital. (2-0) |
|  | ENSEMBLE |
|  | For Majors and Non-Majors |
|  | Course Description |
|  | Music 3160, 3161, University Chorus V, VI, VII, VIII (1 semester hour) 4160, 4161 |
|  | Music 3162 , 3163, University Orchestra V, VI, VII, VIII (1 semester hour) 4162, 4163 |
|  | Music 3164, 3165, University Wind Ensemble V, VI, VII, VIII (1 semester hr.) 4164, 4165 |
|  | Music 3166 , 3167, Studio Band V, VI, VII, VIII (1 semester hour) 4166, 4167 |
|  | Music 3168,3169 Chamber Ensemble V, VI, VII, VIII (1 semester hour) |
|  | $\begin{aligned} \text { Music } 3170,3171, \\ 4170,4171 \end{aligned} \text { Colegium Musicum V, VI, VII, VIII (1 semester hour) }$ |
|  | MUSIC EDUCATION |
|  | Music 3280 Elementary Music: The Woodwind Instruments (2 semester hours) <br> Techniques and materials for beginning instrumental music classes. Basic tone production and technical development on all of the woodwind instruments. (2-0) |
|  | Music 3281 Elementary Music: The Brass Instruments (2 semester hours) <br> Techniques and materials for beginning instrumental music classes. Basic tone production and technical development on all of the brass instruments. (2-0) |
|  | Music 3282 Elementary Music: The String Instruments (2 semester hours) <br> Techniques and materials for beginning instrumental music classes. Basic tone production and technical development on all of the string instruments. (2-0) |

[^4]
## PHILOSOPHY

## OFFICE: Jonsson

William James once defined philosophy as "an unusually stubborn attempt to think clearly." Philosophy fnvolves reflection on the fundamental issues of lasting significance which concern us all. As such, it is both disciplinary and interdisciplinary by its very nature. It is an attempt to examine critically our views about science, morality, art, religion and ourselves. Philosophy is then at once a study which satisfies our natural curfosity and one which deals with the practical concerns of life,

The philosophy curriculum is designed to encourage intelligent reflection, and to serve the complex needs of university students in a broad interdiscipinary setting. Students who will find the philosophy program relevant to their educational goals are:

1. Those who wish to use philosophy as the basis for integrating their general education.
2. Those who wish to study philosophy in preparation for graduate or professional work in closely related fields, such as law, government, education and the humanities.
3. Those who plan to major fointly in philosophy and one of the humanities, or in the social or natural sciences.
4. Those who have a professional interest in philosophy and plan to do graduate work in the subject.

## LOWER DIVISION PREREQUISITES:

No lower division courses in philosophy are required for admission to the program. This will enable students who have no previous course work in the subject to initiate a major at the upper division level. Prior course work, of course, would be helpful.

## UPPER DIVISION REQUIREMENTS:

1. General University degree requirements must be met. This entails a minimum of 36 semester hours at the upper division level in the major and related fields.
2. Specific philosophy requirements include:
a. Satisfaction of the core course requirements. In some cases, certain of these may be walved if sufficient prior work is indicated. These requirements are:
(1) Philosophical Inquiry (3 semester hours)
(2) History of Philosophy (6 semester hours)
(3) The Development of Logic (3 semester hours)
(4) Senior Seminar (3 semester hours)
b. 21 semester hours in philosophy and related fields.

## Philosophy Program Options:

It should be noted that this program allows for and encourages the student to pursue a broadly based interdisciplinary degree plan. A number of possibilities are available, and specific sequences of philosophy courses may be arranged to suit various degree plan requirements and students interests.

The options are:
I. Philosophy As a Discipline.
II. Philosophy, Man, and Society.
III. Philosophy, the Arts and Humanities
IV. Philosophy, Science and Technology.

## I. Philosophy As a Discipilne

This option emphasizes the investigation and criticism of issues and periods, major figures and schools in philosophy. Of the 21 hours beyond the core requirements, a maximum of 3 hours may be taken in a related field.
II. Philosophy, Man, and Society

This option emphasizes the consideration of questions about persons in the private and public conduct of their lives, It addresses problems ranging from the clash between personal values and professional duties, to the evaluation of persons and their traits.

Of the 21 hours in Philosophy and related areas, a student electing this option may take up to 9 hours in such areas as Education, Law, Medicine, and the Social Sciences.
III. Philosophy and the Arts and Humanities

This option is characterized by its reflection upon questions concerning aesthetic experiences, their expression, and the ideas and values involved in them. It treats problems ranging from the determination of the nature of aesthetic objects, to the characterization of style.
Of the 21 hours in Philosophy and related areas, a student majoring in this option can take up to 9 hours in such areas as Visual Arts, Literature, History and Music.
IV. Philosophy, Science, and Technology

This option is for students interested in the history and philosophy of science and technology, or the history of ideas, and who wish to major in philosophy. It provides solid philosophical grounding and allows for extensive work in the related fields. For course detalls, see the course listings both under Philosophy (below) and the History of Science and Technology in the Catalogue.

## Honors Program in Philosophy

I. Purpose

The honors program in Philosophy is designed to encourage and provide an opportunity for philosophic work of greater depth, scope, or originality by the undergraduate. It ought particularly be considered by the student who is interested in graduate study.

## II. Requirements

In order to graduate with honors, the student must satisfy the major field requirements in Philosophy and the University requirements for honors listed under "Graduation with Honors" in the Catalogue. Satisfaction of the third University condition, that of the completion of a senior honors examination, will be met in philosophy by the writing of an honors theses. The general steps for this thesis are as follows:
A. Selection of a thesis topic and thesis advisor.
B. Preparation of a thesis proposal, and acceptance of it by the honors comittee of the philosophy faculty.
C. The writing of the thesis (normally done in conjunction with one or two semesters of PHIL 4399 Senior Research, taken under the thesis adviser).
D. Oral defense of the Honors Thesis before a committee composed of four members of the philosophy faculty and one non-philosophy faculty member.

The grade of the thesis, for satisfaction of the Senfor Research course (s), is determined by the thesis advisor. An evaluation of the paper as a quality is necessary in order for the thesis defense for honors to take place. Disposition of the honors status will be determined by a majority vote of the defense committee, all members having equal voice.

In some cases, the thesis advisor may not be on the philosophy faculty, and the honors committee may call on other faculty members to assist evaluating a thesis proposal. Selection of the advisor and submission and approval of the thesis proposal ought to be completed by the end of the junior year, and may not be later than the last day of registration in Fall semester of the senior year.

Each semester, courses from the following list will be offered:

## Core Requirements - Courses

PHIL 3301 Philosophical Inquiry (3 semester hours)
A general study of philosophical problems in such areas as metaphysics, epistemology, ethics, and social and political philosophy. Special attention will be paid to philosophical method, as well as to the nature and scope of philosophical inquiry.

PHIL 3302, 3303, 3304, 3305 History of Philosophy I, II, III, IV (3 semester hours)
Intensive study of a selection of important works in Western philosophic thought form ancient times to the present.
I. Ancient Greek Philosophy: Presocratics through Stoics
II. Medieval and Renaissance Philosophy: Philo through Nicholas of Cusa
III. Modern Philosophy: Bacon to Kant
IV. Recent: Hegel to the 20th Century

PHIL 3335 The Development of Ideas in Logic (3 semester hours)
A consideration of various attempts, ancient and modern, to provide systems for the evaluation of arguments. Emphasis on validity, on the notion of a formal system, and on the relation of logical systems to ordinary discourse.

PHIL 4397 Senior Seminar (3 semester hours)
An integrating seminar with readings, reports, and discussion on assigned topics. The general topic of the seminar will make it possible for students with different backgrounds to work together in a seminar situation. Each student will also work on a specific seminar project or series of projects in consultation with the teacher. Open to nonmajors only with special permission.

## Courses in the Area of Aesthetics

PHIL 3330 Aesthetics ( 3 semester hours)
An examination of several major theories of art, beauty and aesthetic judgment and of recurring problems such as the nature of artistic genres, form and content in the work of art, the relationship of art and artist, the social and cultural context of artistic activity, art and morality, and the nature and communicability of aesthetic judgment. Topics will also cover the varieties of aesthetic experience, art as a mirror and barometer of cultural change, standards of critical judgment and of taste, and the conflict between theory and practice of the arts.

PHIL 3331 Topics in Aesthetics (3 semester hours)
PHIL 4382 Philosophy in the Arts and Letters (3 semester hours)
A study of philosophical problems or ideas as expressed, for example, in literary works or in films. Also, some discussion of the relation of these problems and ideas to such things as the language, structure, plot, and characterization in literary works, and the fmage, editing, form, and purpose in films.

## Courses in the Area of Ethics

PHIL 3340 Ethics ( 3 semester hours)
Introduction to the nature and kinds of moral problems and of moral theory, with a discussion of some varieties of moral skepticism, and with an introduction to practical ethics and the evaluation of social institutions and of persons.

PHIL 3341 Topics in Moral Philosophy (3 semester hours)
Course may be repeated for credit as topics very.
These topics may include:
I. Institutional Ethics

A consideration of the concept of a social institution or practice, the kinds of moral judgments that can be made about institutions, and the bases on which these fudgments can or should be supported or questioned.

In addition some discussion of contemporary moral lssues like population and birth control, environmental pollution, sexism, and violence, as well as of the institutions or practices to which they are relevant.
II. Personal Ethics

A consideration of (1) the concept of a person, (2) the kinds of judgments that can be made about persons, as well as how these judgments can or should be supported or questioned, and (3) the ways in which the existence of certain characteristics in a person affect moral fudgments about actions of that person. In addition, some discussion of such characteristics of persons as sense of humor, cruelty, selfishness, sense of justice, curiosity, and fanaticism.
III. Moral Problems of Art

Critical consideration of problems raised by the activities and productions of artists, such as the problems of freedom, censorship, the uses of art, the function of artists in society, social benefits of art, and art and personal development.
IV. Theory of Valuation

Value judgment especially in the area of morals: its character, function, and confirmation. Also, consideration of the notion of value.

PHIL 4360 Moral Philosophy, Past and Present (3 semester hours)
Major themes of moral philosophy, from Plato and Aristotle to Bentham, M111, and various contemporary authors; critical study of outstanding works.

## Additional Courses in the History of Philosophy

PHIL 4310 Studies in Individual Philosophers (3 semester hours) Study the work of one philosopher in depth.

PHIL 4320 Topics in European Philosophy (3 semester hours)
Studies of various traditions in European philosophy. Course may
be repeated for credit as the topics vary. These topics may include:
Topic 1. Contemporary Existential Philosophy
Comparative study of the basic philosophical writings of the major twentieth century existentialists. Philosophers considered might include Heidegger, Sartre, Marce1, Jaspers, Ortega, and others.

Topic 2. Husserlian Phenomenology
The basic methods and analyses in the phenomenology of Edmund Husserl, with some of the main extensions of these by subsequent thinkers (Schutz, Gurwitsch, Cairns). Analyses of perception, memory, thinking; and Husserl's theory of intentionality.

Topic 3. Problems of Constitutive Phenomenology
A series of problems dealing with the phenomenological analysis of various sorts of phenomena. Specific attention will be paid to different theories of the constitution of intentional processes and the techniques of constitutive analysis. Problems of the other, society, embodiment, and value may be treated.

Topic 4. Speculation, Reflection, and Introspection in Philosophy
A study of these three modes of thought as they appear in the texts of several modern European philosophers, and a consideration of the continuing place of speculation in philosophy and in daily life. Philosophers studied may Include Nietzsche, Kierkegaard, Whitehead, Jaspers, and Marcel.

PHIL 4320 Special Topics in the History of Philosophy ( 3 semester hours) Course may be repeated for credit as the topics vary. These topics may include:
I. Iberoamerican Philosophy
Major traditions in Iberoamerican thought - Scholasticism,
The Enlightenment, Positivism - in relation to different
Iberoamerican cultures, with a discussion of modern
tendencies in Iberoamerican thought.

II. | Philosophy in the USA |
| :--- |
| Major philosophical traditions in the USA - Puritanism, |
| The Enlightenment, Transcendentalism, Idealism, and |
| Pragmatism -- in relation to Angloamerican culture. |

III. Arabic Philosophy
Critical and historical examination of writings of
al-Kindi, al-Farabi, Ibn Sina, al-Gazali, Ibn Tofail,
Ibn Khaldum, Ibn Roshd
Ccurses in the Area of Metaphysics

PHIL 3345 Metaphysics ( 3 semester hours)
Study of various metaphysical problems selected from among such topics as the following: existence, universals and particulars, space and time, individuals, categories, substance and attributes.

PHIL 3346 Special Topics in Metaphysics (3 semester hours)
Topics may be repeated for credit as the topics vary.
These topics may include:
I. Philosophy of Mind

A consideration of such concepts as memory, intention, motive, sensation, perception, and emotion, especially as they are of relevance to problems concerning action, and the relationship between mind and body.
II. Free Will, Choice and Fortune

Readings in Plato, Aristotle, Mill, James, Sartre or others to formulate and clarify various problems concerning free will, choice and fortune and to look for reasonable solutions to them.

PHIL 4352 Phflosophies of Man
Classical and contemporary conceptions of man in cultural and historical context, and as an entity. Emphasis will be on the nature of man as a problem both for philosophy and for men in their daily life over the ages. Philosophical definitions will be compared with those offered by the natural sciences and by psychology and anthropology. Particular emphasis will be placed on the discipline of philosophical

## Courses in Epistemology and the Philosophy of Science

PHIL 3350 Epistemology (3 semester hours)
Study of various problems about the nature, bases, and limits of man's knowledge, ranging from the problem of induction to that of the relationship between cognition and perception.

PHIL 3380 Topics in the Philosophy of Science (3 semester hours)
Course may be repeated for credit as the topics vary.
These topics may include:
I. Philosophy of the Natural Sciences

A study of philosophical topics concerning such sciences
as physics, biology, and chemistry, with special emphasis
on the nature and function of the natural sciences, the
logic of scientific method, and on concepts like cause, law, theory, probability, determinism, and teleology.
II. Philosophy of the Social Sciences

A study of philosophical topics concerning such sciences as psychology, sociology, and economics, with special emphasis on the concepts and methods of the social sciences and their relationsifp to those of the natural sciences.
III. Introduction to the History and Philosophy of Science and Technology
An Interdisciplinary approach to the issues of science and technology. Major scientific and technological developments and the important philosophical dimensions of them will be considered, along with various ways of interpreting the nature of science and technology.

PHIL 4380 The Development of Ideas in Science (3 semester hours)
Studies in the philosophical and ifstorical aspects of the natural and social sciences. Course may be repeated for credit as topics vary. These topics may include:
I. The Mathematization of Nature in Early Modern Science and Philosophy
A study of the steps by which the various processes of nature were brought within the scope of mathematical treatment. Particular attention will be paid to the philosophical presuppositions of the early modern scientists, and to the consequences of these positions.
II. Conceptual Change in Science

The problem of what sorts of changes take place in science, and why, has been a major source of discussion since the work by Thomas Kuhn on scientific revolutions appeared. This course will examine several theories of concept change, such as objectivist and formalist theories, and relativist and historical context theories.

III, Concepts of Space and Time
An historical and philosophical study of the development of various theories of space and time, from mythopoeic thought to the present. Mathematical and physical theories will be discussed in a relatively non-technical manner.
IV. Physics and Metaphysics

Basic concepts in physics will be compared with those from philosophical metaphysics. Examples might include the notions of continuity and discreteness, the constance of nature, change and causality, energy, potential energy, and so on.

## Courses in the Area of Social and Political Philosophy

PHIL 3355 Social and Political Philosophy (3 semester hours)
A study of such concepts in social and political theory as authority, justice, equality, law, revolution, obligation, rights, state, and nation.

PEIL 3356 Topics in Social and Political Philosophy (3 semester hours)
PHIL 4385 Philosophy of Education (3 semester hours)
A study of the ethical, social, and epistemological concepts which comprise our assumptions about the nature of education. Issues to be considered will include: moral education, curriculum development, educational processes and the school as educator.

## Honors Course

PHIL 4391-4399 Senior Research (1 to 9 semester hours, may be repeated for credit)

## SPANISH LANGUAGE AND LITERATURE

OFFICE: Jonsson
Spanish is one of the three Romance languages which constitute, with English, the only official languages of the entire Western Hemisphere (excepting an island or two): Spanish, French, and Portuguese. There are several million Spanish speaking people in the United States, with dense concentrations throughout the state of Texas and other population centers from Massachusetts to Florida, and the entire American Southwest. Spanish (with other Romance languages), interspersed with English has created a laboratory of languages, as well as intense social problems that makes it one of the liveliest and richest fields of study. It is certainly one of the most practical for any student wanting to equip himself for service to society (be it industry, education, or social work) as well as one way to enhance and broaden his or her perspective of the world.

LOWER DIVISION PREREQUISITES
Four semesters of Spanish language and/or literature.
UPPER DIVISION CORE REQUIREMENTS: (18 hours)
The Development of Spanish Literature
Studies in Individual Spanish Authors
Literary Criticism or Literary Analysis
The Heritage of Western Literature
THE OPTIONS
The student majoring in Spanish Language and Literature may choose to specialize in one of several options. Specialization in an option requires 18 hours of advanced courses in Spanish Language and Literature and related studies beyond the core requirements.

1. Spanish Language and Literature: The study of the Spanish language and literature from a disciplinary perspective.
2. History and Literature: An interdisciplinary study of the history and literature of a single country or area, or a single cultural epoch.
3. Comparative Literature: The study of two or more literatures, with special emphasis on a single genre or period. The second literature must be studied in the original language. Four semesters or the equivalent are required.
4. Literature and the Arts: An interdisciplinary study of the literature and the arts (music, the visual arts, and theatre), of a single country or area, or a single cultural epoch, with special emphasis on aesthetics.
[^5]SPAN 3385 Spanish Literature in Translation (3 semester hours)
An introduction to a selected number of masterpieces of Spanish Literature. SPAN 3321 La genercion de 1898 (3 semester hours)

A study of the works of Azorin, Baroja, Benavente, Machado, Valle-Inclan, and Unamuno, within the framework of the political, historical, and literary events which preceded and surrounded these writers and others of their generation.

SPAN 4198-4998 Independent Study (1-9 semester hours; may be repeated for credit.)

SPAN 4199-4999 Senior Research (1-9 semester hours, may be repeated for credit.)

See Comparative Literature Listings for other appropriate courses. A list of approved courses from other programs which may count toward the Spanish major may be obtained from the Program Office.
"How many ages hence
Shall this our lofty scene be acted over
In states unborn and accents, yet unknown!"
Julius Caesar, Act III Scene I
For Shakespeare, one of the noblest properties of drama was its ability to convey the truths of the human existence to its audience.. "to show virtue her own feature, scorn her own fmage, and the very age and body of the time its form and pressure." From Stratford-on-Avon to Off Broadway, from ancient Greece to China, theater has become a universal art form uniquely reflecting each society's level of development as well as the tears and laughter that comprise the commonality of human experience. In our efforts to explain ourselves, we have used the versatility of theater to reflect the drama of actual life in a myriad of guises - opera, ballet, mime, vaudeville, television. But for the stage to come alive, to capture its audience with make-believe, the actor must be thoroughly familiar with his craft. Students will have a three-fold opportunity: to gain background in dramatic literature; to study acting; and to participate in all aspects of production,

LOWER DIVISION PREREQUISITES
None
UPPIR DIVISION CORE REQUIREMENTS

| History of the Theatre I and II | 6 semester hours |
| :--- | :--- |
| One acting course | 3 semester hours |
| One stagecraft course | 3 semester hours |
| Two courses in dramatic 1iterature | 6 semester hours |

## THE OPTIONS

The student majoring in Theater may choose to specialize in one of two options. Specialization in an option requires 20 hours of advanced courses in Theater and related studies beyond the core requirements.

1. Theater: The study of theater from a disciplinary perspective. Combines substantial background in dramatic literature, classroom and directed study of the performing arts, and presentation of various artistic endeavors in public performance.
2. Arts Criticism: Study of the theater combined with studies in critical writing and apprenticeship with a newspaper, magazine or other media.

## Course Description

3301 History of the Theatre I (3 semester hours)
The development of the theatre, its staging devices, its audiences, and dramatic literature from the primitive beginnings through the seventeenth century. Theatre history will be related to overall aesthetic currents, especially in dance and the visual arts, and to social organization and manners in the periods covered. Representative plays will be read and discussed.

History of the Theatre II (3 semester hours)
The continuation of the above course covers all aspects of the development of theatre and related arts from the eighteenth century to the present, including the many diverse trends of the twentieth century. Representative plays will be read and discussed.

History of Lyric Theatre (3 semester hours)
A study of the evolution of opera, operetta, and the American musical. An examination of the aesthetics of music in the theatre with some attention paid to such varied forms as the Nob theatre of Japan, the classic Greek theatre, and the European music hall. Material presented through a combination of lectures, demonstrations, recordings, and attendance at selected performances.

Acting: Improvisation (3 semester hours)
Developing a vocabulary, getting in touch with internal and external resources, the development of concentration skills, exploration of group dynamics. Basic work in movement, breathing, relaxation, posture, rhythm, exploration of space and pantomime. Includes a voice lab in standard American diction.

Acting: Scene Studies in Realism (3 semester hours, may be repeated for credit)
Application of the principles developed in Improvisation to the playing of realistic scenes from modern dramatic literature. Emphasis is placed on logical, honest development of scripted situations of graduated complexity. Continued work in movement as it affects characterization. Continued work in the voice lab, dialects as needed,
Required: Improvisation or consent of instructor.
Acting: Scene Studies in Verse and Style (3 semester hours, may
be repeated for credit)
Extending realism into the styles required by period plays, verse drama and "style" pieces, Work in movement focuses on dealing with period props and costumes. Voice lab involves the handling of poetry and heightened speech, scansion and phrasing. Required: Improvisation and SCENE Studies in Realism or consent of instructor.

Voice and Diction (3 semester hours)
A practical course for any student wishing to improve his speaking voice. Natural methods of vocal production are explored to direct the individual student toward the optimum resonance, clarity and overall effectiveness of his speech.

Directing the Production: Beginning Problems ( 3 semester hours) The director's work with all the components of the production precess: play analysis, design collaboration, preparation of the prompt book, rehearsal and performance. The course will culminate In the production of a one-act play or extended scene by each director.
Required: Improvisation and Acting: Scene Studies in Realism or consent of instructor.

Directing the Production: Advanced Problems (3 semester hours) A studio course in advanced directing techniques, centering on problems of style and the utilization of non-proscenium stages. Students will direct scenes of graduated complexity covering a wide range of periods and styles. Lectures and readings on the evolution of the modern director.
Required: consent of instructor.
Staging Musical Comedy and Opera (3 semester hours) A studio course aimed at the acquisition of the special skills required by the director of music-theatre. The student will direct a series of scenes from the opera and musical comedy repertoire. In addition, the student will participate directly in the mounting of a full-scale musical or opera by UTD theatre. Course will include lectures and attendance at selected performances of operas and musicals.
Required: consent of instructor.
Fundamentals of Stagecraft ( 3 semester hours)
Discussion of basic scenery construction techniques for two- and three-dimensional scenery. The course will cover such topics as joining, shifting, and rigging stage scenery. Basic painting and ilghting techniques will be covered as well as an introduction to special effects and new products. The student will be required to spend some time doing actual work building scenery.

Advanced Stagecraft (3 semester hours) This course will deal with drafting the scenery construction details and working with complex two- and three-dimensional scenic elements. Special effects, stage machinery, and equipment will be discussed as they relate to the production. Advanced painting techniques will be discussed. There will be a unit taught that will finclude new products for the theatre (plastics, foam, steel). The student will be expected to work with the productions. Required: Fundamentals of Stagecraft or consent of instructor)

Stage Lighting (3 semester hours)
Developing the creative element: light. The course will deal with the basics of electricity as well as the complicated lighting design for areaena theatre. The aesthetic aspects of mood, color, and intensity will be explored as well as the physical lighting instrument that creates the artistic element. The student will be be called upon to create, and recreate, with the lighting instrument, vivid colors and pictures that are both two- and threedimensional.
Required: consent of instructor.
Stage Make-up ( 3 semester hours)
The transformation of the actor's face through the application of make-up; elementary theory and practice. Course may include exercises in corrective make-up, manipulation of light and shade, modeling with paint, three-dimensional make-up, rubber prosthesis, beards, wigs, moustaches, and non-realistic make-up design. A lab fee may be required.

Teckiques of Costume Construction (3 semester hours)
A practical course in translating costume renderings into wearable form. Course may include exercises in the use and maintenance of the sewing machine, pattern drafting, costume-sewing techniques, dyeing, tailoring, the construction of hats and accessories, the use of celastics. Students will be assisting in the construction of actual costumes for UTD theatre productions.

Fumdamentals of Costume Design ( 3 semester hours)
An exploration of the principles of design as they apply to theatrical costume. Topics may include: the history of costume, finding and purchasing materials, rendering techniques.

Design for the Theatre I (3 semester hours)
Although concentrating on the design of scenery for the proscenium stage, the course will also deal with line, form, balance, and the study of perspective. Special design problems, as they pertain to specific productions, will be explored. The student will be called upon to use his creative abilities in design projects.

Design for the Theatre II (3 semester hours)
This course will concentrate on designing scenery for the nonproscenium space. It will deal with line, form, and balance as they relate to alley, arena, thrust, corner, or environmental staging. This course will call upon the student not only to be a designer of scenery but also a designer of space. Design problems as they pertain to non-proscenium productions will be discussed.

Movement as Medium (3 semester hours)
An introduction to the elements - space, time, weight and energy through improvisation; structured exercise to encourage appropriate body functioning - balance, coordination, flexibility, and articulation.

Studies in Dance Forms (3 semester hours)
Examination of skills and techniques required by various dance forms. The course will emphasize compositional studies through the development and presentation of student works.

Mime ( 3 semester hours)
Mime theory and history, with tutorial and practicum, available to beginning and continuing students, Mime is used as a medium to explore further acting skills and further possibilities of performance in relationship to space.

American Drama (3 semester hours)
Reading and discussion of significant and/or representative
American plays from the eighteenth century to the present, with particular emphasis on twentieth-century dramatists such as Eugene o'Neill, Lillian Hellman, Tennessee Williams, and Edward Albee.

British Drama (3 semester hours)
The development of British and Irish dramatic Iiterature from the Jacobean period to the present, with particular emphasis on the Restoration period, Irish drama of the early twentieth century, G. B. Shaw, and Harold Pinter.

Continental Drama of the 19th Century ( 3 semester hours)
Reading and discussion of significant French, German, Russian, Spanish, and Scandinavian plays and playwrights of the nineteenth century. Particular emphasis will be given to plays representative of Romanticism, realism, naturalism, and fin-de-siecle decadence,

Continental Drama of the 20th Century ( 3 semester hours) Reading and discussion of significant plays of continental Europe from Strindberg to the present. Dramatic literature will be related to artistic currents such as expressionism, surrealism, the absurd, and, where, applicable, to political currents.

Writing for the Theatre ( 3 semester hours)
Analysis of significant scripts as models of style, structure, and theatrical effectiveness; written exercises designed to develop particular skills needed in playwriting; guidance in writing a complete one-act play as a major project.

Non-Western Dramatic Forms (3 semester hours)
Special topics in areas such as Japanese Noh, Kabuki, and Bunraku, Chinese Peking opera, African drama,

Selected Studies in Theatre Arts (3 semester hours)
Special topics in theatre as a discipline. May be repeated for credit.

Theatre Production in Secondary Schools (3 semester hours) (cross-11sted: Education 3369, Curriculum and Instruction in Theatre Arts)
The course covers information and skills needed by the secondary school instructor faced with all aspects of producing the high school play.
Consideration will be given to problems of teaching theatre arts in the classroom and through practical production involvement.

| 4360 | Children's Theatre (3 semester hours) <br> Study of special techniques for production of plays for audiences of children; development of materials for children's theatre. The course may include some work in creative dramatics. |
| :---: | :---: |
| 4365 | Theatre Management (3 semester hours) <br> Principles and practices of producing for the commercial, stock, resident, college, and community theatre. The course considers theatre as a business enterprise, with attention to staffing, box office, budgeting, public relations. |
| 3371 | History of Film (3 semester hours) <br> An historical survey of American and European motion picture art, entertainment, and business from 1895 to the present. Specified films will be required viewing. |
| 3372 | Fundamentals of Motion Picture Production (3 semester hours) Theory and practice of basic techniques in motion picture production, including composition, lighting, camera movement, animation, and editing of silent film, A lab fee may be required. |
| 3373 | Advanced Motion Picture Production (3 semester hours) Theory and practice in techniques of sound film production. A lab fee may be required. |
| 4373 | Film Theory (3 semester hours) <br> Reading and discussion of significant theories of the film, including Eisenstein, Pudovkin, Balaza, Munsterberg, Arnheim, Lindsay, and Sarris. |
| 3168-3668 | Theatre Workshop (1 to 6 semester hours) <br> Practical contributions to theatre productions as a learning experience. Credit may be earned by participating in two or more aspects of production (acting, scenery, lighting, costumes, make-up, box office) in one semester. May be repeated for credit. |
| 4199-4999 | ```Senior Projects (1 to 9 semester hours) Individually guided work on a theatre production or a research project.``` |

## VISUAL ARTS

## OFFICE: Jonsson

> "What you see with your eyes shut is what counts."
> Lame Deer

The curriculum is designed to offer a broad but thorough training in visual media, development of aesthetic taste and judgment, and the ability to use the mechanisms of creativity to make visible and concrete the synthesis of awareness of mind and sensibility of emotion. Also through insight in understanding and discovery of ideas and concepts of visual communication, the students will develop an expression of these in original objects of art. This will prepare the student-artists for free-lance studio work in their chosen media, gallery or museum work, design agencies, or continuation of their art education in graduate or professional school with the possible objective of high school, college, or private teaching.

The flexible Visual Arts curriculum provides a broad range of experiences in which specialized courses are supplemented by interdisciplinary seminars. An integral part of each area of study is the use of local, regional, and national visiting artists.

## LOWER DIVISION PREREQUISITES

Prerequisites for admission to the Visual Arts program are 24 semester hours of freshman/sophomore art core courses. If you have at least 15 hours but less than 24, you may be admitted on condition that you remove the deficiencies as evaluated by the Visual Arts Portfolio Evaluation Committee. The 24 semester hours may be selected from the following lower division art core courses: Drawing I, II, III, IV; Design I, II, III, IV; Art History Survey I, II; Art Appreciation; Painting I, II; Sculpture I, II; Ceramics I, II; Printmaking I, II; Photography I, II; Advertising Art I, II; Interior Design I, II; Art Metals I, II; Handweaving I, II.

Prior to acceptance in the Studio Arts or Design options, the student must present an appropriate portfolio of work to the Visual Arts Portfolio Evaluation Committee. Approval for entering the Visual Arts program is at the discretion of this committee. (See portfolio content description.)

Not more than 30 semester credit hours in art courses may be transferred or, not more than one-half of the art credits required for a four-year baccalaureate degree. In either case, no more than 30 semester hours in art will be freely transferable. If any courses are transferred to UTD which are not offered by UTD or if such courses are not specified in the degree program being pursued by the student at UTD, the courses may be counted as electives in the UTD degree curriculum. If the number of such courses exceeds the electives permitted in the student's degree program, credit for such courses will be recorded on the student's transcript but will not replace courses within the minimum hours required for the degree being pursued. Any student in a public community college planning to draw heavily upon the courses in the list of electives would be well advised to consult the UTD catalog. The letter grade $C$ will be the minimum prerequisite grade for continuing studio courses in sequence.

## LOWER DIVISION PREREQUISITES (continued)

The College of Arts and Humanities reserves the right to hold for exhibition and art collection purposes examples of student work executed in Visual Art classes. Senior art majors, prior to graduation, must present an exhibition of their work demonstrating their achievement level.

Studio Arts and Design Portfolios
I. A. You must submit a minimum of 5 pieces of your work.
B. You must submit 6 to 12 drawings in a flat portfolio.

OR
II. A. If you submit fewer than 5 or no actual pieces of work, you must submit in plastic slide sheets between 12 and 20 slides and/or 12 to $208^{\prime \prime}$ by $10^{\prime \prime}$ or $4^{\prime \prime}$ by $5^{\prime \prime}$ photographs of your work. Please include several views of each three-dimensional piece. Each slide or photograph must be labeled clearly with the following data: your name, size, title, medium, date, and top.
B. You must submit a representative selection of 6 to 12 drawings in a flat portfolio.

## UPPER DIVISION CORE REOUIREMENTS

VART 3301 The Arts and Society 3 hours

VART 3302 Perception and Expression in Art and Design 3
VART 3390 Studies in Individual Artists 3
VART 4302 Environments and Events $\quad \frac{3}{12}$ hours
THE OPTIONS
The student majoring in Visual Arts may choose to specialize in one of several options. Sepcialization in an option requires 24 hours of advanced courses in Visual Arts and related studies beyond the core requirements.

1. History of Art: The study of works of art and the role of art in human experience.
2. Studio Art: Creation of original works of art in a variety of media.
3. Design: Advertising, Visıal, and Environmental: The shaping of our visual and physical environment; art as architecture, urban design, graphic design, and the design of visual communication through film and other media.
4. Arts Criticism: The study of visual arts combined with studies in critical writing and apprenticeship with a newspaper, art journal or other media.
5. Teacher Certification Track in Visual Art: Preparation for secondary teaching in art.

## COURSES IN VISUAL ARTS

Core Courses
Course Description
VART 3301 The Arts and Society ( 3 semester hours)
Examination of the social context and social impact of the arts in various places and times. Discussion of such issues as the social role of the artist, elite culture, and artistic expressions of social change. (3-0)

VART 3302 Perception and Expression in Art and Design ( 3 semester hours) Through a series of experimental design exercises, the student will be involved in the analysis of perceptual factors in visual communication, including the visual arts, design, and architecture: psychology of image formation and space perception, structure, and identification of shape, grouping and subdivision of visual patterns, organization of color. (3-0)

VART 3390 Studies in Individual Artists (3 semester hours)
This workshop will include lectures and seminars with gallery directors, museum directors and curators, and visual artists with the emphasis on correlating class lectures with these seminars and current major exhibitions. (3-0)

VART 4302 Environments and Events (3 semester hours)
An event or environment is qualified by the participation of the audience in the act of creation. A new dialogue is established apart from the traditional dialogue between the viewer and the "art object." That is to say that through a change in dealing with the accepted concept of the "art object," (structure art and passive dialogue) the dialogue is transformed to a constant "activated state." The course exists and expands from two educational parallels. The first point of reference is teaching the young artists to seek out their freedoms through direct communications media. The second mainstay of the course is to bring about or to encourage a freedom and or awareness of materials available to them within the visual arts.

## ART HISTORY COURSES

## Course Description

VART 3304 Art and the Arts (3 semester hours)
A study of the "Gesamtkunstwerk": the development in the nineteenth and twentieth centuries of the dream of the unity of the arts. (3-0)

VART 3310 Greek Art and Archaeology (3 semester hours)
Study of the art of crete, the Cyclades, and the Greek mainland from the Bronze Age through the fifth century, B.C. (3-0)

VART 3320 The Art of The Renaissance ( 3 semester hours)
Selected works of architecture, sculpture, and painting of the fifteenth and sixteenth centuries in Italy and northern Europe and of selected major artists. Emphasis will be on the critical evaluation of various approaches to understanding the work of art and the Renaissance period. (3-0)

## VART 3325 American Art (3 semester hours)

A study of American painting, sculpture, architecture and the decorative arts from the early European settlements in the New World to the present. (3-0)

VART 3327 Introduction to African Arts (3 semester hours)
A general survey of the arts of Sub-Sahara Africa, this introductory course
will concentrate chiefly upon sculpture and music, although in selected
instances attention will be directed to other art forms. The question of ethnic styles will constitute a major concern of the course and some attention will also be devoted to an inquiry into the sense in which it may be maintained that there is an African art. (Same as IS 3327) (Same as Anthropology 3315) (3-0)

VART 3328 Studies in Asian Art (3 semester hours)
Studies in major developments in painting, pottery, decorative arts and sculpture.

VART 3 (formerly PHIL 3330) Aesthetics ( 3 semester hours)
A study of critical methods designed to provide students with a basis for analysis of activities and objects of art. (3-0)

VART 3335 Modern Paintin, Sculpture and Architecture (3 semester hours)
A study of twentieth century trends and movements in European and American art and architecture. (3-0)

VART 3336 Modern Art and Technology (3 semester hours)
Technology as a cultural and intellectual force in modern art. Relationship between art and industrial society. The artist's use of new materials and techniques provided by technology. Technology's role in creating new art forms and a new aesthetic. A study of the artist's view of technology through the works of Andy Warhol, Claes Oldenburg, Roy Lichtenstein, James Rosenquist, and others. (3-0)

VART 3337 Nineteenth-Century Art (3 semester hours)
Studies in European art with special emphasis on the period and developments from Romanticism through Post-Impressionism. (3-0)

VART 3338 Twentieth-Century Art (3 semester hours)
Studies in European art with special emphasis on the period and developments from Romanticism through Post-Impressionism. (3-0)

VART 4 __ Anthropology and the Arts (3 semester hours) Prerequisite: one course in Anthropology or sociology.

This course will be primarily concerned with the alternative approaches which have been made in the social sciences, especially anthropology, to the conduct of inquiry into the arts and to the problems and theories from which they derive. (Same as Anthropology 4310) (3-0)

VART 4304 Science and Painting: The Metaphysics of Modern Art (3 semester hours)

Studies in how man's changing view of the universe and himself has been reflected in art. (3-0)

VART 4311 Hellenistic and Roman art ( 3 semester hours)
Study of architecture, sculpture, and painting from the time of Alexander the Great through the period of Constantine. (3-0)

VART 4315 Medieval Art in the West (3 semester hours)
The arts in Western Europe from c. 500 to 1450 A.D. (3-0)
VART 4327 Studies in Primitive Art (3 semester hours)
Arts of prehistoric and primitive man in Europe, the pre-Columbian Americas, Oceania, and Africa. (3-0)

VART 4335 Studies in Contemporary Art (3 semester hours)
Major movements, figures and issues from surrealism through conceptual art. (3-0)

VART 4340 Special Topics in Art History (3 semester hours)
Topics will vary from year to year. (3-0)
VART 4390 Advanced Topics in Visual Arts ( 3 semester hours) Topics will vary from year to year. (3-0)

VART 4395 The Application of Science in the Examination of Works of Art (3 semester hours)

An analysis of the relationships between science and works of art. (3-0)
VART 4396 Workshop in the Design of Exhibitions ( 3 semester hours)
Planning and placement of works of art for public display, comprehension, and appreciation. Emphasis on practical as well as aesthetic aspects of art exhibitions. (3-0)

VART 4397 Workshop in Art Historical Methods and Research (3 semester hours) Concentration on specific problems or works in a particular area of art history; assigned readings, discussion, and a substantial paper will introduce the student to, and allow him to employ, the methodology and techniques of art historical research. (3-0)

## STUDIO ARTS COURSES

Course Description
VART 3351 Studies in Two-Dimensional Design (3 semester hours)
An investigation of the principles of art structure, form, and color taught through a series of experimental exercises in two dimensions. A primary objective of this course is to aid the student in developing a personal, visually aesthetic point of view by carrying an idea through in any media or combination of medias that is most suitable to the idea. (3-0)

VART 3_ (Formerly VART 3375) Advanced Two-Dimensional Design Workshop (3 semester hours) Prerequisite: VART 3351 and VART 3353
The use of images and sound in time applying design principles to expand the students' organizational abilities and perceptions of their immediate environment. (3-0)

VART 3353 Drawing Workshop ( 3 semester hours)
An investigation of the principles of art structure is taught through a series of experimental exercises involving a variety of drawing media. During the semester, there are class criticisms, individual criticisms, lectures, and discussions to develop attitudes and insight into the realities of drawing, form, expression, and communication and a discovery of the interdependence of all forms of human perceptual experience. (3-0)

VART 3 Life Drawing Workshop (3 semester hours) Prerequisite: VART 3353
Studies from the model as expressive mode for composition, interpretation, and anatomical study. ( $3-0$ )

VART 4355 Painting Workshop I (3 semester hours) Prerequisite: VART 3353 or permission of instructor

A course designed to further develop the student's skills in basic principles, techniques, and media of painting. (3-0)

VART 4 Painting Workshop II (3 semester hours) Prerequisite: VART 4355
The course emphasizes the further exploration of painting media and the development of the individual aesthetic growth of the student. (3-0)

* VART 3361 Z.A.P.S./Z Biogemetric Pantologic Sculptura (3 semester hours)

This course is directed toward helping the individual both use and expand upon the desire to understand basic concepts, material innovations, and the necessary equipment needed to produce ideas within a sculptural context. The establishment of a foundation to provide for flexibility, breadth, and freedom, to pursue the sculptural arts is the determination of the course. (3-0)
*VART 4365 Z.A.P.S. II (3 semester hours)
Prerequisite: 6 hours in sculpture, 3 hours of sculpture and VART 3361 or Three-Dimensional Design equivalent, or permission of instructor.

This course is attuned to the individual who wishes to develop his or her own set of concepts and mannerisms in dealing with either actively temporal or actively permeating SCULPTURAL interactions. (3-0)

* VART44 Z.A.P.S. III (3 semester hours) Prerequisite: VART 4365 or permission of instructor

Same as VART 4365 but more advanced. Z - zenith distance, Abiogenetic = the production of living things from inanimate matter; spontaneous generation. Pantologic = a systematic view of all human knowledge. Sculptura - sculpture. (3-0)
*VART 4 Luminetics (3 semester hours) Prerequisite: senior standing or permission of instructor

Study of light systems and their use as formal media of expression. (3-0)
*VART 4 Kinetics ( 3 semester hours) Prerequisite: senior standing or permission of instructor

Study of motion systems and their use as formal media of expression.
*VART 3 Weaving Workshop I (3 semester hours)
*VART 4 Weaving Workshop II (3 semester hours)
*essential equipment and supplies needed before course can be offered.
*VART 3 $\qquad$ Metal Fabrication and Casting Workshop (3 semester hours)
Introduction to cutting, shaping, soldering, and casting of non-ferrous metals is taught in the context of designs appropriate to the medium. (3-0)

VART 4 Hand Construction and Ceramic Sculpture (3 semester hours)
Techniques in slab, coil and pinch will be studies as well as methods of constructing ceramic sculpture. (3-0)

VART 4363 Ceramics Workshop (3 semester hours)
Wheel techniques with a limit of 8 students. Students will be introduced to wheel throwing; and basic pottery forms, slip decoration and glazes will be studied. (3-0)

VART 4 $\qquad$ Ceramics Workshop: Special Studies (3 semester hours)
Prerequisite: Hand Construction and Ceramic Sculpture course and VART 4363
Ceramic workshop in chemistry or clay bodies, glazes, and production techniques. (3-0)

VART 3_(formerly Graphics Workshop) Printmaking I (3 semester hours)
Prerequisite: VART 3353
An introduction to the fundamental techniques of relief printing and intag1io methods. (3-0)
*VART 4 Printmaking II (3 semester hours) Prerequisite: VART 3353
Introduction to fundamental techniques of serigraphy. (3-0)
*VART 4 Printmaking III (3 semester hours) Prerequisite: VART 3353
Introduction to the fundamental techniques of lithography. (3-0)
*VART 3 Introductory Photography (3 semester hours) Prerequisite: VART 3351 Study of photographic theory, techniques, processing, and their application. (3-0)
*VART 3 Introductory Cinematography (3 semester hours) Prerequisite:
VART $33 \overline{51}$
Introductory motion picture production including camera work, lighting, basic editing techniques and processes, and script writing. (3-0)

VART 4 Photography Workshop (3 semester hours) Prerequisite: Introductory Photography course

Emphasis on camera and darkroom techniques utilizing advanced design concepts. The course includes visiting artists workshops. (3-0)

VART 4 Physics and Visual Arts (3 semester hours)
Team-taught lecture and studio course covering properties of matter, Electricity and magnetism, light and color, and mechanics. Students will be expected to do four individual art projects based on the physics course work. (3-0)
*Essential equipment and supplies needed before course can be offered +arrangements must be made with faculty member in Physics

VART 4_ Student Apprenticeship Workshop (3 semester hours) Prerequisite: admission requires prior approval of the faculty artist directing the workshop and the Director of Visual arts program

The workshop will be coordinated by a member of the Visual Arts faculty with the student working as an apprentice to the coordinator and/or visiting artists. Projects will be proposed by the visiting artists and/or Visual Arts faculty with the type of student participation determined by the nature of the project. (3-0)

VART 4 C.A.S.P.: Co-op Apprenticehip/Study Program (3 semester hours)
The Cooperative Education (Co-op) Apprenticeship/Study Program is available during the senior year in which the student will be working with visual artists, design studios, museums, and corporations for the purpose of allowing orientation in occupational specialties. The student must make arrangements for the apprenticeship with a Visual Arts faculty member and the Visual Arts Director six weeks prior to the beginning of the semester in which he or she expects to enroll in the course. (3-0)

VART 4 Individually Directed Study (3 semester hours)
Open only to advanced students who wish to carry out a special studio project or research under supervision. Admission requires prior approval of the Visual Arts faculty member who will direct the work and of the Visual Arts program director. May be repeated for credit. (3-0)

DESIGN COURSES: ADVERTISING, VISUAL, AND ENVIRONMENTAL

## Course Description

VART 3372 Principles of Graphic Design (3 semester hours)
Selected problems in the translation of ideas and concepts into visual messages in printed materials and publications, exhibitions, signs, and communication systems. (3-0)

VART 3 Advertising Design I (3 semester hours) Prerequisite: VART 3351 and VART $33 \overline{53}$

Introduction to the basic processes and techniques of advertising art. (3-0)
VART 4 _ Advertising Design II (3 semester hours) Prerequisite:
Advertising Design I VART 3
Advanced study of advertising art and production. (3-0)
VART 3 Commercial Design I (3 semester hours) Prerequisite: VART 3351 and VART $33 \overline{53}$
Study of lettering, alphabets, and type specifications. May include writing copy. May be repeated twice. (3-0)

VART 4 Commercial Design II (3 semester hours) Prerequisite: Commercial Design I VART 3

Actual campaigns and TV and magazine promotions. May be repeated twice. (3-0)

VART 3 Studio Workshop I (3 semester hours) Prerequisite: VART 3351 and VART 3353

Off campus on-the-job training with studio or agency in conjunction with UTD. May be repeated twice. (3-0)

VART 4 Studio Workshop II (3 semester hours) Prerequisite: Studio Workshop I VART 3

Off campus on-the-job training in area of billboard design. Student will work with sign designers and painters. May be repeated twice. (3-0)

VART 4 Individual Problems (3 semester hours) Prerequisite: Senfor Standing or permission of instructor
Design or illustration concentration. May be repeated twice. (3-0)
VART 3_Basic Illustration I (3 semester hours) Prerequisite: VART 3351 and VART $33 \overline{53}$

Emphasis on draftsmanship, layout, and composition - basic black and white. Drawing and figure drawing background helpful. May be repeated twice. (3-0)

VART 3 Basic Illustration II (3 semester hours) Prerequisite: Basic I VART 3

Stress color and painting techniques in solving illustration problems. May be repeated twice. (3-0)

VART 3 Commercial Art Survey (3 semester hours) Prerequisite: VART 3351 and VART 3353
Survey course stressing newest techniques and study of commercial art history. (3-0)
*VART 3370 Urban Design (3 semester hours)
An introduction to some basic social, technological, and cultural factors of the modern urban environment, with spectal emphasis on the problems of form giving and visual communication. (3-0)
*VART 3371 Fundamentals of Environmental Design (3 semester hours)
Analysis of case studies to identify relationship between people, purpose, and place; and the role of scale, privacy, community, climate, etc.; synthesis through fundamental design exercises; aims to develop a design method from an understanding of relevant needs, activities, and resources which affect the shaping of spaces. (3-0)
*VART 4198-4998 Field Work in Visual and Environmental Design (1-9 semester hours, may be repeated for credit)

On-the-job experience supplemented by supervision from the University visual and environmental design staff. (3-0)
*VART 4199-4999 Projects and Research in Visual and Environmental Design (1-9 semester hours, may be repeated for credit)

Open only to advanced students who wish to carry out a special project under supervision. (3-0)
*VART 4370 The Shaping of Urban Space (3 semester hours)
Emphasis on qualitative analysis and evaluation in urban design; historic urban spaces with their problems of preservation and contemporary projects analyzed and compared with the aid of models, drawings, photographs, and films prepared by the students. (3-0)

VART 4385 Landscape Architecture in the United States (3 semester hours)
A developmental seminar dealing with the relationship of physical landscape planning and design in the United States to social, political, and economic factors. (3-0)

ART CERTIFICATION COURSE

## Course Description

VART 3300 Curriculum and Instruction in Visual Arts ( 3 semester hours)
A seminar examining recent developments in secondary art education, creative and mental growth, and the organization of an art curriculum in secondary schools. Workshops will be concerned with the theoretical and practical aspects of planning, developing, and evaluating visual art learning experiences.

## GENERAL STUDIES

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The General Studies program will emphasize a broad learning experience offering education in the major aspects of world culture and thought; with a chance to receive a wider perspective than the single discipline or the individual electives provide. There is an opportunity to learn outside familiar paths, to absorb new points of view and to approach major problems with the idea of absorbing and analyzing data, with a chance to expand competence, to think about broad areas and to understand new situations. As an interdisciplinary non-specialized program, it is designed for the student who has already gained experience in life and working situations. It is suited for students with a vocational-technical background, as well as those with a liberal arts background. The General Studies program will, in effect, be placing breadth of study after depth. The program has numerous options from which you may choose. Each area will be designed to give you a general grasp of some broad aspect of human knowledge as well as a bearing upon your own particular career goals and interests.

## LOWER DIVISION PREREQUISITES

Completion of 54 hours course work or any approved combination of the following at the lower level:

1. Ordinary admissions procedure from a two or four year college, including vocational technical programs.
2. The presentation of a portfolio of "life-experiences" on which credit may be granted.
3. By examination (CLEP and other recognized examinations).

## STRONGLY RECOMMENDED

*Completion of 6 hours of English, 6 hours of American Government, and 6 hours of American History.

## UPPER DIVISION REQUIREMENTS

## foundation courses

For their first 30 hours of course work, students will choose two sets of Foundation courses, each Foundation consisting of an integrated series of five three-hour courses. The student may choose from the following Foundations:

Arts and Humanities
Human Development

## Management

Natural and/or Mathematical Sciences
Social Sciences
For example, students who select a Social Sciences foundation will take five courses selected from the fields of Anthropology, Economics, Geography, Political Science, and Sociology. These may be 3000 or 4000 level courses.

[^6]
## COORDINATED SEQUENCE

The second component of the Bachelor of General Studies (BGS) degree program is the Coordinated Sequence, which gives the student an opportunity to specialize, but on a specific topic, rather than in an academic area. Students devise, in consultation with their advisers, individually designed Coordinated Sequences which are academically sound and in keeping with their particular interests and future plans. This sequence consists of six three-hour 3000 or 4000 level courses, which must represent at least four academic areas. One or two courses will be field work experience or a research project.

Examples of Coordinated Sequence topics include:
Urban Studies
Criminal Justice
The Third World
American Minorities
Women's Studies
Environmental Studies
Labor Studies
(Geographica1) Area Studies
The Renaissance (or some other period)
Children
For example, a Coordinated Sequence in American Minorities might include the following courses:

Anthropology: Images of American Indians
Education: Multicultural Aspects of Teaching
Sociology: Special Topics: American Minorities and Social Integration English: Afro-American Literature
Comparative Literature: Mexican-American Literature
Sociology: Field Study in a Minority Comunity

## ELECTIVES

Students will choose twelve hours of electives from any 3000 or 4000 level courses in any academic area. The electives may be taken at any time throughout the program.

A Bachelor of General Studies Program looks as follows:


## PSYCHOLOGY

Psychology deals with how people perceive, learn, feel, and think; how individuals differ from one another; how the personality develops from birth to maturity; how interpersonal factors affect human relations in the home, on the job, and in the community -- all these topics, and many others. Psychology approaches these matters from a research perspective. Just as chemistry and biology use special methods of study, so psychology applies special research methods to the study of human behavior. The result has been a body of scientific principles. As a psychology student, you will learn about these principles -- and also about where they came from, about the kinds of research that psychologists do. That means you must have laboratory experiences in addition to lectures, books, and films. The successful psychology student will be one who has learned to evaluate evidence concerning theories of social behavior, personality development, brain processes, problem-solving, and many other facets of human experience.

## LOWER DIVISION PREREQUISITES

Introduction to Psychology, and one additional Psychology course. General biology strongly recommended (two semesters). An introductory statistics course is also recomended, as preparation for the Upper Division statistics requifement.

UPPER DIVISION CORE REQUIREMENTS (12 hours)

Social Psychology<br>Personality \& Abnormal Psychology<br>Cognitive Paychology<br>Physiological Psychology \& Perception

## THE OPTIONS

The student majoring in Psychology may choose to specialize in one of four options. Specialization in an option requires 24 hours of advanced courses in Psychology and related studies beyond the core requirements.

> The Psychology Option -- Course requirements: Strategies of Research, Experimental Projects, Statistics, 1 Developmental course, and 4 additional Psychology courses.

The Human Development Option - Strategies of Research, Experimental Projects, Statistics, 1 Psychology course, and 4 Developmental courses.

The Criminal Justice Option - (A cooperative program with the School of Social Science.) Statistics, 4 psychology courses related to Criminal Justice, 3 courses in social science related to Criminal Justice.

The Teaching Option -- A student majoring in Psychology may also receive secondary school certification as a teacher of psychology. Students interested In the Teaching Option should first confer with the Office of Teacher Education and then with the Teaching Option Advisor in the Psychology program. Requirements include: Strategies of Research, Experimental Projects, Statistics, and 1 Developmental course.

## CERTIFICATION IN PSYCHOLOGICAL TECHNOLOGY

Students with a 3.2 grade point average at the end of their Junior year may select 12 semester hours from the offerings in Psychological Technology. These courses provide special training in skills such as data analysis, biofeedback
methodology, child care, and testing, This additional training will entitle the student to local certification as a Psychological Technologist - which should increase (but will not guarantee) employment potential. The Technology courses may not substitute for major requirements, but may fulfill elective requirements.

## EVENING AND SUMMER PROGRAMS

During the Fall and Spring semesters, at least five psychology courses will be offered in the evening. Some of these will be required courses, and some will be electives. An evening student can complete the entire roster of major requirements over a two year period. The core psychology courses, some elective psychology courses, and some Psychological Technology courses will also be offered during the Summer sessions.

## GRADUATE SIUDY

Students completing an undergraduate major with a 3.2 average will be admitted to the graduate program without being required to take the Graduate Records Examination, and will be exempt from certain graduate course requirements. (Not applicable to Criminal Justice optionees unless Strategies of Research and Experimental Projects have been taken as electives.)

PSYCHOLOGY COURSES (Note: Jumiors may take courses numbered 4_ _ _)
PSY 3331 Social Psychology (3 semester hours)
Theory and research on social perception, socialization, attitude change and social influence, Interpersonal attraction, deviance and control, allenation and commitment.

PSY 3361 Cognitive Psychology ( 3 semester hours)
Theory and research on learning, thinking, psycholinguistics, and memory. Introduction to formal models of human reasoning.

PSY 4331 Personality \& Abnormal Psychology (3 semester hours)
A comparative survey and analysis of various leading theories of personality. Organization of the normal personality, and nature of the disorganizations that accompany abnormal behavior.

PSY 4361 Physiological Psychology \& Perception (3 semester hours)
The nature of the brain processes underlying human behavior. The study of perceptual phenomena in vision, audition, and other senses and how they relate to neurological processes.

PSX 3332 Social Development (3 semester hours)
Sociocultural factors influencing development. How conceptions of morality, rules, and justice change with age.

PSY 3362 Cognitive Development ( 3 semester hours)
A contrast of Piagetian, behaviorist, and information-processing approaches to the development of cognitive processes throughout the lifespan.

PSY 4332 Personality Development (3 semester hours)
Forces affecting growth of the personality, and development of the sense of identity - from childhood, through adolescence, and maturity.

PSY 4362 Perceptual \& Physiological Development (3 semester hours)
A developmental approach to the maturation, structure, and function of the nervous, muscular, and perceptual systems. The lifespan approach will be

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PSY 3390 Strategies of Research in Psychology (3 semester hours)
    A survey of the major methods used in the study of personality, social be-
havior, cognitive processes, and physiological psychology. The course will be
taught by the entire staff, and will emphasize modern rather than traditional
research techniques,
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PSY 3391 Experimental Profects in Psychology ( 3 semester hours)
Three independent study project kits will be checked out by the student, and completed. The project may be chosen from an assortment, in keeping with the student's areas of interest. (May be repeated for credit.)
gENERAL TOPICS IN PSYCHOLOGY
PSY 3333 Behavior Modification (3 semester hours)
Consideration of current theory, research, and practice in modifying behavior through the application of Skinnerian principles.

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PSY 3334 Social Ethology (3 semester hours)
    An examination of evolutionary influences on human behavior. Topics include
territoriality, aggression, and attachment.
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PSY 4333 Human Relations ( 3 semester hours)
Factors influencing empathy and effective communication.
PSY 4334 The Psychology of Early Childhood (3 semester hours)
The development of personality, social play, language, and thought in the
preschool years.
PSY 3363 Measurement \& Evaluation (3 semester hours)
Examination of a varlety of group and individual tests. Basic principles of
validity, reliability, and item analysis will be emphasized.
PSY 3364 Research Design (3 semester hours)
Methods of studying complex human behavior. (Prerequisite: Statistics)
PSY 4363 Man-Machine Interactions (3 semester hours)
Theorles of blofeedback, polygraph, and other monitors of human performance.
PSY 4364 Attention \& Memory (3 semester hours)
Factors influencing the capacity to pick up and organize complex information.
PSY 4365 Psychoactive Drugs (3 semester hours)
Psychological and psychopharmacological factors affecting drug use and abuse.
Neurological and sociological research will be reviewed.

## SPECIAL TOPICS IN PSYCHOLOGY

Topics under the following course numbers vary from semester to semester. The course schedule for the current semester will list the special topics that are offered.

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PSY 4340-4640 Special Topics in Social Psychology (3 to 6 semester hours)
PSY 4350-4650 Special Topics in Personality & Abnormal Psychology
    (3 to 6 semester hours)
PSY 4370-4670 Special Topics In Cognitive Psychology (3 to 6 semester hours)
PSY 4380-4680 Special Topics in Physiological Psychology & Perception
    (3 to 6 semester hours)
CRIMINAL JUSTICE COURSES (Open to all students)
PSY 3335 The Psychology of the Juvenile Offender (3 semester hours)
    Factors influencing the behavior and management of the young delinquent.
PSY 4335 The Psychology of Normal & Deviant Women (3 semester hours)
    Social and psychological factors in normal and abnormal female behavior.
PSY 4336 The Psychopathology of Crime (3 semester hours)
    The forces producing criminal attitudes and behavior.
PSY 4337-4637 Special Topics in Criminal Justice (3 semester hours)
    Topics vary; current topics are listed in the course schedule. Also recom-
mended for Criminal Justice Optionees: Behavior Modification, Human Relations,
and Psychoactive Drugs.
The following Independent Study courses are advanced projects to be arranged
with a supervising professor. Open only to qualified students, by permission
of the professor.
PSY 4341-4641 Independent Study in Social Psychology (3 to 6 semester hours)
PSY 4351-4651 Independent Study in Personality & Abnormal Psychology
    (3 to 6 semester hours)
PSY 4371-4671 Independent Study in Cognitive Psychology (3 to 6 semester
    hours)
PSY 4381-4681 Independent Study in Physiological Psychology & Perception
    (3 to 6 semester hours)
PSY 4366 - 4666 Independent Study In Criminal Justice (3 semester hours)
PSY 3368 - 3668 Independent Study in Educational Psychology (3 semester hours)
PSY 3369 - 3669 Independent Study in Human Development (3 semester hours)
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EDUCATIONAL PSYCHOLOGY
PSY 3336 Motivation in the Classroom (3 semester credits)
Includes principles of behavior modification, group dynamics, and leadership.

PSY 3337 Effective Teacher Communication (3 semester credits)
Training in communicating effectively with parents, colleagues, principals, and students.

PSY 3365 Instructional Psychology (3 semester credits)
Aspects of learning theory, cognitive and social psychology that are relevant to classroom instruction.

PSY 3366 Evaluation of Students (3 semester credits)
Understanding standardized tests, and developing informal tests of classroom competencies.

PSY 3367 Educating the Young Child (3 semester credits)
Development in early childhood and its implications for instruction. Includes a practicum.

PSY 3338 Adolescent Issues ( 3 semester credits)
Aspects of adolescent personality and soclety which have fmpact on classroom behavior.

## PSYCHOLOGICAL TECHNOLOGY

The following courses in Psychological Technology may be taken by qualified seniors who have been admitted to the certification program. Four courses fulfill the certification requirements. Prerequisites are recommended, but may be waived at the discretion of the instructor.

PSY 4390 Advanced Behavior Modification (3 semester hours)
Design and application of Skinnerian principles in a variety of settings,
including family, Industrial, and therapeutic settings. (Recomended prerequisite: Behavior Modification)

PSY 4391 B1ofeedback \& Polygraph Methods (3 semester hours)
Psychological and mechanical training in the use of biofeedback and polygraph measuring devices. (Recommended prerequisite: Man-Machine Interactions)

PSY 4392 Advanced Data Analysis (3 semester hours)
Use of the computer and calculator in the analysis of behavioral data. (Recommended prerequisite: Research Design)

PSY 4393 Managing the Young Child (3 semester hours)
A practical course in understanding young children. (Recommended prerequisite: The Psychology of Early Childhood)

PSY 4394 Recording and Analyzing Videotaped Behavior (3 semester hours)
Videotaping children and adults in naturalistic situation, and scoring behavior (from slow motion playback) on a variety of dimensions. (Recommended prerequisite: Soclal Ethology)

PSY 4395 Measuring Auditory \& V1sual Processing (3 semester hours)
Recording and analyzing high speed reactions to auditory and visual stimuli, using special equipment. (Recommended prerequisite: Attention \& Memory)

PSY 4396 Interpersonal Skills (3 semester hours)
Developing empathy and insight in interpersonal relations, through the use of role-playing and other psychological techniques. (Recommended prerequisites: Human Relations)

PSY 4397 Testing \& Interviewing (3 semester hours)
Methods of administering standardized tests, and conducting interviews on a variety of topics. (Recomended prerequisite: Measurement \& Evaluation)

PSY 4398 Special Topics in Psychological Technology (3 semester hours) Topics vary; the course schedule provides a current listing.

## HONORS PROGRAM

Honors requirements are described on $p$. ___ of the catalog. If a psychology student qualifies for an Honors degree, the following seminar may be elected:

PSY 4399 Honors Seminar (3 semester hours)
Special topics of interest to the Honors group. (May be repeated for credit.)

## SPECIAL EDUCATION

## OFFICE: Green

Many children, because of physical, mental or emotional differences, have difficulty learning in the conventional classroom. As a Special Education teacher, you will be involved in minfmizing the barriers and frustrations that some of these children face. For others, you will provide a more challenging learning experience. In any case, you will be a key to helping each child realize his or her full potential. At UTD, we place the emphasis upon children and their potential rather than upon the category of their handicap. We feel that you will be more effective in your educational role if you are able to manage the child's total learning environment. You will also gain skills in diagnosing and evaluating a child's learning efficiency. It will be up to you to provide the extra opportunities these children need to learn effectively.

## LOWER DIVISION PREREQUISITES

## Psychology

Introduction to Psychology
Human Growth and Development
Academic Foundation courses prescribed for all Teacher Preparation Programs. See Page 25.
*Community Service

## UPPER DIVISION CORE REQUIREMENTS

(21 hours) Required of all Special Education Concentrators:
Survey of Special Education
Development of Cognitive Processes
Developmental Physiological Psychology
Development of Affective Processes
Generic Approach to the Teaching of Exceptional Children
Two courses chosen from the Disability Courses

SPECIAL EDUCATION COURSES
Course Description
SPEC ED 3301 Survey of Special Education (3 semester hours)
A basic course in the study of the major areas of exceptional children, their characteristics and their needs. Emphasis will be on etiology, terminology, classification, prevalence, history and philosophy of spectal education, educational approaches, legal and medical implications, and personal and social growth and adjustment of exceptional children.

SPEC ED 3302 Development of Cognitive Processes ( 3 semester hours)
An analysis of theoretical approaches to the development of cognitive processes from birth to adulthood; review of implications for training exceptional children.

SPEC ED 3303 Development of Affective Processes (3 semester hours)
A study of the prevailing theories of emotional development from birth through adulthood, and the empirical bases of each; review of implications for training exceptional children.

SPEC ED 3304 Developmental Physiological Psychology (3 semester hours)
A developmental approach to the maturation, structure and function of the nervous, muscular and sensory systems. Both comparative and human systems will be analyzed.

SPEC ED 3305 Generic Approaches to Teaching of Exceptional Children
( 3 semester hours)
Oriented toward the development of skills which will allow a teacher to plan educational programs for exceptional children from a generic base of teachinglearning problems; extends across the traditional handicapping categories of mental retardation, emotional disturbance, physical handicaps, and learning disabilities: focuses on the development of teacher skills in task analysis, informal educational assessment, the generation of teaching strategies and physical adaptation of classroom environment necessary for the education of all types of exceptional children. Students will perform supervised observational and tutorial assignments in local school programs for exceptional children.

SPEC ED 4361 Psychology of Learning (3 semester hours)
Laws and principles of learning: the conditions of learning factors that facilitate learning, remembering, transfer of training, guidance in learning: factors of economy in learning.

SPEC ED 3315 Practicum in Appraisal and Programing for Exceptional Children
(3 semester hours)
Practicum designed to present guidelines for assessment procedures and implications for educational diagnosis and remediation. Students will administer and interpret educational tests, will synthesize their results with existent clinical information in order to achieve a behavioral analysis of learning functions and dysfunctions in the individual child and will apply this information to individual programming.

SPEC ED 4315 Guidance of Exceptional Children (3 semester hours)
Educational, vocational and personal guidance of the exceptional child; parent counseling, commity referrals, career and training opportunities.

SPEC ED 4370 Selection, Use and Evaluation of Special Instructional Media
(3 semester hours)
A workshop course designed to introduce the use of media methods, library resources and programing procedures in the education of exceptional children. Multimedia programs will be used to demonstrate how to maximize the receptivity of information by exceptional children. The course will require prescriptive programing and media projects in cooperation with local educational institutions.

SPEC ED 4320 Intrapersonal Dynamics in Special Education (3 semester hours)
Small group exploration of intrapersonal factors essential to understanding roles and interpersonal techniques in teaching exceptional children.

SPEC ED 3330 Developmental Problems in Early Childhood (3 semester hours)
Problems of atypical development during early childhood viewed from an interactional position which has significance for later learning and education will be discussed. Topics include early identification; fmplications for school learning; impact of disability on parent-child interactions; and early intervention programs.

SPEC ED 4332 Environment and Disability (3 semester hours)
Effect of environment on children with disability and the contribution of environment to the development of certain disabilities; with consideration given to the environments of families, clinics, schools, institutions, commities, and their relation to the functioning of exceptional children.

SPEC ED 4390 Issues in the Education of Exceptional Children (3 semester
hours)
Analysis of major research regarding contemporary trends, issues and programs for the exceptional; consideration of commonalties and differences among exceptional ch1ldren.

## SPEC ED Career/Vocational Education for the Handicapped: Individualized

Instruction ( 3 semester hours)
Intensive treatment of the philosophy, goals, and objectives of career/vocational education for the handicapped. The content and techniques of individualized instruction in the areas of functional communication skills, computational and quantitative skills, occupational information, comounity resources and the responsibilities of independent living, and personal and social skills are discussed thoroughly. Students will demonstrate instructional planning, implementation and evaluation in each of these areas.

## DISABILITY COURSES

Course Description
SPEC ED 4380 Seminar: The Mentally Retarded Child ( 3 semester hours)
Survey of social, psychological and educational aspects of mental retardation; fdentification, diagnosis and classification; available services and provisions.

SPEC ED 4381 Seminar: The Emotionally Disturbed Child (3 semester hours)
Develops a frame of reference for the educational needs and problems of emotionally disturbed children; tutoring of individual children and group observation; seminar discussions on educational principles, problems and techniques observed.

SPEC ED 4382 Seminar: The Gifted Child (3 semester hours)
Analysis and discussion of the psychological growth and development of superior children and youth, with consideration given to the problems of identification of such individuals and to the development of educational programs to meet the needs of the total person.

SPEC ED 4383 Seminar: The Multi-Handicapped Child (3 semester hours)
Introduction to methods specifically related to the needs of multiple handicapped and deaf-blind children; emphasis on special training procedures, curriculum adjustments, coordination of educational programs with therapies and special services. Includes opportunity to observe and participate with individual pupils.

SPEC ED 4384 Seminar: Exceptional Children with Language and Motor Deficits
Motor and speech handicaps will be studied in relation to physical, mental and social characteristics of the various handicaps; and how these characteristics relate to the type of classroom methods to be utilized.

SPEC ED 4385 Seminar: The Learning Disabled Child (3 semester hours)
Discussion and practice in the methods, materials and theoretical approaches, as well as classroom management techniques, are presented to assist special education teachers in effectively helping the learning disabled child in developing his abilities in the communication, motor, auditory and visual learning areas.

SPEC ED 4398 Student Teaching (1-6 semester hours)
May be repeated for credit.

$$
\begin{aligned}
& \text { Academic and clinical study in the field of Communication Disorders } \\
& \text { reflects the complex variety of problems that affect man's speech, language } \\
& \text { and hearing capacities. Professional training, for example as a Speech } \\
& \text { Pathologist or Audiologist, typically leads to employment providing clinical } \\
& \text { services to adults and children. An integrated, multi-disciplinary under- } \\
& \text { standing of both the normal communication processes and their disorders } \\
& \text { forms the foundation for professional training, as well as for research and } \\
& \text { teaching careers in related areas. The undergraduate program in Communication } \\
& \text { Disorders is designed to provide that foundation, and to prepare the student } \\
& \text { for further work in professional programs at the graduate level. } \\
& \text { LOWER DIVISION PREREQUISITES }
\end{aligned}
$$

Psychology:
Introduction to Psychology
Human Growth and Development
Physics or Biology:
General Physics or General Biology: two semesters of one subject, with laboratory

## UPPER DIVISION REQUIREMENTS

The student, in conjunction with his or her adviser, will select 36 hours in the major and related areas, including the following required courses:

Introduction to Communication Disorders
Phonetics
Introduction to Language and Linguistics
Communication Sciences
Anatomy and Physiology of Speech and Hearing Mechanisms
Neural Basis of Speech and Hearing
Speech Pathology I
Basic Audiology
COURSES IN COMMUNICATION DISORDERS
Course Description
SPAU 3301 Introduction to Communication Disorders ( 3 semester hours)
An expository course offering the new student an overview of the field of Communication Disorders. (3-0)

SPAU 3302 Introduction to Language and Linguistics (3 semester hours)
An introduction to the scientific study of language, including phonology, syntax and semantics. Prerequisite: COMD 3343 (3-0)

SPAU 3303 Normal Language Development (3 semester hours)
Introduction to the normal processes of language acquisition through the first years of life; sequence of development of normal language skills. Prerequisite: COMD 3302 (3-0)

SPAU 3304 Communication Sciences (3 semester hours)
Fundamentals of acoustic, and the acoustic properties of speech sounds; survey of the basic instrumentation for analysis of sound and speech. (3-0)

SPAU 3340 Speech Pathology I: Articulation Disorders (3 semester hours)
The etiology, symptomatology, evaluation, and treatment of articulation disorders. Weekly clinical conference required. Prerequisite: COMD 3343 (3-0)

SPAU 3341 Basic Audiology (3 semester hours)
An introduction to clinical audiology; observation and orientation in audiometric testing. Prerequisites: COMD 3304, 3344 (3-0)

SPAU 3343 Phonetics (3 semester hours)
The study of speech sounds. Phonetic transcription, description of articulatory and linguistic features, and of distinctive feature systems. (3-0)

SPAU 3344 Anatomy and Physiology of the Speech and Hearing Mechanisms ( 3 semester hours)
Anatomy and physiology of the structures responsible for respiration, phonation, articulation and audition. (3-0)

SPAU 3345 Neural Basis of Speech and Hearing (3 semester hours)
An introduction to the human nervous system, with emphasis on the structures and functions underlying speech production and auditory processing. Prerequisite: COMD 3344 or consent of instructor (3-0)

SPAU 3190 Clinical Practicum in Speech Pathology (3 semester hours)
Supervised participation in evaluation and therapeutic management of communication disorders. Weekly clinical conference required. Prerequisites: $\operatorname{COMD} 3340,3343$ and consent of the instructor. (May be repeated for credit) (0-10)

SPAU 4306 Speech Pathology II - Disorders of Rhythm (3 semester hours)
A study of the etiology, symptomatology and phenomenology in disorders affecting rhythm, with emphasis on the development of stuttering in children and procedures and methods for the evaluation and treatment of stuttering in children. Prerequisite: COMD 3340 (3-0)

SPAU 4308 Language Disorders in Children (3 semester hours)
A survey of chfldren's language disorders, with special attention to the factors which interfere with normal development of language skills. Prerequisite: COMD 3303, 3302 (3-0)

SPAU 4342 Diagnostic Procedures in Speech Pathology (3 semester hours)
Principles and procedures in the identification and evaluation of communication disorders in the school-age child. Interviewing techniques and standardized tests. Prerequisite: COMD 3190 (3-0)

## BUSINESS AND PUBLIC ADMINISTRATION

## OFFICE:

DEAN: GREEN 3.110
ADVISING: GREEN 2.244
The Business and Public Administration Program at UT - Dallas will place strong emphasis on the techniques and approaches typical of today's modern, decision systems-based programs in management and administration. The program will be intriguing to those who want to apply their technical bent toward solving the highly intricate and involved problems that face our society's businesses and industries, as well as the staggeringly large problems that are found in government. We will stress how behaviorial and analytical theories are applied to the functional areas of business, such as accounting, finance, marketing and production. You will also learn about the social and legal environment in which a business operates. These are the essential tools of today's administrator and you must learn to use them wisely. Our primary goal, therefore, is to pass along to you, as the next generation of "problem solvers," the keys to unlock the doors of administrative achievement. You, of course, must find your own particular door and turn the key to your own advantage.

## LOWER DIVISION PREREQUISITES

Accounting (two semesters)
Economics (two semesters)
Mathematics for Business and Economics, or equivalent (two semesters)
Recommended Computer Science (one semester)
UNDERGRADUATE CATALOG CHANGES

## UPPER DIVISION CORE REQUIREMENTS <br> (27 hours)

Probability and Statistics
Marketing and Distribution
Business Finance
Information Systems
Organizational Behavior
Business and Public Law
Operations Research Prinicples
Production Management
Policy Administration

## THE OPTIONS

1. Accounting: The systematic recording, classifying, and interpretation of the economic facts of a system, public or private.
2. Behavioral Management: The application of psychological and sociological concepts to the theory of organizations, human motivation, and behavioral analysis.
3. Finance: Emphasis is on the financial dimensions of problems faced by commerce and industry in a modern complex society.
4. International Management: Functional aspects of international business relationships with a concentration in one area of the student's choosing.
5. Management Science: The development and application of scientific concepts, methods, and techniques to solve complex management decision problems of business and public administration.
6. Management Systems: The study of the design, analysis, and development of computer-based management systems.
7. Marketing Management: Emphasis is on the distribution and demand aspects of commerce and industry along with the techniques for solving those problems.
8. Public Administration: The application of management techniques to problems occurring in the realm of public enterprise.

## Course Description

BAPA 3152 Introduction to Business Uses of FORTRAN ( 1 semester hour)
An introduction to FORTRAN programming and applications to business based primarily on self-study materials. Prerequisite: lower division computer requirement. (1-0)

BAPA 3153 Introduction to Business Uses of COBOL ( 1 semester hour)
An introduction to COBOL programming and applications to business based primarily on self-study materials. Prerequisite: lower division computer requirement. (1-0)

BAPA 3154 Introduction to Business Uses of APL (1 semester hour)
An introduction to APL programming and applications to business based primarily on self-study materials. Prerequisite: lower division computer requirement. ( $1-0$ )

BAPA 3301 Business and Public Law (3 semester hours)
A study of commercial and administrative law. Topics include the Uniform Comercial Code, the Securities and Exchange Act. (3-0)

BAPA 3312 Operations Research Principles (3 semester hours)
An introduction to module formulation and basic techniques in operations research. Prerequisite: lower division prerequisites. (3-0)

BAPA 3331 Intermediate Accounting 1 ( 3 semester hours)
Study of accounting theory with emphasis on financial reporting theory and applied accounting problems. Detailed examination of the accounting cycle, asset valuation, and income determination. Prerequisite: lower division prerequisites. (3-0)

BAPA 3332 Intermediate Accounting II (3 semester hours)
Problems relating to liabilities and non-current assets. Analysis and interpretation of financial statements including the impact of income taxes and changing price levels. Prerequisite: BAPA 3331. (3-0)

BAPA 3334 Cost Accounting ( 3 semester hours)
In-depth study of accounting functions and basic theory: acquisition of assets and services, income and equity accounting, preparation and analysis of financial statements, analysis of variances. Prerequisite: lower division prerequisites. (3-0)

BAPA 3341 Business Finance ( 3 semester hours)
Theoretical and procedural considerations in the administration of finances in the firm: sources and uses of funds, working capital, capital budgeting, capital structure and costs of capital. Prerequisite: lower division prerequisite and co-requisite of MS-3360. (3-0)

BAPA 3351 Information Systems (3 semester hours)
A study of the basic technology and techniques that are utilized in the development of information systems, including: data base management systems, information structure, retrieval. Students will program in higher-level languages. (3-0)

BAPA 3352 Production Management (3 semester hours)
A study of the productive process in the business firm. Emphasis on systems theory, information structures, and data base management; production control techniques. (3-0)

MS 3360 Probability and Statistics for Non-Majors (3 semester hours)
BAPA 3361 Organizational Behavior ( 3 semester hours)
Introduction to behavioral sciences which provides an integrated social science approach to administrative problems and administrative behavior. Behavior in organizations is examined with attention given to such problems as motivation, influence, job satisfaction, communication, leadership, small group processes, and organization change. (3-0)

BAPA 3365 Marketing and Distribution Management (3 semester hours)
Introduction to marketing principles, including marketing planning, the decision making environment, market measurement, product decisions, promotion, pricing and distribution. Special emphasis will be placed upon the determination and evaluation of market segments. Prerequisite: of accounting and co-requisite of MS 3360. (3-0)

BAPA 3368 Distribution Channels ( 3 semester hours)
A study of the flow of goods from producer to consumer. Special emphasis will be placed upon the evaluation of alternative channels of distribution and their effect on the business corporation. Prerequisite BAPA 3365. (3-0)

BAPA 3369 Data Analysis and Market Measurement (3 semester hours)
A review of the current methodology used in business research. Emphasis will be placed upon sources of information and research design. Prerequisite BAPA 3365. (3-0)

BAPA 3371 International Business (3 semester hours)
International employment practices, training, work ethic, productivity, adaption of management methods to foreign situations. Plans for the 1970's and 1980's. Prerequisite: lower division prerequisites. (3-0)

BAPA 3372 World Trade and Investments (3 semester hours)
International institutions and basic international economics. Current issues in international business play an important role in this "general overview" course. (3-0)

BAPA 4180 Colloquium in Business and Public Administration ( 1 semester hour) May be repeated for credit. (1-0)

BAPA 4191 Introduction to Data Processing and Programming Logic (1 semester An introduction to basic concepts of business data processing concepts and programing logic based primarily on self-study materials. (1-0)

BAPA 4305 Policy Administration (3 semester hours)
Integrative course in management administration. Topics in finance, production and marketing analyzed in decision-making format. Case study orientation. Prerequisite: senior standing. (3-0)

BAPA 4312 General Application of Operations Research (3 semester hours)
Analysis of selected applications of operations research to the problems in both the private and public sectors with emphasis on the formulation of problems and the use of O.R. techniques to solve these problems. Prerequisite: BAPA 3312 or permission from instructor. (3-0)

BAPA 4313 Mathematical Programming (Optimization) (3 semester hours)
Optimization techniques for linear and nonlinear programming models. Theory and applications of these techniques are presented, using typical management problems as examples. Prerequisite: BAPA 3312. (3-0)

BAPA 4320 Land Use and Resource Management (3 semester hours)
Seminar on selected topics in optimal land use models and the environmental and economic trade-offs necessary for effective management. Prerequisite: lower division prerequisites. (3-0)

BAPA 4321 Economic Planning of the Public Sector (3 semester hours)
Presents a variety of applications of operations research techniques in the areas of economics, environmental engineering and urban planning. Several quantitative models are examined and the advantages and limitations of each are investigated from a methodological and practical viewpoint. Prerequisite: BAPA 3312. (3-0)

BAPA 4324 Problems in Urban Transportation (3 semester hours)
Problems of developing balanced transportation systems for urban areas-area needs, model evaluation, cost effectiveness, finance, and marketing. Prerequisite: permission of instructor. (3-0)

BAPA 4327 Policy Analysis in Public Administration (3 semester hours)
Systematic analysis of public policy alternatives. Development of a conceptual framework for differentiating types of public policies, e. g. distributive, regulative, redistributive; examination of the contribution of economic, quantitative, and research techniques to the development, administration, and evaluation of these policies. Prerequisite: permission of instructor. (3-0)

BAPA 4331 Advanced Financial Accounting (3 semester hours)
Problems and theory related to advanced accounting topics including partnership dissolution and liquidation; installment sales and contemporary issues. Prerequisite: BAPA 3332. (3-0)

BAPA 4332 Tax Accounting (3 semester hours)
Federal and state tax laws and regulations, tax returns, rates and credits, withholding provisions, capital gains and losses, community property clauses. Prerequisite: BAPA 3331. (3-0)

BAPA 4333 Accounting Systems (3 semester hours)
Organization and use of accounting information: origination, classification, control, and reporting: development, design and installation of accounting systems; accounting communication patterns. Prerequisite: BAPA 3332. (3-0)

BAPA 4334 Management Information Planning and Control (3 semester hours)
Development of accounting systems, concepts and analytical methods to serve the information needs of management in decision making and control of profit and non-profit organizations. Prediction and measurement techniques. Private and public sector planning and budgeting methods; systems analysis.
Prerequisite: BAPA 3334 (Cost Accounting). (3-0)
BAPA 4335 Auditing (3 semester hours)
Auditing principles and procedures, preliminary considerations, planning the audit, classes of audits, audit reports, professional ethics, and legal responsibilities. Prerequisite: BAPA 4331. (3-0)

BAPA 4336 Economic Accounting ( 3 semester hours)
An examination of the accounting concepts and techniques necessary to measure economic activities of National (macro) and governmental units; similarities and contrasts of problems in enterprise, government and national income accounting. Determination of value-added; classification and valuation difference. Appraisal of macro accounting statements, flows and balances. e.g., national income and product accounts, input-output tables; flow of funds accounts; and national balance sheets. Use of macro and micro accounts for private and public sector economic analysis, policy and planning e.g. allocation of national resources; social indicators and corporate social performance measurement; human resource accounting. Prerequisite: Advanced Accounting status and permission of instructor. (3-0)

BAPA 4337 International Dimensions of Accounting (3 semester hours)
International measurement and reporting problems in accounting; the accounting function and activities in various international environments. Accounting concepts, standards, methods, and practices in foreign countries and their relationship to U.S. accounting. Foreign currency translation; taxation; performance measurement of international entities. Accounting for international operations and multinational enterprise accounting. Comparative accounting systems. Financial reporting of foreign and multinational corporations. Case studies. Prerequisite: Advanced Accounting status and permission of instructor. (3-0)

BAPA 4342 Investment Management (3 semester hours)
Theoretical and practical approaches to investment management. Specific areas of discussion include: the theory of the consumption-investment decision; the sources and uses of financial information in making security investment decisions; the role and functions of the security analyst; and the theoretical and applied approaches to efficient portfolio management. Prerequisite: BAPA 3341. (3-0)

BAPA 4345 Money and Capital Markets (3 semester hours)
Encompasses an understanding of the processes of money creation and capital formation in an advanced commercial society. Banking and security markets are explicitly analyzed. Prerequisite: BAPA 3341. (3-0)

BAPA 4352 Advanced Business Programming (3 semester hours)
Use of higher level programming language (s) and file manipulation facilities as applied to business data processing. Prerequisite: BAPA 3351. (3-0)

BAPA 4353 Management Systems ( 3 semester hours)
The study of the design, analysis and development of computer-based management systems, case studies utilizing computer data processing, statistics, operations research, economic analysis, and other relevant quantitative techniques. Prerequisite: BAPA 3352. (3-0)

BAPA 4354 Elements of System Simulation (3 semester hours)
An introduction to Simulation and Simulation languages. The emphasis will be on the construction of simulation models. Additional topics include: the selection of variables for inclusion in models, the analysis of model results, the validation of simulation models, random number generation, and optimization of simulation models. Programming assignments. Prerequisite: BAPA 3351 and MMS 3360. (3-0)

BAPA 4355 Project Management (3 semester hours)
Provides insight into present theories concerning the administration and control of research and business organziations. Decision criteria, conflict resolution, status systems, concepts of organization communications, efficiency criteria, wage concepts, problems of change, and aspects of motivation are presented and discussed as well as techniques such as CPM, PERT, CERT. Prerequisite: Permission of instructor. (3-0)

BAPA 4362 Behavioral Management (3 semester hours)
An analysis of human behavior within organziations, with particular emphasis given to human performance and satisfaction within organizations. The identification of strategies and techniques for enhancing performance and satisfaction within organizations and criteria of organizational effectiveness will also be considered. Prerequisite: BAPA 3361. (3-0)

BAPA 4363 Motivation and Leadership ( 3 semester hours)
Systematic insights into individual motivation and group leadership processes. Intrapersonal, intragroup, and environmental factors affecting the motivation of group members and the emergence of group leaders. Determining the effectiveness of various leadership styles will also be considered. Reviewed will be the works of authors such as Maslow, Herzberg, McGregor, Likert, Fielder, Stogdill, Bowers, etc. Prerequisite: BAPA 4334 or BAPA 4362. (3-0)

BAPA 4365 Personnel Administration (3 semester hours)
A review of the personnel function in both the public and private sector. Includes consideration of merit systems, career development, employee selection, personnel policy administration. Prerequisite: BAPA 3361. (3-0)

BAPA 4366 Promotion (3 semester hours)
A study of the different methods of promotion. Emphasis will be given to the total allocation of expenditure to maximize objectives. Topics will include commercials, advertising, point-of-purchase displays and methods of evaluating promotional effectiveness. Prerequisite BAPA 3365. (3-0)

BAPA 4367 Special Problems in Business and Administrative Research (3 Semester hours)
The study of current business and administrative problems. Each student will participate in the definition and analysis of a current problem. Special emphasis will be placed upon relevant problems and progmatic solutions that integrates total knowledge of the administrative process. May be repeated for credit. Prerequisite: senior standing and BAPA 3369. (3-0)

BAPA 4372 International Business Management ( 3 semester hours)
Managing the multinational enterprise. Planning, coordinating, and controlling the operations of small and large firms engaged in international business. Prerequisite: BAPA 3373 or concurrent enrollment. (3-0)

BAPA 4373 Comparative Management (3 semester hours)
Analysis of different economic systems and manners of doing business in different societies of the world. Prerequisite: BAPA 3372 or Concurrent enrollment. (3-0)

BAPA 4380-4390 Special Topics Series in Business and Public Administration
( 3 semester hours)
(May be repeated for credit)
BAPA 4380 Accounting
BAPA 4381 Behavioral Management
BAPA 4382 Finance
BAPA 4383 Information Systems
BAPA 4384 Marketing
BAPA 4385 Operations Research
BAPA 4386 Public Administration
BAPA 4387 Policy and Ethics

BAPA 4390-4399 Seminar Series in Business and Public Administration
(3 semester hours)
Discussion of selected concepts and theories in Business and Public Administration. (May be repeated for credit.) (3-0)

BAPA 4390 Accounting
BAPA 4391 Behavioral Management
BAPA 4392 Finance

BAPA 4393 Information Systems

BAPA 4394 Marketing

BAPA 4385 Operations Research
BAPA 4396 Public Administration

BAPA 4397 Policy and Ethics

## BIOLOGY

## OFFICE: Founders

Biology is the science of living things: what they are composed of, how they operate, and how they interact with each other. It is the science underlying medicine and the health professions, agriculture and the environmental sciences, and the pharmaceutical and fermentation industries. Culturally, it shows us the unity of the natural world, where the phenomena of physics and chemistry join to give the remarkable structures and processes encountered in life. In the end it is the science of our own selves, of our origins, and of our encounters with the world around us.

## LOWER DIVISION PREREQUISITES

Introductory biology with laboratory - 2 semesters
Introductory chemistry with laboratory - 2 semesters
Organic chemistry with laboratory - 1 semester
Two semesters each of physics (with laboratory) and calculus are highly recommended, and will be required before graduation for those intending to pursue the Bachelor of Science Option.

## THE DEGREE OPTIONS

1. Bachelor of Science in Biology: Intended primarily as a preparation for scientific careers in biology. Requires (for a total of at least 60 hours upper-division work) :

| BIO 3501 Chemical Basis of Biology | 5 hours |
| :--- | ---: |
| BIO 3280 Chemical Basis of Biology Laboratory | 2 hours |
| BIO 3502 Molecular and Cell Biology | 5 hours |
| BIO 3281 Molecular and Cell Biology Laboratory | 2 hours |
|  |  |
| Biology electives | 12 hours |
| Electives in biologically related areas | 10 hours |
| * Free electives | 18 hours |
| Interdisciplinary studies | 66 hours |

* May include calculus and/or physics if these are taken as upper-division work at UT-Dallas.

2. Bachelor of Arts in Biology: A liberal arts biology major. Requires (for a total of at least 60 hours upper-division work):
BIO 3502 Molecular and Ce11 Biology $\quad 5$ hours
BIO 3281 Molecular and Cell Biology Laboratory 2 hours
Biology electives $\quad 12$ hours

Electives in Biologically related areas $\quad 12$ hours
Free electives
23 hours
Interdisciplinary studies $\quad 16$ hours
60 hours

Pre-Medical or Health Profession requirements are set by the individual professional schools, whose specific requirements should be reviewed with the help of the Health Careers Advisory Committee by students planning such careers. (The requirements of most medical schools include introductory biology, introductory chemistry, organic chemistry, physics for science majors, and mathematics through the calculus, and allow either a broad science or a liberal arts major.)

## COURSES IN BIOLOGY

The lower division prerequisites apply to all courses listed except those carrying the statement "No prerequisites". Any additional prerequisites are specified in each course description. Course prerequisite may be waived by the instructor with the approval of the Biology Office.

## CORE COURSES

BIO 3501 Chemical Basis of Biology ( 5 semester hours)
The major molecules of biological systems: their properties, reactions, and roles in biological structures and functions. (To be taken in conjunction with BIO 3280.) Required for B.S. degree.

BIO 3280 Chemical Basis of Biology Laboratory (2 semester hours)
Basic laboratory methods for quantitatively characterizing and investigating biological substances. (To be taken in conjunction with BIO 3501.) Required for $B . S$. degree.

BIO 3502 Molecular and Cell Biology (5 semester hours)
Mechanisms of genetics, regulation, and metabolism in prokaryotic systems; extension of these principles to the cells of higher forms. (To be taken in conjunction with BIO 3281.) Required for B.S. or B.A. degree.

BIO 3281 Molecular and Cell Biology Laboratory ( 2 semester hours)
Growth, function, and replication in procaryotic and eucaryotic cells. (To be taken in conjunction with BIO 3502.) Required for B.S. or B.A. degree.

## ELECTIVES

BIO 3303 Developmental Biology (3 semester hours)
Genetic and chemical basis of developmental phenomena; morphogenesis and histological differentiation in organisms.

BIO 3304 General Genetics (3 semester hours)
The phenomenon of heredity, its cytological and molecular basis; genetic code; transfer of genetic material in pro- and eukaryotes; single and multiple gene inheritance; genetic recombination and chromosome mapping; tetrad analysis; muta tions; genetic interactions; sex determination; cytoplasmic inheritance; population genetics.

## BIO 3305 Evolution (3 semester hours)

Creation of bio-organic substances from inorganic matter; occurrence of primitive life on our planet; stages of biological evolution in different periods of earth history; evolution of the present plant and animal life; Darwin's theory in the light of modern genetics. Predominant evolutionary factors: mutability, selection, isolation. Evolutionary processes in recent times: domestication of animals, development of agricultural plants, microbial evolution.

## BIO 3306 Cellular Metabolism (3 semester hours)

The role of enzymes, cofactors, and vitamins in respiration and in the synthesis and degradation of nucleic acids, nucleotides proteins, amino acids, polysaccharides, sugars, and lipids; regulatory mechanisms of the enzymes involved in these processes.

BIO 3309 Neurobiology (3 semester hours)
A survey of brain mechanisms mediating behavior in vertebrates and invertebrates; general neuroanatomical, neurophysiological, and neurochemical principles at molecular and higher levels.

BIO 3312 Plant Physiology and Autecology (3 semester hours)
Principles of structure and functioning of higher plants, uptake of water, transpiration, mineral units, photosynthesis respiration, and chemosynthesis; plant metabolism; growth, differentiation and movements of plant cells, and the chemical and physical factors affecting these parameters; adjustments of plants to their ecological niches.

BIO 3315 Aquatic Biology (3 semester hours)
Aquatic organisms, their interactions, and responses to the environment; effects of chemical pollutants on individuals and whole populations.

BIO 3316 Invertebrate Zoology (3 semester hours)
Structure, development, and physiology of invertebrate metazoa.
BIO 3325 Environmental and Population Biology (3 semester hours)
Examination of structure and function in ecological systems, organization and processes of communities, population growth and limitations, and environmental adaptations. Study of terrestrial, freshwater, and marine ecosystems expands the focus of basic principles.

BIO 3344 General Microbiology (3 semester hours)
Characterization and interrelationships between the major groups of algae, protozoa, fungi and bacteria; energy requirements and generation; macromolecular subunit biosynthesis; mutation and genetic transfer; relation of structure and function. Microorganisms and the environment and in relation to disease. Symbiotic relationships. Will include demonstrations.

BIO 3646 Marine Biology (6 semester hours)
Any of the courses in marine biology offered in summer sessions by the Port Aransas Marine Station (The University of Texas). Specific courses and their prerequisites announced annually by the Station. (Past examples: Biology of Microalgae, Ecology of Fishes, Marine Chemistry, Physical Oceanography, Marine Invertebrates, Microclimatology, Biology of Seagrass Ecosystems.) Admission by separate application. Students intending to apply should consult their advisers or the Biology Program Office by the beginning of the spring semester to insure that the necessary steps are taken before the deadline.

BIO 4307 Cellular Physiology (3 semester hours)
Genetic and chemical bases of the function of pro- and eukaryotic cells.

BIO 4310 Mycology (3 semester hours)
Introduction to the morphology, biochemistry, taxonomy, genetics and ecology of fungi.

BIO 4313 Survey of the Plant Kingdom (3 semester hours)
Review of groups of living and fossil plants, with emphasis on their organization, reproduction and evolution.

## BIO 4314 Virology (3 semester hours)

Bacterial, plant, and animal viruses, with emphasis on the latter. Design principles of virus structure; mechanisms of virus-particle production, viral control of infected cells, and induction of cancers by viruses. Viral genetics. Viral diseases and their spreading and control; natural defenses of an organism against viral invasion. Demonstrations of tissue culture procedures.

## BIO 4315 Protozoology (3 semester hours)

A survey of the world of free-living and parasitic protozoa, their contributions to some problems of fundamental importance in biology (e.g., evolution, development, aging, inheritance) and their role in ecology and as parasites of man. The laboratory deals with (1) experiments with living protozoa, (2) study of prepared slides, especially parasitic and pathogenic protozoa, and (3) preparation of slides by the student involving an introduction to the basics of microtechniques. 2 hours lecture and 2 hours laboratory (Prerequisites: BIO 3502 and BIO 3281, Molecular and Cell Biology lecture and laboratory core courses.)

BIO 4316 Parasitology (3 semester hours)
Morphology, physiology and ecology of the major parasites of medical and veterinary significance. (Prerequisite: BIO 3316 Invertebrate Zoology.)

BIO 4317 Principles of Ecology (3 semester hours)
With an orientation toward natural history and field biology, the theory of ecological organization, sampling methodology, and data analysis are emphasized. Laboratory and field studies are a major part of the course. (Prerequisite: BIO 3325 Environmental and Population Biology.)

BIO 4318 Human Genetics (3 semester hours)
Biological basis of heredity in man; genetic variability, sex determination. Human chromosomes and their aberrations, mutation rates. Dependence of phenotype on genotype and milieu; twin research. Inheritance of both normal and abnormal morphological and physiological characteristics. (Prerequisite: BIO 3304 General Genetics.)

BIO 4319 Biochemistry (3 semester hours)
The chemistry of biological substances and their transformations in living organisms. (Identical with Chemistry 4361. Prerequisite: Organic Chemistry or Covalent Chemistry II.)

BIO 4320 Enzymology (3 semester hours)
The structure of enzymes and how they work; application of enzymology in industry and medicine.

BIO 4321 Electronics for Scientists (3 semester hours)
Basic and practical A.C. and D.C. circuits; operation of transistors; circuit building and analysis of circuit diagrams; digital electronics. 2 hours lecture and 2 hours laboratory. (Prerequisites: Calculus, Physics.)

BIO 4322 Molecular Biophysics (3 semester hours)
Physics of cellular systems; chemical bonding and molecular organization; physical methods of determining macromolecular, viral, and organelle structure. (Prerequisites: Calculus, Physics.)

BIO 4323 Biomathematics (3 semester hours)
Statistical considerations in the evaluation of experimental data; correlations; graphical representations; linear, quadratic, and exponential functions; probability calculations; formulation and solution of quantitative problems commonly encountered in biology. (Prerequisite: Calculus.)

BIO 4324 Photobiology ( 3 semester hours)
Physical and chemical aspects of the interaction of light with biological molecules; light measurement; action of ultraviolet light on nucleic acids and cells; visible light effects on plants; vision; skin cancer; environmental impact of changes in solar radiation. (Prerequisites: Calculus, Physics.)

BIO 4343 Cellular Ultrastructure ( 3 semester hours)
Ultrastructure and function of cell organelles as revealed by electron microscopy and other techniques.

BIO 4344 Bacteriology ( 3 semester hours)
Major taxonomic groups and methods of identification; macromolecular biosynthesis and regulation; bacterial genetics; bacterial viruses and plasmids; pathogenicity, chemotherapy and immunity. 2 hours lecture and 2 hours laboratory. (Prerequisite: BIO 3344 General Microbiology.)

BIO 4345 Immunobiology (3 semester hours)
Antibody formation, structure and reactions with antigens; complement; antibody and cell-mediated sensitivity; blood group substances and transplantation immunity.

COURSES ALSO LISTED AS INTERDISCIPLINARY STUDIES
BIO 3326 Ethical Problems in Modern Biology (3 semester hours)
An inquiry into the choices posed by present biological knowledge regarding individuals, species and ecosystems; rationales for deciding these choices. (No prerequisites.) Same as IS 3341.

BIO 3327 The Phenomenon of Life ( 3 semester hours)
Historical survey of the development of science, with emphasis on concepts of the nature of life and of living things. Outline of the essential ideas of modern biology, particularly at the molecular level. Use of both historical and modern knowledge in attempts to evaluate philosophical views of the nature of man and of his place in the universe. (No prerequisites.) Same as IS 3342.

BIO 3328 Biology for Poets (3 semester hours)
The creative process in biological science, as revealed by selective readings of original papers. (No prerequisites.) Same as IS 3343.

BIO 4190-4690 Readings in Biology ( $1-6$ semester hours, may be repeated for credit)
(Prerequisite: consent of the instructor and the Biology Program Office.)
BIO 4391-4991 Undergraduate Research in Biology (3-9 semester hours, may be repeated for credit)
(Subject and scope determined on an individual basis. (Opportunities also exist for outstanding undergraduates to participate under this course number in marine science or neurosciences research at the Marine Biomedical Institute, The University of Texas Biomedical Branch at Galveston, during summers. Those interested should contact the Biology Program Office for information about applying no later than the December preceding the summer in which they wish to participate.) (Prerequisite: consent of the research supervisor and the Biology Program Office.)

BIO 4100-4900 Special Topics in Biology (1-9 semester hours, may be repeated for credit)

BIO 5000 During the last 12 hours of senior work, students may, with the permission of the instructor and the Biology Program Office, enroll in the 5000 level courses listed for the Graduate Program in Biological Sciences.

## CHEMISTRY

## OFFICE: Berkner 2.502

Chemistry deals with the materials of the world. Chemists quite literally "take the world apart" and examine it in terms of its atoms and molecules. Together with the excitement of unraveling of the mysteries of nature, chemistry attempts to control and change the world according to man's needs Witness the "wonder drugs", modern fertilizers and pesticides, synthetic rubber and fibers, new energy sources, environmental monitoring and control, chemically doped solid state electronic devices -- the list is nearly endless. The success of Chemistry in its past attempts indicates great promise for its use in the solution of both present problems and ones as yet unrealized.

## LOWER DIVISION PREREQUISITES

One year each of general chemistry with laboratory, general physics with laboratory, and calculus. The general physics course should be calculusbased. A lecture course in organic chemistry is strongly recomended. Quantitative analysis and differential equations are desirable if the student's schedule permits.

UPPER DIVISION CORE REQUIREMENTS: (10 semester hours)
Chemistry 3411 (Physical Chemistry I)
Chemistry 3371 (Integrated Laboratory I)
Chemistry 3372 (Integrated Laboratory II)
(Covalent Chemistry I and II with laboratory must be added if organic
chemistry is not presented at entrance. In this case the upper division
core requirements are increased to 20 hours and the unspecified hours
below are decreased accordingly.)

## THE OPTIONS

The Chemistry major may choose a program leading either to a B.A. degree or a B.S. degree. In either case, he or she must take, including the core, 36 hours of upper-level work, which the student and his Chemistry Faculty Adviser agree is valuable for personal career objectives. This work includes, for the B.A., a minimum of six hours of Chemistry beyond the core; the twenty unspecified hours may, and is expected to, include coursework outside of Chemistry. For the B.S., a relatively specific fifteen-hour sequence in Chemistry beyond the core must be followed; the eleven unspecified hours may be used flexibly, as for the B.A.

1. The B.A. program provides the minimum fundamental knowledge required for adequate professional function in a career in Chemistry. The student choosing this option may, through suitable use of his unspecified hours, prepare for careers so varied as: chemical business, marketing, or sales; medicine, secondary teaching; employment in a chemistry-related area; employment in government; or even law or politics. Specific Course Requirements beyond the core are:
a. CHEM 3312 (Physical Chemistry II)
or CHEM 4301 (Topics in Chemistry)
or CHEM 4374 (Methods of Industrial Practice)
b. Any 4000 or 5000 level Chemistry course ( 3 semester hours)
c. An additional 20 hours, not necessarily in Chemistry, to be agreed upon by the student and his advisor.
2. The B.S. program provides more intensive training in Chemistry for the student who intends either to pursue graduate study or to obtain employment at the B.S. level in the chemical industry. Specific Course Requirements beyond the core are:
a. CHEM 3312 (Physical Chemistry II)
b. CHEM 3351 (Instrumental Analysis)
c. CHEM 4341 (Inorganic Chemistry)
or CHEM 4361 (Biochemistry)
d. CHEM 4373 (Chemical Fundamentals)
e. Any 4000 or 5000 level Chemistry course ( 3 semester hours)
f. An additional 11 hours, not necessarily in Chemistry, to be agreed upon by the student and his advisor.

## CHEMISTRY COURSES

## Course Description

CHEM 3411 Physical Chemistry I (4 semester hours)
Fundamental properties of macroscopic matter are introduced and described in quantitative terms. Thermodynamics (first and second laws, chemical and phase equilibria, ideal and nonideal solutions), electrochemistry, and surface chemistry are discussed. Prerequisites: General Chemistry, General Physics, Calculus, 2 semesters each, or consent of instructor.

CHEM 3312 Physical Chemistry II (3 semester hours)
Fundamental microscopic properties of matter are discussed. Quantum mechanics, statistical mechanics, kinetic theory, atomic and molecular structure and spectroscopy, and chemical kinetics are introduced to the student. Prerequisite: Physical Chemistry I.

CHEM 3371 Integrated Laboratory I -- Synthesis and Purification (3 semester hours)
The synthesis of organic and inorganic compounds; introduction to the separation, purification, handling, and characterization of materials including the uses of fractional distillation, melting point determination, crystallization, extraction, and column, ion-exchange, thin-layer, and gas chromatography; product determinations on milligram and smaller scale: isolation of natural products. Prerequisites: General Chemistry and Organic or Covalent Chemistry II, or consent of instructor.

CHEM 3372 Integrated Laboratory II -- Dynamics, structure and Physical Methods ( 3 semester hours)
Applications of infrared, ultraviolet, visible, fluorescence, nuclear magnetic resonance, and mass spectroscopy in quantitative and qualitative analysis of compounds, studies of magnetic susceptibility, electrochemical methods, cis-trans isomerization, kinetics of reactions, enzyme control and purification, and enzyme kinetics. Prerequisite: Integrated Laboratory I or consent of instructor.

CHEM 3301 Chemistry in Modern Society ( 3 semester hours)
The fundamental concepts of chemistry are developed within the context of their application to societal goals. Topics will vary from semester to semester. Examples are: energy sources, chemistry and life, natural resources, the environment, the petroleum industry, and electronic devices.

CHEM 3331 Covalent Chemistry I (3 semester hours)
The covalent bond. Organic Chemistry: aliphatic and aromatic compounds; covalent inorganic and organometallic compounds; a survey of the organic functional groups and their typical reactions; stereochemistry. Satisfies basic organic chemistry lecture requirements for pre-health professions students. Prerequisite: General Chemistry.

CHEM 3233 Covalent Chemistry Laboratory I (2 semester hours)
The experimental skills associated with organic funcational group reactions. Prerequisite: Organic Chemistry or coregistration in Covalent Chemistry I.

CHEM 3332 Covalent Chemistry II (3 semester hours)
Relationship between structure and reactivity. Methods of structure determination: chemical synthesis, degradations, spectroscopic techniques. Naturally occurring compounds; biochemistry. Satisfies basic organic chemistry lecture requirements for pre-health professions students. Prerequisite: Covalent Chemistry I.

CHEM 3234 Covalent Chemistry Laboratory II (2 semester hours)
Experiments dealing with the effect of structure on reactivity. Determination of the structures of organic and covalent inorganic compounds. Prerequisite: Covalent Chemistry Laboratory I.

CHEM 3351 Methodology of Quantitative Determinations (3 semester hours)
A study of the theory, applications, and calculations involved in the methods of analysis. Theory and practice of volumetic, gravimetic, and spectrophotometric methods. Prerequisite: General Chemistry.

CHEM 3255 Instrumental Analysis (2 semester hours)
An introduction to the theory, design, and basic operation of standard laboratory instruments. Topics to be covered include optical spectrometers, mass spectrometers, nuclear and electron magnetic resonance spectrometers, signal enhancement by computers, and chromatography. Prerequisite: General Chemistry.

CHEM 4373 Integrated Laboratory III -- Chemical Fundamentals (3 semester hours)
Thermodynamics and physical properties of matter, vacuum line techniques, gas phase kinetics, basic operations in electronics, experimental optics, radiochemical methods, and chemical uses of the computer. Prerequisite: Integrated Laboratory II or consent of instructor.

CHEM 4374 -- Methods of Industrial Practices (3 semester hours)
An introduction to industrial methods and practices including business and economic aspects of the chemical industry. Prerequisite: consent of instructor.

CHEM 4333 Intermediate Organic Chemistry (3 semester hours)
Survey of modern synthetic techniques. The strategy of multi-step synthesis, control of stereochemistry, and structure proofs. Recommended for students intending careers in organic chemistry regardless of their intent to pursue graduate training. Prerequisite: Chemistry 3332 or consent of instructor.

CHEM 4341 Inorganic Chemistry (3 semester hours)
Survey of inorganic chemistry with emphasis on the modern concepts and theories of inorganic chemistry including electronic and geometric structure of inorganic compounds. Prerequisites: General Chemistry and at least coregistration in Physical Chemistry I.

CHEM 4361 Biochemistry (3 semester hours)
A general course dealing with the chemistry of biological substances and their transformations in Iiving organisms. Prerequisite: Organic Chemistry or Covalent Chemistry II.

CHEM 4362 Biochemistry (3 semester hours)
A continuation of CHEM 4361 Biochemistry (3 semester hours)
A general course dealing with the chemistry of biological substances and their transformations in living organisms.

CHEM 4301 Topics in Chemistry (3 semester hours)
Subject matter will vary from semester to semester. Examples would include, as required, bio-organic chemistry, industrial processes, applied spectroscopy, drugs and man, practical analysis, or other topics which span several subdisciplines. Prerequisites: Organic or Covalent Chemistry II, Physical Chemistry $I$, or consent of instructor.

CHEM 4291-4691 Research in Chemistry (2-6 semester hours)
Students will pursue an independent project under the supervision of a member of the Chemistry faculty. Prerequisites: consent of supervising faculty and filing a research plan approved by him with the Undergraduate Adviser in Chemistry prior to the 12 th class day.

CHEM 4198 The Chemical Literature (1 semester hour)
Students will be introducted to information retrieval in Chemistry via lectures and assigned literature searches. Prerequisite: consent of instructor.

CHEM 4299 Undergraduate Seminar (2 semester hours)
Students will organize and present talks on some aspects of modern Chemistry with the assistance and supervision of a faculty member.
Prerequisite: consent of instructor.
CHEM 5309 Special Topics/TAGER (3 semester hours)
CHEM 5411 Introduction to Chemical Physics (4 semester hours)
Survey of fundamental ideas of classical, quantum, and statistical mechanics, with examples drawn from atomic structure, chemical bonding, spectra and dynamics; relation of bulk properties to microscopic interactions. Prerequisite: Physical Chemistry II.

CHEM 5312 Chemical Dynamics ( 3 semester hours)
Contemporary experimental methods for reaction rate data; theory of uni-, bi-, and termolecular reactions; phase space and collision theories of reaction; mechanisms of reactive collision. Prerequisite: Physical Chemistry II.

CHEM 5313 Statistical Mechanics (3 semester hours)
Classical and quantum statistical mechanics, localized and non-localized ensembles; thermodynamic properties in terms of partition functions for atoms and molecules; equations of state of non-ideal gases and liquids; Fermi-Dirac and Bose-Einstein statistics with emphasis on extreme degenerate regions; introduction to the Darwin-Fowler method. Prerequisite: Physical Chemistry II.

CHEM 5431 Advanced Organic Chemistry (4 semester hours)
Modern Concepts of bonding and structure in covalent compounds. Static and dynamic stereochemistry and methods for study. A survey of the relationships between structure and reactivity. Prerequisite: Organic or Covalent Chemistry II.

CHEM 5332 Physical Organic Chemistry (3 semester hours)
Reaction Mechanisms. Techniques for determining reaction mechanisms, reactive intermediates, and applications to synthesis. Prerequisite: Advanced Organic Chemistry.

CHEM 5333 Synthetic Organic Chemistry (3 semester hours)
A survey of modern synthetic methods in organic chemistry. Prerequisite: Physical Organic Chemistry.

CHEM 5341-5342 Advanced Inorganic Chemistry (3 semester hours)
Atomic structure. Ionic bonding and crystal structures. Valence bond theory, molecular orbital theory, hybridizations and delocalization. Introduction to structure and bonding of transition metal complexes: crystal field theory, lingand field theory, and spectra. Prerequisite: Physical Chemistry II.

CHEM 5352 Advanced Analytical Chemistry (3 semester hours)
Applications of instrumental techniques to structure determination of organic and inorganic compounds. Lecture only; laboratory skills may be gained by registering in an appropriate research course. Prerequisites: Organic or Covalent Chemistry II, Physical Chemistry II, Instrumental Analysis.

CHEM 5381 Chemistry, Technology, and Society ( 3 semester hours)
The principles of chemical bonding and reactivity are applied to the system earth, our resources and our technology for materials as in paper, plastic, and concrete. The regularities of the periodic table will be emphasized. Prerequisite: consent of instructor.

## OFFICE: Founders

Geology and geophysics are the earth sciences - the study of our planet's rocks, minerals, records of ancient life, and of the physical, chemical, and biological processes, past and present. They probe deep into the earth's core, examine its crust, and reach far out into the earth's atmospheric envelope. A primary function of the science is the search, discovery and utilization of our natural resources. The methods of geoscience are applicable to studies of the moon and other planets as well. Geoscience consists of a wide variety of specialities which have one central goal: to better understand our earth and thereby obtain solutions to many of the pressing resource and environmental problems confronting mankind.

## LOWER DIVISION PREREQUISITES

Bachelor of Arts: Physical Geology, Recommended courses: General Chemistry, General Physics, Introductory Mathematics.

Bachelor of Science: Physical Geology; one year of Chemistry; one year of Physics and/or Biology; and Mathematics through Analytical Geometry. (Students interested in Geophysics must have completed one year of Physics and one year of Calculus.)

Students deficient in some of the above prerequisites may be admitted to the program with the understanding that these deficiencies must be removed during the first 30 hours of upperclass work and that these courses will be in addition to the 60 hours required for graduation.

## UPPER DIVISION CORE REQUIREMENTS

Bachelor of Arts: GEOS 3420 (or equivalent Historical Geology).
Bachelor of Science: GEOS 3461, 3462, 4370 and a Field Course (GEOS 4405, 4483 or 4606 ). One year of General Physics (if not taken previously), two semesters of Calculus; and a course in statistics or differential equations.

## THE OPTIONS:

The student majoring in the Geosciences may choose to specialize in one of two options.

1. Bachelor of Arts in Geosciences:

Designed to give a scientific background to those students who intend to enter such fields as law, politics, management and teaching. Requirements: The core requirements plus sufficient upper division courses in Geosciences to total at least 24 upper division hours.
2. Bachelor of Science in Geosciences: This course of study stresses fundamental and broad training in principles of Geology. It is designed to prepare the student to enter graduate school in Geosciences or to seek employment as a professional geoscientist upon graduation.

Requirements: (Geology) The core requirements plus an additional twelve hours in Geosciences which must fnclude GEOS 3420 (or equivalent Historical Geology) and GEOS 4421; plus one additional course in Chemistry, Physics, Mathematics or Biology.

Requirements: (Geophysics) The core requirements plus eight additional hours in Geosciences, and six additional courses in Physics and Mathematics (above core requirements) which must include PHYS 3311, PHYS 3312, PHYS 3422, and MMS 3371.

## GEOSCIENCES COURSES

## Course Description

GEOS 3300 Understanding the Earth (3 semester hours)
Volcanism and earthquakes; composition and layering of the earth; age of the earth; formation of mountain ranges and fundamentals of plate tectonics in earth evolution. Includes basics of mineralogy, petrology, and structural geology. Laboratory course, Field trip. Prerequisite: None.

## GEOS 3301 The Oceans ( 3 semester hours)

Physical, chemical and geological oceanography. History of oceanographic studies; chemistry of oceans and the history of seawater; ocean basin evolution; composition of the ocean floor; origin and distribution of economic deposits in the ocean; results of ocean floor drilling.

## GEOS 3303 Geologic Computing ( 3 semester hours)

Application of computer techniques in solving geological problems. Includes instruction in programing languages, computer operation, programing techniques and geologic modeling. Laboratory sessions are included. Prerequisite: permission of instructor.

## GEOS 4204 Spring Field Trip (2 semester hours)

A study of the geology of a selected region within the United States and/or northern Mexico followed by a 10 to 14 day field trip to the selected region in order to study the field relationships of geologic features within those regions. Prerequisite: permission of instructor.

GEOS 4405 Field Geology ( 4 semester hours)
An introduction to the interrelation of geologic features in the field including the fundamental principles and techniques of geologic mapping. Course consists of lectures, 8 days of detalled field mapping and preparation of a report prepared in professional form.

GEOS 4606 Field Geology - Summer Camp (6 semester hours)
Note: Students are responsible for all personal expenses related to the field camp.

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GEOS 4308 Special Topics in Geology-Geophysics (3 semester hours)
Prerequisite: permission of instructor.
GEOS 4109-4909 Senior Research in Geology (1-9 semester hours, may be repeated
for credit)
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GEOS 3310 Environments of the Earth's Surface (3 semester hours)
Relations of rocks to landforms; surface processes of wind and water erosion and sedimentation; weathering and soil formation; the influence of man on surfacial processes; the coastal zones - estuaries, bays, beaches. A sedimentology environmental science-geomorphology course.

GEOS 3312 Geology and Man (3 semester hours)
Economic and quality of life significance of earth resources, environmental implications of their use and depletion, land usage and consequences of interference with geological processes. Field trip. Prerequisite: None.
gEOS 3420 Essentials of Earth History (4 semester hours)
Historical geology and stratigraphy; development of life, evolution of organisms through time; the use of organisms to establish a stratigraphic framework; the geological time scale; organic and inorganic evolution of the Earth as related to continental drift and plate tetonics. Laboratory Course. Field Trip.

GEOS 4322 Geology of Texas (3 semester hours)
Fundamentals of the geology of Texas and adjacent states. Several two or three day field trips to such areas as the Gulf Coastal Plain, Llano Upift, Ouachita, Arbuckle and Wichita Mountains. Limited geologic mapping exercises will be included. Field trips. Prerequisite: Geosciences 3420.

GEOS 4421 Sedimentology and Stratigraphy (4 semester hours)
Fumdamental principles of sedimentology and stratigraphy. Physical and chemical sedimentation, study of sedimentary structures and hand specimen petrography. Weathering and formation of terrigenous clastic and carbonate sediments. Evolution of modern physical stratigraphy and biostratigraphy. graphy. Prerequisite: 3420 or its equivalent.

GEOS 3430 Invertebrate Palentology ( 4 semester hours)
Studies of the morphology, evolution, classification and paleoecology of invertebrates important in the fossil record. Laboratory course. Ffeld trjp. Prerequisite: Geosciences 3420.

GEOS 4334 Paleoecology (3 semester hours)
Relations between sediment type, organism distribution, diagenesis, and the historical continuity of community organization. Laboratory course, Field trip. Prerequisite: Geosciences 3420.

GEOS 4343 Sedimentary Environments (3 semester hours)
The interpretation of ancient sedimentary environments of deposition based on the study of primary sedimentary structures, grain size analysis, fossils, trace fossils, unit geometry, quartz grain surface textures, trace element, geochemistry, etc. Deals with clastic terrigenous as well as carbonate sediments. Laboratory course. Field trip. Prerequisite: Geosciences 3343.

GEOS 3452 Geochemistry ( 4 semester hours)
Principles of geochemistry, including geochemistry of the elements, the hydrosphere, the atmosphere and the biosphere; chemical evolution of the solar system and igneous and sedimentary rocks. Laboratory course. Prerequisite: General Chemistry.

GEOS 3461 Introduction to Mineralogy - Petrology I (4 semester hours)
Hand specimen mineralogy and fundamentals of crystallography and optical mineralogy. Laboratory course. Prerequisite: General Chemistry.

GEOS 3462 Introduction to Mineralogy - Petrology II (4 semester hours)
Classification, nomenclature and textures of igneous, sedimentary, and metamorphic rocks including both hand specimen and optical study. Laboratory course. Prerequisite: Geosciences 3461.

GEOS 4365 Mineral and Energy Resources ( 3 semester hours)
The geology, distribution and economics of oil and gas, metalic and nonmetallic mineral deposits; also discussion of geothermal, nuclear and other energy sources. Prerequisite: Geosciences 3360.

GEOS 3360 Rocks and Minerals ( 3 semester hours)
Elementary crystallography and physical properties and identification of common minerals. Associations of minerals in igneous, sedimentary and metamorphic rocks. Laboratory course.

GEOS 4370 Structural Geology (3 semester hours)
Introduction to behavior of materials, stress and strain, fallure criteria, fault analysis, rheologic properties of geologic materials, fold analysis; survey of major structural provinces in North America and Europe. Lab includes descriptive structural geology map interpretation, stereophoto analysis, use of stereographic projections. Prerequisite: Trigonometry. Laboratory course. Field trip.

GEOS 3380 Physics of the Earth's Interior (3 semester hours)
Application of classical physics to the study of the earth; the origin of the earth, its gravitational, geomagnetic, geothermal, and seismic characteristics, the seismicity and the dynamics of the earth's crust, plate tectonics, and continental drift.

GEOS 3381 Earthquakes and Their Effect on Man (3 semester hours)
A study of a natural earth process that has profoundly effected the course of civilization. Topics to be covered include the mechanism, measurement and distribution of earthquakes; means of recognizing active fault zones and regions of potential geologic hazard; and way of avoiding or minimizing damage through judicious architectural and engineering design.

GEOS 4180-4980 Senior Research in Geophysics (1-9 semester hours, may be repeated for credit)

GEOS 4483 Field Geophysics (4 semester hours)
An integrated geophysics field course. Elementary theory will be discussed. Application of seismic techniques, gravimetric measurements magnetic surveys, electrical techniques and thermal methods to the solution of geologic problems. Laboratory course. Field trip. Prerequisite: permission of the instructor.

GEOS 4190-4390 Senior Seminar (1-3 semester hours)

## MATHEMATICAL SCIENCES

## OFFICE:

Mathematics is both a profession and an indispensable tool for many types of work. As a tool, mathematics in the form of a universal language, has been crucial in formulating and expressing ideas not only in science and engineering, but in the areas of business and the social sciences as well. As probably the oldest and most basic science, it provides the key to understanding the major technological achievements of our time. Equally important, a knowledge of mathematics will provide you with the type of uncompromising and clear-sighted thinking that helps cut through the complications of many other disciplines. At UT - Dallas, you will find outstanding opportunities in the study of both pure and applied mathematics. Areas of specialization include mathematics, applied mathematics, computer science, statistics, and teacher certification.

## LOWER DIVISION PREREQUISITES

Calculus through multivariable calculus
To take full advantage of the opportunities at an upper level university we recommend that, if possible, the concentrator enters the program with an additional four to six semesters from among the following list:

```
Modern Algebra
Linear Algebra
Differential Equations
Advanced Calculus
Probability
Statistics
Computer Science
College Geometry
```

UPPER DIVISION CORE REQUIREMENTS: (12 hours)

| Advanced Calculus | (6 hours) |
| :--- | :--- |
| Linear Algebra | (3 hours) |
| Introduction to Computing | $(3$ hours $)$ |

## THE OPTIONS

The student majoring in mathematical Sciences may choose to specialize in one of seven options. Each option requires 24 hours of advanced courses (beyond the core requirements) which are tailored to that option.

1. Mathematics: For those interested in mathematics per se for the intellectual satisfaction it offers.
2. Applied Mathematics: For those interested in the mastery of basic mathematics for the purpose of using it in any of the many areas of its application.

2a. Applied Mathematics with Applied Concentration: *For those interested in applied mathematics but with a particular area of application in mind. The students will train in both applied mathematics and the chosen area of application.
3. Computer Science: For those interested in any of the several fields associated with modern computers.

3a. Computer Science with Applied Concentration: *For those interested in the application of computers to a particular area.
4. Statistics: For those interested in being able to effectively extract information from complex data for the purpose of making decisions in the face of uncertainty.

4a. Statistics with Applied Concentration: *For those interested in analysis of quantitative information in some particular area of application.
5. Teacher Certification: For those interested in obtaining a B.S. in Mathematical Sciences and teacher certification in the State of Texas with at least one teaching field in mathematics.

## MATHEMATICAL SCIENCE COURSES

## Course Description

MS 3301 Foundations of Modern Mathematics ( 3 semester hours)
Introduction to mathematical reasoning, the axiomatic method and introduction to certain of the major fields of mathematics. Cannot be used by mathematical sciences concentrators to satisfy degree requirements. (3-0)

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MS 3102 Introduction to Programming FORTRAN (1 semester hour)
    An introduction to FORTRAN programming based primarily on self-study
materials. (1-0)
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MS 3103 Introduction to Programming PL/I (1 semester hour)
An introduction to PL/I programing based primarily on self-study materials. (1-0)

MS 3104 Introduction to Programming APL (1 semester hour)
An introduction to APL programing based primarily on self-study materials. (1-0)

MS 3407-3408 Calculus ( 4 semester hours each)
The first calculus course. Analytic geometry, functions, limits, sequences, series, differentiation, integration, special functions, introduction to multiple integration and partial differentiation. Cannot be used to satisfy degree requirements for mathematical sciences concentrators. (4-0)

MS 3311-3312 Modern Algebra (3 semester hours each)
Algebraic systems: groups, rings, fields, polynomials and other selected topics. Prerequisite: high school algebra. (3-0)

MS 3315 Applied Linear Algebra (3 semester hours)
Introduction to the theory of matrices, systems of linear equations, eigenvalues and eigenvectors. Cannot be used by mathematical sciences concentrators to satisfy degree requirements. (3-0)

[^7]MS 3316 Introductory Statistics for Human Development ( 3 semester hours) An elementary introduction to the concepts and methods of statistical analysis as used primarily in the disciplines within the School of Human development. Topics include: presentation and interpretation of data; frequency distributions; measures of central tendency and variability; point estimation; confidence intervals; hypotheses testing; non-parametric tests; correlation; regression; one way analysis of variance; and contingency table analysis. Three lectures and one lab per week. Prerequisite: College Algebra. (3-0)

MS 3318 Linear Algebra (3 semester hours)
Vector spaces, linear transformations, systems of linear equations, eigenvalues, quadratic forms. (3-0)

MS 3319 Introduction to Discrete Structures (3 semester hours)
Intended primarily for students planning to take several computer science courses. Sets, undirected and directed graphs, partial orders and lattices, Boolean algebras and minimization of circuits, the propositional calculus, formal languages. (3-0)

MS 3321 Introduction to Geometry (3 semester hours)
The course will deal with elements of Euclidean and projective geometry. Topics covered will be drawn from the following list: triangles and their distinguished points, Euler line, nine point circ1e, extremum problems, circles and spheres, inversions, the circles of Apollonius, projective geometry, axioms of the projective plane, Desargue's theorem, conics, elementary facts of the non-Euclidean geometries. (3-0)

MS 3325-3326 Advanced Calculus (3 semester hours each)
Mathematical theory of limits, types of convergence, power series, calculus of functions of several variables: introduction to ordinary differential equations Prerequisite: one year of college level calculus. (3-0)

MS 3331 Introduction to Computing ( 3 semester hours)
Basic programming and program structure. Introduction to commonly used languages such as FORTRAN and APL: types of computers and computing systems. Examples worked on computers by students. If enrollment is sufficient, separate sections can be formed, each emphasizing a different set of programming languages. The student may choose that set most suited to his or her needs. (3-0)

MS 3451-3452 Quantitative Methods (4 semester hours each)
This course is intended for students who have not had calculus. Introduction to the basic ideas and tools of calculus: graphs, functions, derivatives, integrals, sequences and series; introduction to the basic tools of the analysis of quantitative information; methods of summarizing information in data; means, variances, co-variances, histograms, and regression; statistical methods including hypothesis testing, estimation and Bayesian methods; randomness, probabilities and statistical philosophy. Consists of 3 lectures and 2 laboratories per week. Laboratories will be divided along disciplinary lines as enrollment numbers permit. Cannot be used by mathematical sciences concentrators to satisfy degree requirements. (4-0)

MS 3353-3354 Inference from Data (3 semester hours each)
Inference from quantitative observations is covered from the design of experiments and the collection of data through the final analysis; probability models; sampling methods; statistical methods including hypothesis testing, estimation, regression and decision theory; methods of summarizing data including the mean, the median, the standard deviation, and measures of association; introduction to computer data analysis. Three lectures and one lab per week. Sections available: 1. Social Sciences; 2. Political Science and Economics; 3. Psychology. Prerequisite: College Algebra. (3-0)

## MS 3355-3356 Methods of Data Analysis (3 semester hours each)

This course is meant to develop statistical maturity as opposed to mathematical maturity. Sampling, experimental design, modeling, regression, comparison of populations, methods of statistical inference; introduction to computer data analysis. Three lectures and one lab per week. Sections available: 1. Natural Sciences; 2. Physical Sciences; 3. Mathematical Sciences. Prerequisite: calculus through multivariate analysis. (3-0)

MS 3360 Probability and Statistics for Non-Majors ( 3 semester hours)
Probability theory including independence, conditioning, density functions, frequently used families of distributions, random variables, expectation, moments, and the central limit theorem; statistical inference including sampling, estimation, hypothesis testing, regression and decision theory. Three lectures and two labs per week. The lab sections will be divided along disciplinary interests. Prerequisite: Basic college algebra. (3-0)

MS 3371 Ordinary Differential Equations ( 3 semester hours)
Methods of solution of ordinary differential equations of second and higher order. Emphasis on applications. Prerequisite: one year of college level calculus. (3-0)

MS 3374 Partial Differential Equations (3 semester hours)
Methods of solution of common partial differential equations; emphasis on app1ications. Prerequisite: MS 3371. (3-0)

## MS 3377-3378 Advanced Calculus for Scientists (3 semester hours)

Applied mathematical methods commonly used in the sciences; transforms, special series, numerical solutions of differential equations, special functions, boundary-value problems, vector analysis, line integrals, surface integrals, complex variables. Prerequisite: calculus through multivariable calculus. (3-0)

MS 4301-4302 Introduction to Analysis (3 semester hours each)
Sets, real number system, metric spaces, real functions of several variables. Riemann-Stieltjes integration, other selected topics. Prerequisite: MS 3326. (3-0)

MS 4330 Introduction to Computer Science (3 semester hours)
Computer structure and organization, digital representation of data, symbolic coding and assembly systems, use of assembly language for various programming applications. Prerequisite: MS 3331 or permission of instructor. (3-0)

MS 4331 Computer Systems (3 semester hours)
Emphasis on computer systems organization. Including topics such as assemblers, compilers, file and table structures, time sharing; applications using higher level languages such as PL/I, APL, etc. Prerequisite: MS 4330. (3-0)

MS 4334 Introduction to Numerical Analysis (3 semester hours)
Solution of linear equations, roots of polynomial equations, interpolation and approximation, numerical differentiation and integration, solution of ordinary differential equations; computer arithmetic and error analysis. Prerequisites: MS 3318, one year of calculus, and knowledge of a programming language. (3-0)

MS 4337 Programming Languages ( 3 semester hours)
Expressions and statements, storage reservation, data organization, looping control, linkages, survey of such languages as: COBOL, SNOBOL, ALGOL, FORTRAN, PL/I. Prerequisite: MS 3331. (3-0)

MS 4340 Computer Architecture ( 3 semester hours)
Basic digital circuits, Boolean algebra, data representation and transfer, and digital arithmetic. System organization, multiprograming, multiprocessing, and real-time systems. Prerequisites: MS 3319 and 3331. (3-0)

MS 4345 File Structures ( 3 semester hours)
File structure, searching, sorting and retrieving algorithms. Applications to scientific and business systems. Prerequisites: MS 3319 and 4330. (3-0)

MS 4348 Operating Systems Concepts ( 3 semester hours)
Organization of multi-programming environment including batch parrellel and priority programing, virtual systems, core and file management and interprocess communication. Prerequisites: MS 4340 and concurrent enrollment MS 4345. (3-0)

MS 4351 Probability ( 3 semester hours)
A mathematical treatment of probability theory for students desiring this approach and for students planning to continue study in probability and statistics. The theory is illustrated by numerous examples. Prerequisite: differential and integral calculus. (3-0)

MS 4352 Mathematical Statistics (3 semester hours)
An introduction to the theory and methods of statistical inference. The major statistical topics are discussed with some derivations as well as many examples from the physical, social and management sciences. Prerequisite: MS 4351 or equivalent. (3-0)

MS 4353 Stochastic Processes for Applications (3 semester hours)
Stochastic models including Markov chains, branching processes, random walks. Poisson processes, renewal processes. Prerequisite: probability or statistics. MS 4351 or equivalent. (3-0)

MS 4371-4372 Methods of Applied Mathematics (3 semester hours each)
This is a survey of many of the frequently used tools in applied mathematics: topics chosen from such things as special series, infinite products, line and surface integrals, divergence, gradients, Green's functions, tensors, elementary complex function theory, calculus of residues, transforms, orthogonal function systems. Prerequisite: MS 3326. (3-0)

MS 4591 Undergraduate Mathematics for Non-Majors ( 5 semester hours) Undergraduate topics in mathematics with business applications including graphs, solving systems of linear equations, matrices with applications, determinants, the simplex method in linear programming, logarithms, mathematics of finance (compound interest, annuities), the derivative of a function with applications, topics in probability theory. Prerequisite: high school algebra. (5-0)

MS 4191-4991 Undergraduate Topics in Mathematics (1-9 semester hours each)
MS 4193-4993 Undergraduate Topics in Applied Mathematics (1-9 semester hours each)

MS 4195-4995 Undergraduate Topics in Computer Science (1-9 semester hours each)

MS 4197-4997 Undergraduate Topics in Statistics (1-9 Semester hours each)
MS 4199-4999 Undergraduate Research in Mathematical Sciences (1-9 semester hours each)

## OFFICE: Founders

The science of physics seeks understanding of the behavior of matter and energy at the most general and fundamental level. The physicist is trained to explore the physical universe in which man lives and seeks interpretations of the natural phenomena found there. While much is already known about the physical universe, many phenomena still remain to be investigated, understood and hopefully exploited to the ultimate benefit of mankind. This is the challenge that a modern physicist faces.

## LOWER DIVISION PREREQUISITES

Two calculus courses and two general physics courses (with laboratory).
UPPER DIVISION CORE REQUIREMENTS: ( 20 hours B.A., 30 hours B.S.)
Atomic and Molecular Physics I (B.S. and B.A.)
Classical Mechanics I (B.S. and B.A.)
Electricity and Magnetism (B.S. and B.A.)
Electronics for Scientists (B.S. and B.A.)
Laboratory Technology (B.S. and B.A.)
Thermodynamics and Statistical Mechanics (B.S. and B.A.)
Optics and Microwaves (B.S. only)
Classical Mechanics II (B.S. only)
Quantum Mechanics (B.S. only)
THE OPTIONS
The student majoring in Physics may choose to specialize in one of two options; B.A. or B.S.

1. B.S. Option: Intended for students interested in a professional career in physics or immediately adjacent fields and those who intend to pursue graduate studies in Physics. In addition to the core of 30 hours of physics, an additional 6 hours of physics or closely related electives, approved by the adviser, are required.
2. B.A. Option: This option provides a strong base in physics for students wishing to pursue (non-physics) graduate studies in, for example, medicine, business administration, biophysics, oceanography and patent law. Additionally, students seeking certification as high school teachers with physics as a major specialization and those seeking immediate employment in industry, military service and computer technology can obtain the necessary physics background through this option. In addition to the core of 20 hours, 16 hours of science electives are required, at least 3 of which must be physics.

## PHYSICS COURSES

Odd numbered courses will be taught generally in the Fall, even numbers in the Spring.

## Course Description

PHYS 3300 Physics and Man ( 3 semester hours)
An analysis for non-science majors of the role of physics in society today. Lectures and demonstration experiments will be used to illustrate historically important concepts.

PHYS 3301 Fundamentals of Physics I (3 semester hours)
Particle dynamics, energy and momentum, oscillation and waves, fluid mechanics, kinetic theory of gases, first and second law of thermodynamics; taught at the level of Halliday and Resnick. (Calculus required at least concurrently).

PHYS 3302 Fundamentals of Physics II ( 3 semester hours)
Electric and magnetic fields, circuits, inductance, magnetic properties of matter, electromagnetic waves, optics, quantum physics: taught at the level of Halliday and Resnick. (Calculus required).

PHYS 3203 Fundamentals of Physics Laboratory (2 semester hours)
A laboratory sequence in general physics designed to complement Physics
3301 and 3302. Topics covered include mechanics, heat, sound, electricity and magnetism, mechanical and electrical oscillations, light and other electromagnetic waves.

PHYS 3311 Classical Mechanics I (3 semester hours)
Newton's laws and conservation of momentum; vector analysis and the mathematical background of simple linear differential equations; two and three dimensional kinematics and dynamics; rotational dynamics and the inertia tensor. (Calculus required).

PHYS 3312 Classical Mechanics II (3 semester hours)
Lagrangian and Hamiltonian formulations; simple calculus of variations; applications; special Theory of Relativity.

PHYS 3422 Electricity and Magnetism (4 semester hours)
Electrostatic fields, capacitance, multipole expansion, dielectric theory; magnetostatics, magnetic induction; magnetic properties of material media; introductory treatment of Maxwell's equations and radiation.

PHYS 4314 Fluid Dynamics (3 semester hours)
Development of the Navier-Stokes equations and the methods of solving them in various cases; supersonic flow and shocks.

PHYS 3327 Laboratory Technology (3 semester hours)
This required laboratory for all Physics Majors introduces the important laboratory instruments and techniques: scopes, pulse analyzers, vacuum systems, etc; stress is upon state of the art methods for making measurements.

## PHYS 3328 Electronics for Scientists (2 Lecture - 3 Laboratory Hours)

Direct and alternating current circuits; characteristics of semiconductor devices, typical electronic circuits, power supplies, amplifiers, oscillators, flip-flops and gates; feedback transients and pulse circuits.

PHYS 3351 Atomic and Molecular Physics I (3 semester hours)
Introduction to Atomic and Molecular structure, energy levels, transition selection rules, and their interpretation in terms of elementary quantum mechanical concepts.

PHYS 3380 Astronomy (3 semester hours)
An essentially descriptive course outlining the current views of the universe and the sources of data supporting those views. The solar system and its origin, stars, galaxies, pulsars, quasars, black holes, nebulae and the cosmological theories; observational techniques. (Calculus not required).

PHYS 3382 Physics Meteorology (3 semester hours)
An introductory course on understanding our atmospheric environment. It covers physical properties of the atmosphere, clouds, the general circulation of the atmosphere and weather systems, weather instruments and observations, weather forecasting and pollution. Elementary calculus is used, along with a few sample exponential functions.

PHYS 4301 Quantum Mechanics (3 semester hours)
Fundamental principles of quantum theory with application to one and three dimensional systems under various potentials; free particle; bound particle; harmonic oscillator; and hydrogen atom.

PHYS 4304 Modern Physics (3 semester hours)
Survey of quantum mechanical phenomena in modern physics; atomic and molecular spectroscopy; quantum statistics; band theory of solids; particle scattering and radiation; nuclear models, reactions, and stability; elementary particles.

PHYS 4307 Senior Projects Laboratory (3 semester hours)
Intended as an introduction to research, this course involves independent reading and/or laboratory work on advanced topics or experiments. The course includes a regular seminar series where related topics from the current literature will be discussed.

PHYS 4411 Thermodynamics and Statistical Mechanics ( 4 semester hours)
Introduction to the elements of thermodynamics, kinetic theory and statistical mechanics; the concepts of temperature, entropy, phase transitions, transport phenomena, partition functions, statistical ensembles, the Maxwell-Boltzmann, Fermi-Dirac and Bose-Einstein distributions and the equipartition theorem. Applications considered will include the thermodynamic description of chemical and phase equilibria, magnetism, superconductivity and superfiuidity.

PHYS 4428 Optics and Microwaves (4 semester hours)
Lecture and laboratory course in which some important applications of Maxwell's equations will be considered. Topics covered will include electromagnetic waves and radiation, cavities and guides, laser oscillation interference, diffraction, Bragg reflection, wave length and frequency measurements; the parallel nature of microwaves and visible light, and coherent optics.

PHYS 4352 Atomic and Molecular Physics II (3 semester hours)
Topics considered in this advanced continuation of Physics 3351 will include the application of quantum mechanics to atomic and molecular problems; nuclear structure, models and forces; introductory discussion of subnuclear particles, their properties and interactions.

PHYS 4372 Solid State Physics (3 semester hours)
The course covers topics in the theory of perfect crystals including crystallography, lattice energy of ionic crystals, elasticity, lattice vibrations, electric and magnetic properties and the band theory of solids.

PHYS 4371 Solid State Devices (1 Lecture - 2 Laboratory hours)
Emphasis will be placed on the application of solid state physics to modern day devices. Experiments will be performed to investigate the interaction of light, electricity and magnetism with crystals. Current diagnostic devices utilizing these interactions will be examined. Typical experiments will include photoconductivity, Hall effect, magnetism of thin films, piezoelectricity, crystal preparation and luminescence. Prerequisite: PHYS 4372 Solid State Physics or equivalent.

Graduate courses available as electives for seniors.
(Detailed course content available in UT - Dallas Catalog).
PHYS 5313 Statistical Mechanics
PHYS 5323 Digital Circuits

PHYS 5360 Plasma Generation

PHYS 5381 Introduction to Space Physics

PHYS 5391 Relativity

PHYS 5392 Relativity and Cosmology
PHYS 5330 Introduction to Quantum Electronics

## ANTHROPOLOGY

## OFFICE:

Anthropology deals with the origin, development, and nature of man and his culture. It differs from other social sciences in its comparative approach, studying man today as well as in the past; in Western and non-Western civilizations' in remote tribes and in sophisticated urban settings. As the anthropologist cuts across cultural lines and delves into man's past and present, his wide perspective promises to provide insights and some possible solutions to many of the problems of our century. In essence, the modern anthropologist holds up a giant mirror to mankind, and allows us to look at ourselves in our infinite variety.

A special strength of the UTD Anthropology program lies in an area that can best be described as "Humanistic Anthropology". This is an orientation (A) whose topics of inquiry overlap with those of the humanities, focusing particularly on human experience in all its cultural variation; (B) whose methodology utilizes self-reflection as a tool of investigation, may incorporate non-analytic modes of expression, and seeks to portray a holistic vision of man: (C) whose value orientation encourages anthropology to take a role in promoting self-understanding, cultural tolerance, and concern for human problems. Anthropology, as a discipline at UTD, forms a bridge between those concerned with scientific explanation and those concerned with humanistic understanding.

## LOWER DIVISION PREREQUISITES

Two Anthropology courses or one Anthropology and one Sociology course. UPPER DIVISION CORE REQUIREMENTS (12 hours)

Advanced Cultural Anthropology
Introduction to Linguistics
Social Science Research Methods
Statistics and Data Analysis

## THE OPTIONS

The student majoring in Anthropology may choose to specialize in (1) Anthropology as a discipline or (2) Urban Studies. Specialization in an option requires 24 hours of advanced courses in Anthropology and related studies beyond the core requirements. A student should consult with the College Master or their adviser about specific courses required by each option.
Course Description

Anthro 3300 General Anthropology
An advanced review of the major divisions of anthropology and the outstanding current theoretical issues in the field for those lacking lower division instruction. Not available for credit toward the major in Anthropology.

Soc. Sci. 3401 Social Science Research Methods (4 semester hours)
Introduction to the philosophy of science and its impact on the scope and method of the social sciences. Introduction to the idea of hypothesis testing as a process for research. Study of several research methods currently used in the social sciences including survey research, participant observation, experimental design, gaming and simulation techniques.

Soc. Sci. 3402 Data Analysis and Statistics (4 semester hours)
Fundamental methods of quantitative analysis in the social sciences; statistical inference; use of computers for statistical data analysis; inference of causal structure. Parametric and non-parametric tests of statistical hypotheses; introduction to correlation and regression. Three lectures plus one lab per week.

Anthro 3301 Advanced Cultural Anthropology


#### Abstract

An intensive review of major issues in cultural and social anthropology, including basic concepts in cultural ecology, kinship analysis, and analysis of values and symbol systems.


Anthro 3302 Humanistic Anthropology
An examination of humanistic thought in anthropology, past and present. Topics covered include literary anthropology, the place of art and aesthetics, and the use of the anthropologists own "self" as an anthropological tool.

Anthro 3303 Ethnographic Methods
Survey of ethnographic, experimental, and other techniques for describing ongoing social and interactional systems.

Anthro 3305 History of Anthropology
The history and nature of anthropological thought.
Anthro 3311 Introduction to Linguistics
A general survey of theory and method in linguistics. The basic tools of linguistic analysis will be introduced for the fields of phonetics, phonology, syntax and semantics. Special topics include language families, historical linguistics, psycholinguistics, anthropological and sociolinguistics, language and the brain, poetics, and animal communication.

Anthro 3312 Folklore
An examination of some of the major forms of verbal folklore including proverbs, jokes, riddles, superstitions, myths, legends and folktales with special emphasis on the psychological and cultural value of folklore. Each student will be required to do field work in folklore collection.

Anthro 3313 Political Anthropology
Comparison and analysis of political structures; behavior and processes among selected peoples of the world; special emphasis on leadership authority, power, and the origins of states; the relevance of primitive political systems to anthropological theory, and the comparative study of politics.

Relationships of cultural, social and personality factors in human behavior; personality in representative societies; cross-cultural comparison of culturepersonality relations.

Anthro 3315 Kinship and Social Organization (3 semester hours)
The development of kinship studies; analysis of the family; unilineal and bilateral systems of kinship and marriage; the study of kinship terminology; kinship in small-scale and complex societies; political, economic and religions aspects of kinship organizations.

Anthro 3316 Ethnomusicology: Music of Non-Western Cultures (3 semester hours)

Introduction to the history and methods of Ethnomusicology; study of musical form, structure, and behavior in selected cultures, with special attention to social and cultural contexts. Same as Music 3347.

Anthro 3317 Native Americans in Contemporary Society
Consideration of various Indian subcultures and individuals in their accomodations to the dominant American Society, interactions with other Native Americans development of Indian identity, and social problems and goals.

Anthro 3318 Cognitive Anthropology
The study of individual and cultural differences and similarities in the categorization and organization of semantic structures, and their relationships to other systems of behavior.

Anthro 3319 Cultural Ecology
An examination of the relationships between natural resources and sociocultural organization. Focus will be on attempting to assess the variety and effectiveness of the cultural ecologies of different peoples.

Anthro 3320 The Anthropology of Religion (3 semester hours)
A comparative study of religion as a cultural system. The analysis will focus on the relationship between religion and its social and psychological determinants, and its social and psychological functions.

Anthro 3321 Peasant Socfeties
Analysis of the social, political, economic and religious aspects of peasant communties; problems of tradition and change in peasant societies; 1inks between peasant communities and national societies.

An introduction to the anthropological study of the histories of non-western peoples. Course will focus each semester on the cultural history of a selected region, depending upon the instructor. Course may be repeated for credit with different instructors and regions.

Anthro 3341 Ethnography: Selected Cultural Regions
Introduction to the attempts of anthropologists to provide systematic descriptions of other cultures, either as "total systems" or "part systems". Instructors will concentrate on specific areas as case studies. Areas will be announced in advance. Course may be repeated once for credit on the major.

Anthro 3350 Language and Society
The study of the way language asserts and expresses social roles, relationships, and institutions. Topics include language and sex, language and politics, language and social status, and the use of language in defining particular kinds of interactional situations.

Anthro 3351 The Arts and Anthropology
An examination of the problems involved in establishing the social and cultural nature of a work of art, and of past and current attempts to resolve them. Prerequisite: at least one course in Anthropology.

Anthro 3352 Art in Non-Western Cultures: Selected Areas
A survey of the visual arts of selected regions, considered in their total cultural contexts. Study includes the relationships between visual arts and social organization, oral traditions, dance and music. Specific regional focus will be announced each time the course is offered.

Anthro 3353 Non-Western Belief and Value Systems
An examination of philosophies, systems of beliefs and values from selected cultures. Study will include the relationship between values and actual behavior.

Anthro 3354 Cultural Illness and Health
A cross-cultural examination of the way different cultures define illness and health, and of non-western approaches to curing.

Anthro 3361 Anthropology of Sport
An examination of the structure of particular professional and amateur sports. Attention will include the relationship of sport to the mass media, and to educational and other institutions.

Anthro 3362 Images of U.S. Indians
As examination of White perceptions of American Indians, together with the actions that have resulted from them. Topics covered include Federal Indian policy, missionary efforts, 'do-good' societies, literary and film 1mages.

Anthro 3363 Peoples of the American Southwest
An examination of the lifestyles and institutions, past and present, of some of the Indian, Mexican American, and Anglo-American groups who presently inhabit the American Southwest, including the ways these groups perceive themselves and each other.

Anthro 3364 Multicultural Aspects of Teaching
An examination of problems and issues that arise when teachers encounter students whose world view and cultural views are different from their own. The viewpoint of the course is both historical and compartive.

Anthro 3380 Film as a Social Document
An analysis of the way film has been used for social-scientific purposes, reviewing techniques of ethnographic, historical, and propaganda film-making and interpretation.

Anthro 4301 Explorers in Anthropology
Examination of the role of early explorers in contributing to the development of anthropology, and of exploration as an anthropological activity.

Anthro 4311 Economic Anthropology
An examination of the basic concepts anthropologists apply to the analysis of non-western systems of production and distribution, and their relation to concepts of modern economic theory. It is recommended that students have a previous course in Principles of Economics.

Anthro 4312 Music and Society
The study of the relationship between music and social organization and social behavior, within and across cultures.

Anthro 4313 Anthropology and the Theory of Signs
A seminar to develop and evaluate the role of semiotics, or sign theory, in a holistic theory of man.

Anthro 4391 Advanced Topics in Cultural and Social Anthropology
Selected topics in Cultural and Social Anthropology, by arrangement with instructors. Prerequisite: Senior Status.
Anthro $4392 \quad$ Special Topics in Ethnomusicology
Courses in selected topics announced by the instructor.
Anthro $4393 \quad$ Advanced Topics in Urban Anthropology
Selected topics in the description and analysis of Urban social organiza-
tion, by arrangement with faculty. Prerequisite: Senior standing.
Anthro 4198-4998 Field Work or Internship
Anthro 4198-4999 Senior Research

## ECONOMICS

OFFICE: Green
Given the basic fact of scarcity, the discipline of economics explores how technology, capital, labor and land can be used for maximum output. Economics also looks at how capitalist, socialist, and mixed economics produce goods and services and evaluates these systems in terms of efficiency, equality, freedom, and growth. A major analytical focus is the performance of the entire economy What causes inflation and unemployment, and what influences the rate of growth? Still another concern is the economics of government. What principles should guide governmental policy in areas such as taxing, spending, encouraging competition, and providing social services? The discipline is continually evolving as new problems arise. New areas of economic inquiry include the economics of the environment, of depletable resources, and of the city.

## LOWER DIVISION PREREQUISITES

Two Economics Courses, one of which should be a basic principles course.
UPPER DIVISION CORE REQUIREMENTS: (12 semester hours)
Microeconomic Theory
Macroeconomic Theory
Social Science Research Methods
Statistics and Data Analysis

## THE OPTIONS

The student majoring in Economics may choose to specialize in one of several options. Specialization in an option requires 24 hours of advanced courses in Economics and related studies beyond the core requirements,

1. Economics: The study of economics from a disciplinary perspective
2. Political Economy: The analysis of the economic basis of politics and the study of the politics of the economy (with political science).
3. Urban Studies: The analysis of Urban processes, policies and problems (with other social sciences and including field work experience).
A student should consult with the College Master or their adviser about specific courses required by each option.

ECONOMICS COURSES
Course Description
Soc. Sci. 3401 Social Science Research Methods (4 semester hours)
Introduction to the philosophy of science and its impact on the scope and method of the social sciences. Introduction to the idea of hypothesis testing as a process for research. Study of several research methods currently used in the social sciences including survey research, participant observation, experimental design, gaming and simulation techniques.

## Soc. Sci. 3402 Data Analysis and Statistics (4 semester hours)

Fundamental methods of quantitative analysis in the social sciences; statistical inference; use of computers for statistical data analysis; inference of causal structure. Parametric and non-parametric tests of statistical hypothesis' introduction to correlation and regression. Three lectures plus one lab per week.

Eco. 3301 Economics of Public Issues (3 semester hours)
An examination of current public policy issues from an economic perspective, designed to provide the interested layman with a more informed view of current affairs. Specifically intended for students not majoring in economics.

Eco. 3305 Economic Analysis (3 semester hours)
Fundamentals of macro-and micro-economic analysis. The former studies the economy as a whole, money and banking, national income public finance, and international trade. The latter studies problems arising in the relationship of economic groups (business, labor, agriculture, etc.) to the total economy with special attention to market mechanisms.

Eco. 3310 Microeconomic Theory (3 semester hours)
The study of optional theories of demand, production, competition, markets, and welfare. Implications of theory for purposes of public policy prescriptions are given particular emphasis.

Eco. 3311 Macroeconomic Theory (3 semester hours)
A study of the determinants of national income, employment, interest rates, and the price level, including theories and evidence regarding the influence of monetary and fiscal policies on the economy.

Eco. 3312 Money and Banking (3 semester hours)
The development, structure, and regulation of financial institutions and the roles of these institutions in determining the money supply and level of economic activity.

Eco. 3330 Economics of Health, Education, and Welfare (3 semester hours)
A policy-oriented examination of the delivery of health care, education, and welfare in the United States. Economic criteria are applied to the evaluation of alternative public programs.

Eco. 3331 Urban and Regional Economics (3 semester hours)
The economics of urbanization and of metropolitan spatial relations, with reference to urban development policy and metropolitan fiscal arrangements.

Eco. 3360 Development Economics (3 semester hours)
An analysis of economic development, especially in third-world countries. Topics include the role of population growth, technological progress, capital accumulation, land reform, international trade and assistance, and political and economic dependency. Individual countries are studied in depth.

An introduction to the economics of public finance, including taxation, public expenditures, and fiscal policy. Special attention to current issues such as tax reform and federal expenditure policy.

Eco. 4325 State and Local Finance (3 semester hours)
A practical study of the ways in which state and local governments raise revenue and decide on patterns of public spending; an examination of the economic consequences of these actions.

Eco. 4330 Issues in Law and Economics (3 semester hours)
An application of economic analysis to such legal issues as the delineation and enforcement of property rights, consequences of different liability rules, criminal behavior, federalism, and the operation of the legal system.

Eco. 4333 Environmental Economics (3 semester hours)
A study of man and his environment emphasizing the social and economic consequences of development and pollution. Alternative public policies for dealing with environmental impacts are explored.

Eco. 4340 Labor Economics and Human Resources ( 3 semester hours)
Analyses of wage and employment determination, the roles of unions and public policy; includes discussions of such issues as education, discrimination, and population growth.

Eco. 4341 Transportation Economics (3 semester hours)
The economic characteristics of transport; the functions of the different agencies; pricing and resource allocation in transport and other topics in modern transportation economics.

Eco. 4342 Structure and Regulation of American Industry
( 3 semester hours)
The main features of industrial structure and their relationship to corporate power, followed by an evaluation of different approaches to controlling and regulating industry.

Eco. 4351 Introduction to Mathematical Economics (3 semester hours)
Mathematical formulation of economic theories, such as static and dynamic analysis of market behavior and macroeconomic models. Introduction to optimization techniques.

Eco. 4355 Introduction to Econometrics (3 semester hours)
The application of statistical methods to economic analysis; particular attention is given to regression analysis and hypothesis testing.

Eco. 4360

## International Economic Relations (3 semester hours)

A study of international trade and finance, with attention to problems of adjustment between national economics, and role of international agencies, national and multi-national corporations, and conflicts of internal and external economic policies.

Eco. 4363 Selected Topics in Political Economy (3 semester hours)
Eco. 4370 Economics of Crime (3 semester hours)
The decisions of criminals, potential criminals, law enforcement agencies, and the public are examined from an economic viewpoint. Applications of utility analysis, production theory, theories of risk taking and principles of public finance are considered.

Eco. 4381 History of Economic Ideas (3 semester hours)
An investigation into the nature of economic man and economic society. Beginning with the ancient Greeks and ending with contemporary "radical" economic thought, the course places current economic issues into historical perspective. Works by Smith, Malthus, M111, Marx, Veblen, Schumpeter, Galbraith and others are covered.
Eco. 4385 Topics in Economic History (3 semester hours)

Selected topics in economic history.
Hist. 3366 American Economic History (3 semester hours)

A survey of the problems of development in the American economy.
Eco. 4395 Advanced Topics in Economics (3 semester hours)

Topic 1 The Political Economy of International $0 i 1$

| Eco. $4197-4997$ | Independent Study (1-9 semester hours) <br> May be repeated for credit |
| :--- | :--- | :--- |
| Eco. $4198-4998$ | Fleld Work or Internship (1-9 semester hours) <br> May be repeated for credit |
| Eco. 4199-49999 | Senior Research (1-9 semester hours) <br> May be repeated for credit |

## GEOGRAPHY

## OFFICE: Green

The geographer's viewpoint is a spatial one; he is concerned with where things are located, why they are located where they are, and where they should be located. Geographers at UTD apply this spacial perspective to problems of social, economic and environmental concern. However, since problems in the modern world are highly interrelated, the UTD program offers options in various areas including urban studies, environmental studies, and geography and management. For the student interested in private decision making and public policy analysis in these three areas, the analytic framework of geography is of critical importance. For the student who wants to go into teaching, graduate work, or to get a broad knowledge of modern geography, a discipline-oriented concentration is offered. A student should consult with the College Master or their adviser about specific courses required by each option.

1. Lower Division Pre-requisites: None
2. Upper Division Core Requirements:
a. Man, Space, and Behavior
b. Seminar in Geography
c. Social Science Research Methods
d. Data Analysis and Statistics

Course

## Description

Soc. Sci. 3401 Social Science Research Methods (4 semester hours)
Introduction to the philosophy of science and its impact on the scope and method of the social sciences. Introduction to the idea of hypothesis testing as a process for research. Study of several research methods currently used in the social sciences including survey research, participant observation, experimental design, gaming and simulation techniques.

Soc. Sci. 3402 Data Analysis and Statistics (4 semester hours)
Fundamental methods of quantitative analysis in the social sciences; statistical inference; use of computers for statistical data analysis; inference of causal structure. Parametric and non-parametric tests of statistical hypothesis; introduction to correlation and regression. Three lectures plus one lab per week.

Geography 3301 Man, Space, and Behavior
Study of man's organization of space and ways of thinking about and examining that organization. Looks at the way human behavior is related to space. Ideas of nodes, networks, hierarchies of activities, interactions, environmental perception and deliberate spatial planning are introduced.

## Geography 3302 Economic Organization of Space ( 3 semester hours)

Spatial structure of economic activity, as observed in local, regional, and international systems; introductory location theory.

## Geography 3303 Social and Cultural Organization of Space

Examination of geographic, sociological and related ideas for understanding the social organization of space. Study is made of the ways the American cultural system has shaped spatial processes and structures in the United States. Examples are drawn from population migration and the images we hold of our country. Discussion is made of the themes of cultural geography, culture areas and distributions, and cultural origins and dispersals.

## Geography 3330 Urban Geography

Economic relations between cities, and between cities and their hinterlands. Theories of urban location with emphasis on the services function of cities in determining their location relative to one another.

Geography 3340 Man and the Environment ( 3 semester hours)
An analysis of the role of man as a major agent of biological change in the earth's ecosystems; both historical and contemporary processes, geographic and economic approaches to man-resource relationships, will be examined. Same as IS 3340.

Geography 3345 Human Use of the Earth (3 semester hours)
The earth as the home of Man; population and settlement as spatial processes impacting the physical and environment are described using slides, films, lectures and discussions. Examples are drawn from as wide a range of environments as possible. Same as IS 3345.

## Geography 3350 Regional Development

Models explaining urban and regional development with an emphasis on location theory and its role. Models include economic base, diffusion theory, interindustry linkages, growth center theory.

Geography 3390 Geopolitics
Models of territoriality and the partitioning of space at different scales, from the macroscale of world politics to the microscale of interpersonal conflict and competition are examined. General properties of geopolitics are discussed in light of evolving spatial theories.

Geography 3420 Map Design (4 semester hours)
Survey of the field of cartography. Includes history of mapping, theory and construction of map projections, compilation procedures, principles of generalization, symbolization, and map reproduction. Laboratory sessions.

Geography 4330 Industrial Location and Planning (3 semester hours)
Explanation of the location of manufacturing activity in theory and practice. Location decision analysis is explored and industrial development planning is discussed.

Geography 4335 Internal Structure of Cities
Discusses in detail alternative ways of examining the form and structure of cities. Examination is made of urban cognitive mapping and methods for defining the urban realm; patterns of urban structure and growth; determinants of structure and growth; transportation and communication networks; and the idea of urban "communities"; and the possible future design of our cities.

Geography 4337 Environmental Impact of Urbanization (3 semester hours)
A review of the consequences of man's influence upon the urban landscape in terms of environmental abuse.

Geography 4345 Resources and Development (3 semester hours)
Analysis of resource endowment and technological change in economic growth in cross-national contexts. Contemporary resource problems are examined and the role of the multinational corporation as a user and as a developer of resources os introduced. Same as IS 4345.

Geography 4360 Texas: A Regional Analysis (3 semester hours)
Techniques of regional analysis are introduced and then applied to the territory of Texas. This course seeks to develop in the student a set of tools which may be applied to any region. Planning issues are addressed from the point of view of allocation procedures.

Geography 4375 Behavioral Geography
Discussion of perception and cognition in influencing spatial behavior. Individual behavior is discussed but the main emphasis is on aggregate, or group behavior. Games are used as an instructional device.

Geography 4380 Topics in Social Geography (3 semester hours)
Discussion of selected topics in social geography.
Geography 4384 Selected Topics in Economic Geography
Different topics will be selected from semester to semester.
Geography 4396 Selected Field Analysis (3 semester hours)
Field analysis will center on the Metroplex region and questions of urban geography and urban environmental impact will be frequent subjects for research.

Geography 4421 Mapping Systems and Spatial Analysis
Advanced work in practical applications of cartographic techniques to urban - rural analysis. Computer cartographic methods are introduced.

Geography 4470 Spatial Considerations of Community and Regional Planning
A review of the component parts of comprehensive plans and how each is developed and presented.

Geography 4488 Advanced Quantitative Analysis (4 semester hours)

Geography 4497 Seminar in Geography: Theoretical Geography and General Spatial Systems

The theoretical bases of geographic thought are investigated: emphasis is placed on scientific inquiry and on the relationship of geography to the other social and physical sciences.

Geography 4198-4998 Internship (1-9 semester hours, may be repeated for credit)

Geography 4199-4999 Senior Research (1-9 semester hours, may be repeated for credit)

Geography 4196-4996 Independent Study (1-9 semester hours, may be repeated for credit)

## POLITICAL SCIENCE

## OFFICE: Green

Most people are drawn, sooner or later, into the study of politics. A knowledge of the "political science" is important for the enlightened selfinterest we must have as responsible citizens. Nothing less than the future of mankind depends on the ability of peoples and nations to cooperate for their common welfare and ultimate survival. How can we conduct our political lives so as to preserve our natural resources, to foster international peace, and to articulate our human values? These are indeed compelling questions, and the goal of the Political Science program at UTD is to provide the essential tools for dealing with them. In the last analysis, the answers we find will concern each of us personally, in our capacity as citizens of a state and members of a larger community of nations.

Lower Division Prerequisites: None
Upper Division Core Requirements: (12 hours)
One course in each of the following areas:
a. Social Science Research Methods
b. Statistics and Data Analysis
c. Comparative Politics
d. Political Theory

## THE OPTIONS

The student majoring in Political Science may choose to specialize in one of several options. Specialization in an option requires 24 hours of advanced courses in Political Science and related studies beyond the core requirements.

1. Political Science: The study of political science from a general perspective.
2. Political Economy: The analysis of the economics bases of politics and the study of the politics of the economy (with economics).
3. Urban Studies: The analysis of urban processes, policies and problems (with other social sciences and including field work experience).
4. Criminal Justice: The social, behavioral and political aspects of law enforcement and the judicial process (with political science, psychology and sociology).

A student should consult with the College Master or their adviser about specific courses required by each option.

## Course Description

Soc. Sci. 3401 Social Science Research Methods (4 semester hours)
Introduction to the philosophy of science and its impact on the scope and method of the social sciences. Introduction to the idea of hypothesis testing as a process for research. Study of several research methods currently used in the social sciences including survey research, participant observation, experimental design, gaming and simulation techniques.

Soc. Sci. 3402 Data Analysis and Statistics (4 semester hours)
Fundamental methods of quantitative analysis in the social sciences; statistical inference; use of computers for statistical data analysis; inference of causal structure. Parametric and non-parametric tests of statistical hypotheses; introduction to correlation and regression. Three lectures plus one 1 ab per week.

Pol Sci. 3301 Political Theory
An introduction to the major perennial issues in political thought, and the types of theoretical approaches used to analyze these issues in contemporary political science.

## Pol. Sci. 3302 Introduction to Public Administration

Introduction to the study of bureaucracy. Examines the theoretical, political, and practical issues of organization, staffing, financing and other topics.

## Pol. Sci. 3303 Contemporary Issues in Criminal Justice

Examines various issues created by problems within the American system of criminal justice and explores alternative solutions.

## Pol. Sci. 3306 Introduction to Political Economy

Assuming the interconnection of the economic and political realms, this course will introduce various perspectives on policy growing out of the classical tradition in political economy. The focus will be on conservative liberal and radical views of politics and economics.

Pol. Sci. 3322 Public Law: Federal and State
An examination of the significance of the legal impulse in the American political tradition. Consideration will be given to the evolution of the Constitution of the United States and the constitutions of the States, with special emphasis on that of Texas. (Fulfills one-half of the legislative requirement of six hours of American Government.)

Po1. Sci. 3323 Intergovernmental Politics
An examination of how local, state and national governments share power in such important areas as welfare, education, housing and community development, and criminal justice. There will also be discussions of recent innovations including revenue sharing and the New Federalism. In addition to readings there will be guest presentations by key governmental officials in Texas. (Fulfills one-half of the legislative requirement of 6 hours.)

Pol. Sci. 3325 Issues of American Public Policy (3 semester hours)
The evaluation of public policies in selected areas, including control of industry, civil rights, social welfare, poverty, foreign policy, the environment, and defense policy; the policy-making process, and the influence of economic, cultural and political factors on policy-making will be studied. Same as IS 3361.

Pol. Sci. 3327 American Foreign Policy in the Third World
An intensive examination of the political economy of American foreign policy in the Third World. Contrasting theories of American behavior will be evaluated with the help of case studies of particular relationships and interventions in Asia, Africa, the Middle East and Latin America.

Pol. Sci. 3331 Party Politics
This course will examine the changing pattern in party politics in the United States over the last decade with a particular focus upon comparisons of the American party system with parties in other countries and with previous patterns of instability in the American political system.

Pol. Sci. 3340 Urban Politics (3 semester hours)
An analysis of the variety of political forms and forces operating in an urban area. Issues include: police performance and accountability; environmental control; redevelopment policies (housing, zoning, urban renewal); education and welfare policies; and neighborhood control of decision-making.

Pol. Sci. 3350 Comparative Politics (3 semester hours)
An introduction to the comparative analysis of political life in different cultural and national settings. A consideration of different theoretical approaches to comparative politics.

Pol. Sci. 3351 Politics of Developing Areas (3 semester hours)
The political processes involved in the transformation of non-modern societies, particularly in the "Third World"; illustrations will be drawn from modernizing countries of Asia, Africa and Latin America.

## Pol. Sci. 3361 International Relations (3 semester hours)

General issues of theory-building in international relations. Various theoretical orientations to the study of international politics will be examined in terms of specific historical events such as peace settlements, alliance formation, and relations between powerful and weak states.

## Pol. Sci. 3362 The American Presidency (3 semester hours)

Contemporary developments in the American presidency set in historical perspective through the comparative analysis of earlier presidents; consideration of the way in which individual leadership affects history. (Cross listed with IS 3362.)

The development of the tradition of Western political philosophy from preclassical Greek to early Christian theorists.

Pol. Sci. 4312 Modern Political Theory
The development of the tradition of Western political philosophy from the early modern period through the 19 th century.

Pol Sci. $4325 \quad$| Politics of Public Expenditures and Finance |
| :--- |
| (3 semester hours) |

How public bodies do and should make decisions about the allocation and distribution of public resources (at the federal, state, and local levels). Collective choice theories will be applied to, and evaluated by, reference to specific public policy issues such as taxation, income redistribution, welfare and defense spending, and environmental control.

Pol. Sci. 4332 Congress and Public Policy
This course will portray Congress, the institution and its activities. Various aspects of congressional activity will be examined with a view to the manner in which they affect public policy. Topics will include considerations of size, norms of behavior, strategic premises, constituency relations, executive relations, and relations with the bureaucracy.

Pol. Sci. 4333 American Political Thought to the Civil War 1600-1865
The development of American political thought from the Colonfal Period to the end of the Civil War.

Pol. Sci. 4334 American Political Thought after the Civil War 1865-present
The development of American political thought from post Civil War Reconstruction to the present.

Pol. Sci. 4335 Civil and Political Liberties
The theory of civil liberties in a democratic context and an examination of current legal interpretations.

Pol. Sci. 4340 Comparative Urban Politics
An examination of the city in different cultures and different times. Emphasis will be on the political process by which urban problems are defined and solutions attempted.

Pol. Sci. 4341 Politics of the Judicial Process (3 semester hours)
The study of judicial decision-making, the political impact of court decisions, and the role of lawyers and judges at the local, regional and national levels.

Pol. Sci. 4343 Public Opinion, Propaganda, and Participation
A critical examination of the nature and role of public opinion in democratic systems, and the impact of modern propaganda techniques on public opinion and political participation as a whole.

## Pol. Sci. 4345 The Development of Marxism

By discussing the writings of Marx, Engels, Lenin, Stalin, and Mao Tse-tung, this course will present an overview of the major Marxist theories and the relationship of their ideas to Marxist and Communist political movements. It will serve as a general introduction to Marxist political thought and to the ideologies of revolutionary movements.

Pol. Sci. 4350 State Politics

The study of the variety of political institutions and forces operating in the many states and counties, including their social and economic characteristics, political culture, governors, legislatures, judiciaries, political parties, interest groups, citizen views and participation. The emphasis will be upon state governmental bodies and the constituencles they serve.

Pol. Sci. 4352 The Politics of Industrial States (3 semester hours)
A comparative analysis of the politics of highly technological societies (including the U.S., Japan, and Western Europe).

## Pol. Sci. 4355 Revolutionary Movements and Systems (3 semester hours)

The comparative analysis of theories about revolutionary change and the nature of revolutionary movements, both before and after taking power. Topics include: the role of ideology, the role of violence, international context, the impact of pre-takeover strategy on the nature of the post-takeover politics, mobilization of various social groups (with particular attention to peasants), leadership and intra-elite conflict.

## Pol. Sci. 4360 Political Anthropology (3 semester hours)

Comparison and analysis of political structures; behavior and processes among selected peoples of the world; special emphasis on leadership authority, power, and the origins of states; the relevance of primitive political systems to anthropological theory, and the comparative study of politics. (Cross listed with Anthropology 3340.)

Pol. Sci. 4365 Mao Tse-tung and the Chinese Revolution
The development of contemporary China will be viewed from the perspective of China's most famous leader. Mao's various roles in the Chinese revolution-activist, party leader, guerilla commander, founder of the People's Republic of China, etc. --will be discussed in relation to the ongoing developments of Chinese politics.

An analysis of the political structure of China from 1949 to the present. China's integrated developmental strategy and the policy-determining role of political struggle will be important themes.

## Po1. Sci. 4370 Politics and Violence

Relying on literary, philosophical, sociological, and dramatic resources the nature of violence as a form of political activity will be explored.

## Pol Sci. 4375 Comparative Communist Systems

The political theory, structure, techniques and behavior of communist systems examined in cross-cultural perspective and in the context of their organizing ideologies and the historical circumstance of revolution. Case studies include Russia, Poland, Rumania, Yugoslavia, and China.

Pol. Sci. 4377 Public Interests and Private Power
This course examines the extent and importance of private interests and the interest groups that represent them. Then, looking at both private and public governments, it assesses whether pluralist, elitist, or Marxist explanations best describe the distribution of power in American today.
Po1. Sci. 4380 Selected Topics in Comparative Politics (semester hours)
Discussion of selected topics in comparative politics.
Pol. Sci. 4381 Selected Topics in American Politics (3 semester hours)

Pol. Sci. 4382 | Selected Topics in International Relations |
| :--- |
| (3 semester hours) |

Pol. Sci. 4383 | Selected Topics in Political Theory and Methodology |
| :--- |
| (3 semester hours) |

Pol. Sci. 4385 | Selected Topics in Political Science Methodology |
| :--- |
| (3 semester hours) |

Model building and quantitative methods for political science research are developed and explored.

Pol. Sci. 4386 Selected Topics in Public Policy
Pol. Sci. 4387 Selected Topics in Public Administration
Pol. Sci. 4405 Introduction to Political Research
A workshop course focussed on a class research project in which various political strategies will be evaluated. Selected topics in advanced analytic techniques will be offered as needed. The use of the computer as a research tool will be stressed.

Pol. Sci. 4440 Workshop in Metropolitan Problems
Designed as a workshop, this course will investigate various aspects of the Dallas urban setting. In general particular problems will be addressed by the class and policy alternatives will be generated.

Pol. Sci. 4198-4998 Internship
Pol. Sci. 4199-4999 Independent Study
(with permission of instructor)

## OFFICE: Green

Sociology is the study of social order and social change, the structures and processes through which social life is carried on. As a science, sociology seeks to explain how man organizes and differentiates human activities to achieve desired ends, how societies seek to maintain orderly relations, and how societies change. In addition to the examination of man in society, the study of sociology includes attempts to understand society in man. This emphasis includes identifying the mechanisms by which man develops and maintains his needs, his values, his ideologies, his very identity. In carrying out this endeavor, sociology pays special attention to the methodology of its research, and to the ways in which theory is formulated.

## LOWER DIVISION REQUIREMENTS

Two semesters of Sociology or one semester of Sociology and one related course.

## UPPER DIVISION REQUIREMENTS

Social Science Research Methods (Soc. Sci. 3401)
Statistics and Data Analysis (Soc. Sci. 3402)
Sociological Theory (Soc. 3303)
Social Stratification (Soc. 3302) or Soc. Control (Soc. 3332)

## THE OPTIONS

The student majoring in Sociology must choose one of three options in which to concentrate his work. Specialization in an option requires 24 hours of advanced courses in Sociology and related fields beyond the core requirements listed above. A student should consult with the College Master, or their adviser about specific courses required by each option.

1. Sociology. A general preparation in the discipline of sociology.
2. Urban Studies. The analysis of urban processes, policies, and problems. This option includes courses from the other social sciences and requires fleld work experience.
3. Criminal Justice. The social, behavioral and political aspects of law enforcement and the judicial processes. This option includes courses from other social sciences.
4. Social psychology. Processes of socialization, person to person interaction, and the individual's relationship to society.

## SOCIOLOGY COURSES

Course Description
Soc. 3301 Social Change ( 3 semester hours)
The dynamics of change in social structures and societies, resistance to change, and change producing agencies and processes.

Soc. 3302 Social Stratification (3 semester hours)
An examination of the social patterning of the unequal distribution of rewards in societies. The functions and dysfunctions for society of inequality, typical characteristics of class members, and the status attainment process are among the topics to be discussed.

Soc. 3303

## Sociological Theory (3 semester hours)

Survey of the main currents of sociological theory, as developed by early European and American theorists and applied in contemporary sociological thinking about the world today.

Soc. Sci. 3401 Social Science Research Methods (4 semester hours)
Introduction to the philosophy of science and its impact on the scope and method of the social sciences. Introduction to the idea of hypothesis testing as a process for research. Study of several research methods currently used in the social sciences including survey research, participant observation, experimental design, gaming and simulation techniques.

Soc. Sci. 3402 Data Analysis and Statistics (4 semester hours)
Fundamental methods of quantitative analysis in the social sciences; statistical inference; use of computers for statistical data analysis; inference of causal structure. Parametric and non-parametric tests of statistical hypothesis; introduction to correlation and regression. Three lectures plus one lab per week.

Soc. $3310 \quad$ Population and Society (3 semester hours)
The study of population statistics: birth rates, death rates, migration and population composition and distribution.

Soc. 3311 Human Ecology (3 semester hours)
The study of community structure through the analysis of the spatial and temporal distribution of persons, groups and services. Focusing on issues of social organization, population and physical environment.

Soc. 3320 Urban Sociology (3 semester hours)
A study of the city both in the United States and elsewhere. Analysis includes the structural and demographic characteristics of urban areas as well as the social and psychological dynamics of urban life.

Soc. 3321 Social Disorganization (3 semester hours)
Analysis of the manner in which societies come to define certain behavior as deviant; the effects of technological, economic and value changes on the development of deviant groups and individual behavior patterns.

Soc. 3330 Marriage and the Family (3 semester hours)
The family as a social institution, its place in different cultures and social strata; the impact of industrialization and urbanization on family life; family functions; the family in transition.

Soc. 3331 Sociology of Education (3 semester hours)
A study of the structure of the educational institution and its relationship to other social institutions. Primary emphasis on the historical development of American education, the role of education in stratification systems, busing and the community school concept, and alternative educational systems.

Soc. 3332
Social Control (3 semester hours)
A comparative analysis of the means by which groups maintain the behavioral conformity of the memberships, with emphasis on the study of social sanctions.

## Soc. 3333 Sociology of Religion

The existence of religion in society studied in terms of religious experfence as an aspect of human consciousness, the practices and beliefs through which religious experience is induced and channeled, the structure of religious organizations and teachings, and the consequences of membership in particular religions for social attitudes and behavior.

Soc. 3335 Status of Women in American Society (3 semester hours)
An examination of the patterns and trends in female employment and education, occupational segregation, sex role attitudes. The ideology of the Women's Movement.

Soc. 3341 History and Theory of Social Psychology
A general review of the development of social psychology, followed by a survey of theoretical approaches to the scientific study of individual behavior as a function of social stimuli.

Soc. $4330 \quad$ Aging and Society ( 3 semester hours)
The analysis of age as a basis for differentiation in social relations and for distribution of societal resources. Socialization into roles and attitudes at various life-stages. The influence of age on the performance of social roles in a variety of behavioral settings.

Soc. 4331 Sociology of Childhood and Adolescence
The socialization environment structured for children and adolescents in American Soctety, and its variations by social strata, sub-cultures or countercultures, and other sociological variables. The relationship between socialization environments and social behavior patterns of youth.

Soc. 3340 Social Structure and Personality (3 semester hours)
The processes by which the individual becomes a member of society. Special emphasis on the influences of social structure on the behavior of the individual, and the social agents, techniques, and learning processes in socialization.

Soc. 4340 Formal Organizations (3 semester hours)
A general study of the structure and dynamics of organizations. Problems of motivation, leadership, morale, group networks, communication, hierarchy, and control. The interaction between technology and human behavior.

Soc. 4341 Small Groups
The distinctive structural and functional properties of small groups, focusing on similarities across different social settings, e.g. families, work groups, committees, friendship and recreational groups.

Soc. 4342 Communications and Media
The processes and effects (direct and indirect) of human commumication, from interpersonal transmission to mass media. Organizational characteristics of the media in selecting and presenting information.

Soc. 4343 Applied Social Psychology
Examines the uses of social psychological mechanisms in real world environments. Provides pragmatic insights that can be applied in varied social situations; examples are management of personnel, group therapy, changing attitudes, socialization and resocialization.

Soc. 4345 Sociology of Work and Leisure (3 semester hours)
The study of the division of labor within society focusing on the variable rewards attached to different activities. Analysis of how work and leisure contribute to maintenance of social order and influence the self conceptions of societal members.

Soc. $3350 \quad$ Political Sociology (3 semester hours)
The analysis of political processes and institutions. Includes the study of voting behavior, participation in politics and political institutions as expressions of societal values.

Soc. 3351 Social Attitudes and Public Opinion (3 semester hours)
First, a focus on how attitudes are conceptualized and measured, the way attitudes are used in social science research and their strengths and weaknesses as theoretical constructs. Second, the formation, change and measurement of public opinion.

Soc. 3360 Criminal Justice and the Community ( 3 semester hours)
Sociological analysis of policy, courts, and correction systems, with an emphasis on the relationship of these with the community.

Soc. 3361 Criminology (3 semester hours)
Study of the social definition of crime, the causes of criminal behavior, and the agencies charged with apprehension, determination of guilt, and correction.

Soc. 3362 Juvenile Delinquency (3 semester hours)
Study of the social phenomenon of juvenile delinquency and state supervision of youths. The causes of delinquency and the social and legal agencies established to deal with it.

The components of the process termed modernization will be examined; industrialization, urbanization, differentiation, changing modes of interpersonal relations. The prospects for modernization in Latin America, Asia, and Africa will be assessed with attention to indigenous impetuses as well as the external influences of multi-national corporations and the foreign policy of the U.S. and Europe.

Soc. 4360 Penology (3 semester hours)
Critical examination of sociological aspects of selected problems, programs, and issues involved in treatments of convicted offenders as represented by correctional processes.

Soc. 4361 Sociology of Law (3 semester hours)
Analysis of the interrelationships between society and law focusing on the use of law in the maintenance of order, and in promoting social change. Study of the uses of social science data in legal settings.

Soc. 4370 Social Welfare Policies and Programs (3 semester hours)
Intensive study of program areas including child welfare, corrections, family welfare, health, housing, medical care, mental health, mental retardation, poverty, and rehabilitation. The specific program area to be studied will vary from semester to semester.

Soc. 4375 Social Problems and Social Reform ( 3 semester hours)
The processes through which social problems are defined, the political sources of support and resistance to reform, and evaluation of alternative remedial programs. A survey of such "problem" areas as family and individual welfare, crime, and consumerism.

Soc. 4380 Advanced Topics in Sociological Theory ( 3 semester hours)
Selected advanced topics in sociological theory.
Soc. 4381 Advanced Topics in Deviance and Control (3 semester hours)
Discussion of selected social problems.

Soc. $4382 \quad$| Advanced Topics in Comparative Social Institutions |
| :--- |
| $(3$ semester hours) |

Discussion of selected topics in comparative social institutions.
Soc. 4383 Advanced Topics (3 semester hours)
Specialized areas of sociological investigation.

Soc. $4396 \quad$| Directed Reading in Selected Sociological Topics |
| :--- |
| (1-9 semester hours) |

Independent reading under the direction of one or more faculty.

Soc. Sci. 4401 Writing Social Science
A laboratory course, examining various styles of discourse employed in the social sciences, but placing primary emphasis on the student's own writing. Limit of fifteen students per section. Permission of instructor required. Pre-requisites: Social Science 3401 and Social Science 3402. Armstrong.

Soc. Sci. 4402 Computer Methods in the Social Sciences
This course provides the novice with the knowledge of design, write, and implement computer programs to aid in the analysis of social science data. It will cover elementary computer operations and elementary and intermediate programming techniques. Although there are many prepared programs written for social science research where analysis can begin (which will be surveyed), the student will be able to program analyses that "standard" programs will not perform and thus facilitate innovative research. Exercises will be frequent and will utilize the IMB370 occasionally and the DEC 10 BASIC interactive system frequently. Pre-requisites: Social Science 3401 and Social Science 3402. Morgan.

Soc. 4198-4999 Field Work in Internship (1-9 semester hours)
Soc. 4198-4999 Senior Research (3-9 semester hours)
Independent research project for seniors.

## EDUCATION

## Teacher Education Programs

The preparation of professional personnel for the school systems of our nation is a significant responsibility for any institution. It is especially important for The Untversity of Texas at Dallas since the objectives of the University recognize the vital role of education in our democratic society.

The legislation creating The University of Texas at Dallas, effective September 1, 1969, which may be found in Chapter 70 of the Texas Education Code, charged the Board of Regents with the responsibility of providing courses customarily offered at leading American universities. Pursuant to that authorization, The Untyersity of Texas at Dallas has developed curricula appropriate for the preparation of professional personnel for service in public and private school systems.

The Teacher Education Program at The University of Texas at Dallas has been developed by the Council on Teacher Education consisting of persons from the various faculties of the University and University administrative officials. The Texas Education Agency, the Dallas Teacher Education Council and the Northeast Texas Suburban Teacher Education Council provide guidance and consultation in the development of the programs.

## Admission

Students desiring to enter the Teacher Education Program at The University of Texas at Dallas should apply for admission to the program in the Office of Teacher Education upon completion of the process of admission to the University. Applications for admission to the Teacher Education Program will be considered on the basis of the following criteria:

1. Indication of a serious intent to enter the field of teaching as shown in a petition for admission to the Teacher Education Program, including documentation of experiences in working with children or young people and how this experience relates to the intent to pursue the teacher preparation program.
2. Completion of at least 54 semester hours or its equivalent with a grade point average of 2.5 on a 4 point scale at the time of official entrance to the program. A student with less than 2.5 at the time of application for admission will be given an opportunity to demonstrate a 2.5 grade point average in the first 12 semester hours taken at U.T. Dallas.
3. An application on file with the Director of Teacher Education requesting admission to the Teacher Education Program and approved by the student's faculty advisor.
4. A formal degree plan on file with the office of the University Registrar.

NOTE: Through the regular undergraduate curriculum, The University of Texas at Dallas offers post baccalaureate certification. This program provides the individual with an opportunity to obtain certification after graduation or to secure additional endorsements over those currently held. Each applicant is individually counseled and a course of study appropriate for the applicant is outlined consistent with the Guidelines for School Personnel: Certification, Allocation, and Records, Teacher Certification Handbook, Texas Education Agency, dated December, 1974.

SECONDARY CERTIFICATION, GRADES 7-12

## PLAN I

Student must complete a minimum of 24 semester hours in each of two specializations selected from the following fields of interest plus 18 semester hours of professional development in education:

## Biology

Chemistry
Computer Information Science

## *Drama

Earth Science
English
*French
**Generic Special Education
*Geography

* German

Government
History

* Latin Mathematics Physics Psychology
* Sociology Spanish


## PLAN II

Student must complete a minimum of 48 semester hours in one of the following composite fields of interest plus 18 hours of professional development in education:

Science
*Social Studies

[^8]```
ALL-LEVEL CERTIFICATION, GRADES 1 - 12
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All-level certification is available in the field of music. Student must complete a minimum of 48 semester hours in music plus 18 hours of professional development in education.

## SPECIAL EDUCATION CERTIFICATION, GRADES 1 - 12

Special education certification is available in speech and hearing therapy. Student must complete a minimum of 27 semester hours in speech pathology and audiology plus 18 hours of professional development in education.

## STUDENT TEACHING

Students must apply for admission to student teaching with the Director of Student Teaching at the beginning of the semester before they enroll in the supervised student teaching course. Students may be admitted to student teachIng when they have completed the following requirements:

1. Admission to the Teacher Education Program
2. Completion of 6 semester hours of professional education courses
3. Classification as sentors
4. Approval of faculty advisor.

## CERTIFICATION

In order to be recommended by the University for certification by the Texas Education Agency the student must complete the following steps:

1. Successfully complete the academic requirements of the degree plan and all other requirements for graduation.
2. Demonstrate interpersonal skills which enhance teaching effectiveness in relating to pupil and school personnel.
3. Submit an application for certification and a two-dollar money order to the Certification Officer.

Typical Program
A typical program in secondary certification will include the following:
Lower Division Preparation
Academic foundations prescribed

| English | 12 semester hours |
| :--- | ---: |
| American History | 6 semester hours |
| Texas and Federal Constitutions | 6 semester hours |
| From two (Mathematics, Science, |  |
| Foreign Language) | 12 semester hours |

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    Institutional prerequisites
    Psychology (may include a course
    in child or human development) 3 semester hours
Lower division prerequisites for
    entrance to selected
    specialization areas Consult program office
*Community service
Academic Specialization
    Secondary P1an I
    24 hours in first teaching field (plus additional upper level
    courses to achleve a 36-hour major for the bachelor's degree) and
    24 hours in second and related teaching field
    Electives 6 semester hours
    Professional Development
        Professional education, junior
        level and above
        12 semester hours
    6 semester hours
    PROFESSIONAL EDUCATION COURSES
Course Description
ED 3315 Multicultural Aspects of Teaching (3 semester hours)
    Problems and issues in multicultural education, using sociological,
historical, and philosophical perspectives.
ED 3321 History of Education in the United States (3 semester hours)
    (Same as History 3365)
ED 3336 Motivation in the Classroom (3 semester hours)
    Behavior modification, group dynamics, and leadership training, as
applied to classroom situations.
ED 3337 Effective Teacher Communication (3 semester hours)
    Training in communicating effectively with parents, colleagues, principals,
and students.
ED 3338 Adolescent Issues (3 semester hours)
    Aspects of adolescent personality and society which have impact on class-
rooms.
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[^9]ED 3339 Instructional Psychology (3 semester credits)
Aspects of learning theory, cognitive, and social psychology that are relevant to classroom instruction.

ED 3340 Evaluation of Students (3 semester hours)
Understanding standardized tests, and developing tests of classroom competencies.

ED 3341 Educating the Young Child (3 semester hours)
Development in early childhood, and its implications for instruction. Includes a practicum.

ED 3342 Cognitive Psychology ( 3 semester hours)
Theory and research on learning, thinking, psycholinguistics, and memory.
ED 3370 Curriculum and Instruction in Mathematics (3 semester hours) Curriculum design and methods of instruction in the mathematical sciences. Includes some work in educational media.

ED 3371 Curriculum and Instruction in the Natural Sciences ( 3 semester hours) Curriculum design and methods of instruction in the natural sciences. Includes some work in educational media.

ED 3375 Curriculum and Instruction In Psychology ( 3 semester hours) Curriculum design and methods of instruction in psychology. Includes some work in educational media.

ED 3380 Curriculum and Instruction in English ( 3 semester hours) Curriculum design and methods of instruction in English. Includes some work in educational media.

ED 3385 Curriculum and Instruction In History ( 3 semester hours)
Curriculum design and methods of instruction in history. Includes some work in educational media,

ED 3390 Curriculum and Instruction in the Social Sciences (3 semester hours) Curriculum design and methods of instruction in the social sciences. Includes some work in educational media.

ED 3367 Curriculum and Instruction in the Visual Arts (3 semester hours) The student will be given the opportunity to demonstrate a level of competence in one or more of the studio arts that will be conducive to the role of the art teacher in the secondary school. The course will also provide opportunity to relate such areas as art history and aesthetics to a perception of art and design to the end that the student will be competent to share with others a valid appreciation of art as expression. ED 3369 Curriculum and Instruction in Theatre Arts ( 3 semester hours) This course covers information and skills needed by the secondary school instructor faced with all aspects of producing the high school play. Consideration will be given to problems of teaching theatre arts in the classroom and through practical production involvement.

ED 3381 Curriculum and Instruction in Foreign Languages (3 semester hours)
This course will examine the most recent developments in modern language teaching-the methods and the materials--especially those suitable for teaching in secondary schools. Students will construct practical approaches to the problems in today's language classrooms, based on personal research and observation.

ED 4380 Curriculum Instruction In Elementary School Music (3 semester hours) Same as MUS 4380. Methods and materials for elementary school music programs. Laboratory experience in teaching songs, Thythms, music listening, and sight reading. Study of curriculum guides and materials.

ED 4381 Curriculum and Instruction in Secondary School Music (3 semester hours)
Same as MUS 4381. Techniques and materials for the general music program in the secondary school. Methods for teaching music as one of the humanities,

ED 4315 Education and Social Change in North America I (3 semester hours)
A study of the social aspects of education; development of institutions for mass schooling; social reform and education; education of blacks and immigrants; social changes and educational development; patterns of school attendance and other related themes. An intensive course in reading and research.

ED 4316 Education and Social Change in North America II (3 semester hours) Continuation of themes studied in the first half of the course. Individual and group research reports. New trends of analysis, new methods and new interpretations from a comparative perspective, Prerequisite: Education and Social Change in North America I.

ED 4341 Mathematics I (3 semester hours)
Provides introduction to teaching of quantitative and mathematics skills, An individualized approach will be used which derives from Plaget's research; approach focuses on action and manipulation on the part of the student, and the development of innovative activities and materials to foster understanding on the part of the teacher. Participants will be required to conduct field activities with children or adults and to construct teaching materials.

ED 4351 Approaches to Developmental Reading ( 3 semester hours)
Topics to be covered are the developmental reading skill sequence, and the following procedures of instruction; methodology, materials, and strategies for individualization.

ED 4352 Reading: Initial Instruction (3 semester hours)
The decoding and comprehension factors included in primary reading instruction will be examined. Various theories of the reading process, as well as methods and materials based on those theories, will be presented. Students will learn to assess the development of decoding skills, to plan further instruction, and to teach basic skills using a variety of approaches.

ED 4385 Philosophy of Education (3 semester hours)
(Same as Philosophy 4385)
ED 4392 Observation and Student Teaching in the Kindergarten (3 semester hours)
Observation of teaching and experience in the preparation of plans and materials for teaching followed by the experience of teaching under the supervision of an experienced kindergarten teacher.

ED 4393 Observation and Student Teaching in the Elementary School (3 semester hours)
Observation of teaching and experience in the preparation of plans for teaching followed by the experience of teaching under the supervision of an experienced elementary school teacher.

ED 4394 Observation and Student Teaching in the Secondary School (3 semester hours)
Observation of teaching and experience in the preparation of plans for teaching followed by the experience of teaching under the supervision of an experienced secondary school teacher.

ED 4396 Observation and Student Teaching in Special Education (3 semester hours)
Observation of teaching and experience in the preparation of plans for teaching followed by the experience of teaching under the supervision of an experienced special education teacher.

ED 4698 Observation and Student Teaching in Speech Pathology and Audiology ( 6 semester hours)
Observation of teaching and experience in the preparation of plans for teaching followed by the experience of teaching under the supervision of an experienced teacher in speech pathology and audiology.

ED 4699 Observation and Student Teaching in the Secondary School (6 semester hours)
Observation of teaching and experience in the preparation of plans for teaching followed by the experience of teaching under the supervision of an experienced secondary school teacher.

## INTERDISCIPLINARY STUDIES

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UT-Dellas has a special interest in, and commitment to, interdisciplinary studies. Many of the degree programs offer the student the opportunity to have an interdisciplinary option within the program. The university also requires that each student participate in six hours of interdisciplinary studies chosen from among the College Courses, College Seminars, and other courses listed in this section or in the approved list available each semester. A booklet will be available each year outlining the topics.
COLLEGE INTERDISCIPLINARY COURSES
IS 3181-3681 College I Interdisciplinary Courses
IS 3182-3682 College II Interdisciplinary Courses
IS 3183-3683 College III Interdisciplinary Courses
IS 3184-3684 College IV Interdisciplinary Courses
IS 3185-3685 College V Interdisciplinary Courses
IS 3186-3686 College VI Interdisciplinary Courses
IS 3187-3687 College VII Interdisciplinary Courses
IS 3188-3688 College VIII Interdsiciplinary Courses
IS 3189-3689 College IX Interdisciplinary Courses
COLLEGE INTERDISCIPLINARY SEMINARS
IS 4181-4681 College I Interdisciplinary Courses
IS 4182-4682 College II Interdisciplinary Courses
IS 4183-4683 College III Interdisciplinary Seminars
IS 4184-4684 College IV Interdisciplinary Seminars
IS 4185-4685 College V Interdisciplinary Seminars
IS 4186-4686 College VI Interdisciplinary Seminars
IS 4187-4687 College VII Interdisciplinary Seminars
IS 4188-4688 College VIII Interdisciplinary Seminars
IS 4189-4689 College IX Interdisciplinary Seminars
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## PHYSICAL INSTRUCTION

The UT-Dallas program in physical instruction is designed to provide experiences in a variety of sport, dance, exercise, and recreational activities. The courses are designed to offer opportunity for physical exercise, increase skill level in specific activities, and as a source of recreation and enjoyment. The program is designed to meet student needs and interests, is voluntary, and is co-educational. Students may repeat any of the courses for credit, for a maximum of three credit hours. The emphasis of the program is in the lifetime sports areas.

PHYS INST 3101 Squash (1 semester hour)
Instruction in the basic shots and their use. Rules and experience in game situations.

PHYS INST 3102 Handball and Racketball (1 semester hour)
Emphasis on acquiring enjoyment, knowledge and skills in handball and racketball. Instruction will vary according to individual ability.

PHYS INST 3103 Beginning Tennis (1 semester hour)
Designed for the beginning player; development of basic strokes, rules of play, scoring.

PHYS INST 3104 Intermediate Tennis (1 semester hour)
Designed for the player who has mastered the basic skills; utilization of strategy and tactics in game playing.

PHYS INST 3110 Modern Dance ( 1 semester hour)
Introductory and intermediate exploration of modern dance as an expressive medium and as an art form. Development of movement and rhythmic skills, including some improvisation and composition.

PHYS INST 3111 Folk and Square Dance ( 1 semester hour)
Introduction to folk and square dances of America as well as other countries. Instruction in basic footwork, body movements and basic configurations. Emphasis is upon folk and square dance as recreational and social activity as well as physical exercise.

PHYS INST 3120 Hatha Yoga (1 semester hour)
Instruction in the basic asanas and their use in building and maintaining muscle tone throughout the body.

PHYS INST 3121 Martial Arts and Self Defense (1 semester hour)
Instruction in basic self defense techniques. Emphasis on judo and karate for self defense and physical exercise.

PHYS INST 3122 Physical Fitness and Conditioning (1 semester hour)
Instruction and participation in weight training and conditioning techniques. Designed to improve muscle tone, flexibility and endurance.

Amend the PREFACE PAGE as follows:

THE BULLETIN OF
THE UNIVERSITY OF TEXAS AT DALLAS

Graduate Catalog Issue 1976[5] - 1977[6]

The benefits of education and of useful knowledge, generally diffused through a community, are essential to the preservation of a free government.

Sam Houston

Cultivated mind is the guardian genius of Democracy and, while guided and controlled by virtue, the noblest attribute of man. It is the only dictator that freemen acknowledge, and the only security which freemen desire.

Mirabeau B. Lamar

Statement on Equal Educational Opportunity
No person shall, on the basis of race, color, national origin, religion or sex, be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity conducted by The University of Texas System or any of its component institutions.
[W士th-respeet-te-the-admieston-and-edueatien-ef-studentsj-with-respeet-te-the avałłabitity-of-student-łoanes-grants,-sehołarshtps;-and-job-opportuntetes, with-чespeet-to-the-emptoyment-and-promotton-of-teaehtng-and-non-teaching personnet;-and-wteh-respeet-to-the-student-and-feeuley-activittes-eondueted on-premises-owned-or-oceupted-by-the-Universtey-The-Hniversity-of-Texas-at Đatłas-shetu-not-disertminate-etther-立n-favor-of-or-agatnet-any-person-on aceount-of-raees-eolors-rełtgtens-ages-sers-or-nationat-origtn.]


## THE UNIVERSITY OF TEXAS AT DALLAS

Officers of Central Administration


Officers of Academic Administration
Carolyn Galerstein, Ph.D. .............................. Acting Dean, General Studies Acting Dean, Arts and Humanities
Aram G1orig, M.D. ............................................. Dean, Human Development Clifton F. Harris, Ed.D. .................. Director, Office of Teacher Education Francis S. Johnson ............................... Acting Executive Dean, Graduate

Studies and Research
 Regina M. J. Kyle, Ph.D. ............... Executive Dean of Undergraduate Studies [Aeting-Deant-Arts-s-Humantites]
Raymond P. Lutz, Ph.D. ... [Aeting] Dean, Management \& Administrative Sciences David Morgan, Ph.D. ........................... Assistant to the Vice president for Academic Abfairs
W. Roy Naugle, M.S. ......................... Director of Admissions and Registrar Claud S. Rupert, Ph.D. .......... [Aeting] Dean, Natural Sciences \& Mathematics John W. Sommer, Ph.D. ....................................Acting Dean, Social Sciences


## Other Officers of Administration

Sandra M. Budreck, M.S. ............................... Director of Student Services David W. Canham, M.A. .................................. Director of Research Support Priscilla Detweiller, Ph.D. ..............Acting Director, Continuing Education and Community Service Robert E. Fielder, Ed.D. . . . . . . . . . . . . . . . . . . . [Diteeten-ef-Gamph-Devetoment] Assistant Director, Office of Teacher Education Millicent Green, B.A. ........................... Director, News and Information Alfred T. Mitchell, B.A., P.C.J. .... University Editor [Absoetate-Dtreeten-of Devetorment-and-umivendity-Retations]
Grady C. Starnes, B.B.A., C.P.A. .................................... Business Manager

Amend the INFORMATION DIRECTORY as follows:

## INFORMATION DIRECTORY




Amend the ACADEMIC CALENDAR for the long session as follows:

> Calendar of the Long Session, 1976-77

## Fall Semester

15 Class Weeks Plus One Week for Final Examinations

| August 25-26 | Wednesday-Thursday. Registration, orientation and advisement |
| :---: | :---: |
|  |  |
| August 27 |  |
|  | holiday. |
| August 30 | Monday. Classes begin. Late registration begins. |
| September 6 | Monday. Labor Day. University holiday. |
| September 15 | Wednesday. Census day and date on which the official enroll- |
|  | ment is taken. |
| September 20 | Monday. Last day for making application for a degree. |
| October 23 | Saturday. Last day for dropping a course with an automatic |
|  | grade of $\mathrm{W}_{\text {- }}$ |
| November 25-27 | Thursday-Saturday. Thanksgiving holidays. |
| December 3 | Friday. Last day for presenting final copies of the Master's |
|  | Thesis or Doctoral Dissertation, approved by Committee, to |
|  | the Graduate Dean. |
| December 8 | Wednesday. Last day of classes. |
| December 9, 10 | Thursday-Saturday - Reading period. |
| December 13-18 | Monday-Saturday. Fall semester final examinations. |
| December 21 | Tuesday. Graduation Day (no public exercises). |

## Spring Semester

## 15 Class Weeks P1us One Week for Final Examinations

| January 11-12 | Tuesday-Wednesday. Advisement and Registration for the |
| :---: | :---: |
|  | Spring Semester. |
| January 13 |  |
| January 28 | Friday. Census day and the date on which the official |
|  | enrollment count is taken. |
| February 2 | Wednesday. Last day for making application for a degree. |
| March 9 | Wednesday. Last day for dropping courses with automatic |
|  | grade of $W^{\text {. }}$ |
| April 4-9 | Monday-Saturday inclusive. Spring Break. |
| April 27 | Wednesday. Last day for presenting final copies of the |
|  | Master's Thesis or Doctoral Dissertation, approved by |
|  | Committee, to the Graduate Dean. |
| April 30 | Saturday. Last day of classes. |
| May 2-3 | Monday-Tuesday. Reading Period. |
| May 4-10 | Wednesday-Tuesday. Spring semester final examinations. |
| May 21 | Saturday - Commencement (Public Exercises). |

The Academic Calendar may be subject to change or modification.
[Gatenday-of-the-teng-Geseten-eq-1975-7976]
[Fa士̇-Gemester]
[15-Głass-Weeks-P士te-One-Week-for-Finat-Enaminatione]

[Gpring-Gemester]



Amend the ACADEMIC CALENDAR for the Summer Session, as follows:


The Academic Calendar may be subject to change or modification.
[Gałendar-of-the-Gummer-Geestont-1976]


## INTRODUCTION

1. Amend the second paragraph of the section, THE MEANING OF GRADUATE EDUCATION, as follows:

The fundamental aspects of the classical university persist in the graduate schools of the modern university. Here are true scholars, dedicated to learning and to the search for truth. [and-so-eonvineed of-the-vaiue-of-thte-attivity-that-they-willingiy-endure-a-mattitude of-discouragementer-stemming-from-the-etuotveness-of-truth;-the-un-eompromietng-erttietem-of-eełteagues 5 -and-the-steptictom-of-soetetyr] The quest for knowledge [thus] leads along a difficult path, requiring great perseverance and mental discipline.
2. Amend the title to the section, ACADEMIC PLAN FOR 1975-76, as follows:

ACADEMIC PLAN [feq-1975-76]
3. Amend the first paragraph of the section, ACADEMIC PLAN, as follows:

In the 1969 Act establishing The University of Texas at Dallas, authority is given to the Board of Regents of The University of Texas System to prescribe courses leading to customary degrees offered at leading American universities and to give degrees at the baccalaureate, master's, and doctoral levels. The Act provided [provides] for continuation of the graduate programs in existence on September 1, 1969; planned expansion of the scope of graduate offerings with the approval of the Board of Regents and the Coordinating Board; and for enrollment of junior and senior undergraduates in September, 1975.
4. Amend the second paragraph of the section, TEACHER PREPARATION AND PROFESSIONAL DEVELOPMENT, as follows:

Prior to their first registration at UT-Dallas, all M.A.T. students are encouraged to visit the Office of Teacher Education for additional information concerning professional teacher certification in support of their professional objectives. It is possible to fulfill requirements for the Professional Certificate concurrently with the earning of the M.A.T. In order to attain this combined objective, the candidate will take nine semester hours of professional education, including three semester hours in multi-cultural studies. The Professional Certificate requires the applicant to hold or be eligible for the Provisional Certificate (before admission to the professional program) and to have had three years of teaching experience (prior to being recommended for the Professional Certificate).
[It-4s-possable-to-fulftul-requirements-for-the-Professfonaz-Certificate coneurrently-with-the-earning-of-a-Masterls-degree-in-Mathematieat-Set-enees;-Seience-Education--Humanities,--fuman--Devełopment--or-Speciat-Edu-eation--As-a-part-of-the-coursework-required-by-the-Individuai-program, the-candidate-for-Professional-Gertiffeatfon-must-inetude-three-semester hours-in-mutti-culeurat-studies;-this-coursework-emphasizes-the-matti-euteurat-eharaetertstics-of-our-soctety-and-the-corresponding-needs-of ehtudren-from-eutturałty-different-backgrounds--The-Professionai-Eerti-£ұeate-requiree-the-applieant-to-hoId-or-be-eligtbłe-for-the-Provisionat Eertiffeate-fbefore-admission-to-the-professionat-program- and to have had-three-years-of-teaehing-experienee-fprifor-to-betng-recommended-for the-Professionat-fertifieatet-]

5．Amend the second and third paragraphs of the section，UNDERGRADUATE PROGRAMS，as follows：

Through the implementation of the academic arrangement spelled out in the preceding section，The University of Texas at Dallas offers［plene－to effer］undergraduate course work and／or degree programs in the following areas［at－the－begtning－ef－the－1975－76－aeademte－year］：

| Anthropology | History |
| :--- | :--- |
| Art | Mathematical Sciences |
| Biology | Music |
| Business and Public | Philosophy |
| Administration | Physics |
| Chemistry | Political Science |
| Classics | Psychology |
| Economics and Finance | Sociology |
| English | Spanish |
| French | Special Education |
| General Studies | Speech Pathology and |
| Geography | Audiology |
| Geosciences | Theater |
| German | Visual Arts |

Information regarding the undergraduate programs is available through the Office of the Director of Admissions．As a general rule，students pre－ paring themselves for admission to The University of Texas at Dallas at the junior level［fn－Fatio－ $\mathbf{7 9 7 5}$ ］should adhere to the basic requirements for a bachelor＇s degree．The University of Texas at Dallas has authori－ zation to offer undergraduate degree programs in Asian Studies，Dietetics and Nutrition，and Russian．These will be implemented over the next several years．

6．Amend the second and third paragraphs of the section，GRADUATE PROGRAMS， as follows：
［The－erganinatien－ef－the－Gkadtate－Pnegぇamb－refleete－programmatie－funetien rather－than－aeademte－departmentaltration－－－The－6radtate－Pネegramb－of－the Untverstty－are－the－admintatrative－and－budgetary－untte－whteh－offer－the g¥aduate－teaehing－and－degreeat－－They－may－be－fnterdfeetpitnary－tn－nature （for－exampte，envirenemntal－setenee）－or－they－may－ite－primartyy－wtehtn one－dtsetpltne－f£or－енаmples－physteotr－－Teachers－are－drawn－£orm－one－or
 Pregtamb－are－reapenstble－£er－the－aeademte，－admintetrative，－and－ftseat aspeete－of－Ghaduate－Phegrams，－－These－administrators－thus－have－the－primary duty－of－seetrg－that－thetr－6九tuate－Phogtamb－attraet－good－eandtdates； Previde－euperier－teaehings－and－preduee－graduates－werthy－of－the－disetpline and－the－tnstitutions］

Since the establishment of the Southwest Center for Advanced Studies，a distinguished and well－recognized program of research has existed on the campus．The nature of this research has ranged widely，from the instru－ mentation for［of］lunar exploration［herdware］to problems in the bio－ chemical repair of animal cells，to the neurological basis of deafness and is now being expanded to include the management sciences，mathemati－ cal sciences，the social and behavioral sciences，and the humanities． Research continues to represent a major thrust of The University of Texas at Dallas．
7. Amend the section, PRESENT GRADUATE PROGRAMS, as follows:

The University of Texas at Dallas is accredited by the Southern Association of Colleges and Schools. All course work and research activity for the Master's and Doctor of Philosophy degrees listed below are presently offered by The University of Texas at Dallas.

```
    [Meleeular] Blology (M.S., Ph.D.)
                        Chemistry (M.S.)
        Communication Disorders (M.S., Ph.D.)
        Environmental Sciences (M.S., Ph.D.)
            Geosciences (M.S., Ph.D.)
            Human Development (M.S., M.A.T.)
            Humanities (M.A., M.A.T., Ph.D.*)
Interdisciplinary [Generat] Studies (M.A., M.S.)[@M\tauG\tauG*)]
    International Management Studies (M.A., Ph.D.)
    Management and Administrative Sciences (M.S.)
                            Management Science (Ph.D.)
Mathematical Sciences (M.S., M.A.T., Ph.D.)
            Physics (M.S., Ph.D.)
            Political Economy (M.A., Ph.D.*)
            Science Education (M.A.T.)
            Special Education (M.S.)
```

For detailed descriptions of these Graduate Programs, see the specific entry under Graduate Programs (beginning on page
*[7he-MтAт-and-MtAtTr-degrees-in-Humantetes-eannot-be-awarded-before-the 1976-1977-aeademe-seesions] The Ph.D. In Humanities cannot be awarded before the 1977-78 academic session and the Ph.D. In Political Economy cannot be awarded before 1978-1979; however, [主mited] course work leading to these degrees may be taken [starting-Septembers-1975].
8. Amend the section, PROJECTED GRADUATE PROGRAMS, as follows:

In expanding the scope of graduate offerings as provided in the 1969 Act of the Texas Legislature, The University of Texas at Dallas does not intend to duplicate graduate offerings which exist in other institutions simply to produce a standard set of degree curricula. Instead, [eon-stotent-wth-eonetratnts-imposed-by-the-reed-for-high-quat tey-faeutty-4n eertatn-baete-dteetplifiees] the University will expand graduate offerings only finto those areas where a need can be shown locally, regionally or nationally.

The University has approval to begin a program in Industrial Biosciences (M.S., Ph.D.) which is proposed to be phased in over the next several academic terms. Approval of the following programs is pending at the Coordinating Board, Texas College and University System:

Chemistry (Ph.D.)<br>Human Development (Ph.D.)<br>Special Education (Ph.D.)

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9. Amend the section, SUMMARY OF THE ACADEMIC PROGRAM STRUCTURE, as follows:

The faculties of the University will furnish intellectual and human
 undergraduate courses, as members of the college faculties providing academic advisement and the required undergraduate interdisciplinary seminars, and as teachers of graduate courses in Graduate Programs,
 his time as a member of one or more research groups involved in applied
 Geaters-fat-Aduaheed-Studtes $]$ This concept is clearly in contrast to the traditional one whereby a faculty member owes his primary allegiance to a particular discipline and department, operating under a department chairman or head.

1．Amend the second，third，fourth，fifth，sixth and seventhparagraphs of the section，LIBRARY，as follows：

Several notable collections have been acquired with［witkin］the assistance of grants and gifts of particular note are the Berkner Collection in science，the Lundell Collection in earth and life sciences and the Green Collection，which deals with Central and South American culture．The total collection of the Library is expected to number 350,000 volumnes by September，1976［ 1975 ］．

More than 2400 ［ $2 \theta \theta \theta$ ］scientific and general journals，newspapers， and serial publications are available in the Library．For many of these，backfiles are maintained on microfilm and in bound form． Since 1973 the Library has been a federal government documents depository as well as a depository of Texas State publications．

The McDermott Library maintains cooperative working arrangements to share library resources with the libraries of the members of the Interuniversity Council of North Texas，a consoritum of academic institutions．

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Through computer terminals，the Library has access to the shared bibliographic data of the Ohio College Library Center，and cooperates statewide in the Texas Information Exchange，an inter－library exchange network among State supported and private institutions．Other library facilities are available on a regional basis through Regional Bibliographic Centers and the Regional Medical Library Program． Nationally，the UT－Daillas Library has access to search－and－exchange facilities of the Library of Congress and to the Smithsonian Scientific




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In addition to the traditional services, the Library provides a variety of developing instructional and media services for the
 вerriee日-que- $\theta$ ffexedr] Audio-visual equipment is supplied for instructional purposes; rental films are secured, and visual materials are produced. The Media Services staff is available to assist in the use of media materials and equipment in the instructional programs.
2. Amend the section, CAMPUS ACTIVITIES PROGRAMS, as follows:

These programs are designed to make free-time activities a valid part of the education process. Students are encouraged to enter activities in the organized student life both for their personal value and for the unique contribution each student can make to the campus





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3. Add a section as follows:

STUDENT CONGRESS
The Student Congress of The University of Texas at Dallas is the officially recognized body of student self-government on campus. The Student Congress was established to serve as the official channel of representing student interests and opinions to the faculty and the administration.

Through various student committees and student representation on University committees, students are involved in almost all forms or campus activities and endeavors.
4. Add a section as follows:

STUDENT TRAVEL BUREAU
The Student Travel Bureau is sponsored by the Student Congress to assist students with their travel plans, both in the United States and abroad. The Bureau maintains a library of information, issues International Student Identification Cards, sponsors charter flights, and plans special vacation packages at reduced rates.
5. Amend the second paragraph of the section, STUDENT ORGANIZATIONS, as follows:

These recognized groups include scholastic honor societies, departmental and professional societies, service clubs, religious groups, and numerous other organizations. Detailed information about this aspect of campus life is available from the Office of Student Services, 1.402 McDermott , and from the various activity advisers.
6. Add a section as follows:

## SPORTS AND RECREATION

The program in sports and recreation includes individual usage of the facilities organized intramurals for individuals and teams, skill instruction, and special clinic sessions.

The University has designed the activities to emphasize lifetime sports and to encourage student participation. Individuals seeking information regarding specific sports or recreational activities should contact the Physical Instruction Staff, 690-2090.
7. Amend the section, COUNSELING SERVICES, as follows:

The Student Counseling Service provides personal, social, and career counseling on both an individual and group basis to enrolled students. The staff consists of counselors, student development specialists, and psychologists. Consulting psychiatrists are available on a referral basis.

Special workshops and programs are offered throughout the year. Examples of the themes of these workshops and programs are aggression/ assertion, self-awareness, leadership development, effective human relations, test anxiety reduction, and career exploration.

All counseling services are confidential. To make an appointment, call 690-2940 or come to McDermott 1.310.

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8. Amend the sections, HEALTH CENTER and HEALTH RECORDS as follows:

## HEALTH SERVICES [GENTER]

The Student Health Service provides routine medical treatment to all regularly enrolled students. Treatment on-campus is on an out-patient basis only. In the event of emergency, ambulance service is available and the Student Health Service physician will treat students at the Richardson General Hospital emergency room. Special clinics dealing with specific medical problems are scheduled throughout the year.

The staff consists of professionally trained medical personnel who provide medical treatment and conduct workshops and seminars．These workshops and seminars deal with such areas as drug and alcohol usage， weight control，nutrition，and smoking．Services include private consultation on various health matters．

All health services are confidential．The Student Health Service is located in McDermott 1.502.

An optional student group insurance plan is available to all students on an annual basis．This plan supplements coverage provided by the Student Health Service，and covers the entire year，even though the student may be off－campus or enrolled for only a portion of the year．








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## ［HEAITH－REGORDS］

Prior to registration，each student will be required to submit：
1．A report of medical history，recorded on the UT－Dallas health form，

2．Proof of immnizations required by law，signed by a physician， and，

3．An up－to－date examination or a signed statement that the student is in good health．

The forms are mailed to each student following formal admission to the University．
9. Amend the section, INTERNATIONAL STUDENTS, as follows:

The Assistant to the Registrar, in the Office of the Director of Admissions and Registrar, is responsible for student visas at The University of Texas at Dallas. All questions regarding student visas should be addressed to her.

Foreign student advising is made available to international students through the Office of Student Services. The foreign student adviser will provide assistance in the interpretation of University policies, campus life and activities, American customs, assistance with personal concerns, insurance and medical problems. A number of international student organizations and social activities are planned during each academic year. Various programs designed to acquaint the student with the campus and the community are also available.

The Host Family Program, sponsored by the Dallas Council on World Affairs, is available to international students while they are attending UID. The host family invites the student to share in family activities, particularly holiday gatherings. Students may request a host family by contacting the foreign student adviser in the Student Services office, McDermott 1.402, 690-2945.

International students who are not proficient in the English language may enroll in special classes in English as a Second Language until their proficiency has been certified. Classes on campus are sponsored by the Effective Techniques Center and individual tutoring may be arranged. Foreign students are required to present evidence that they have adequate health insurance coverage for themselves and their dependents. They may purchase group student health insurance on campus or purchase (in their home country) an individual policy that will provide coverage while in the United States.



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10. Amend the section LIVING ARRANGEMENTS, as follows:

SPECIAL SERVICES [GI\#IHG-ARRAHGEMGNIG]
UT-Dallas does not own or operate student housing facilities.

The Office of Student Services maintains a list of area apartments and other living accommodations available in the community in an attempt to assist students in making suitable living arrangements.

A list of day care facilities in the area is available from the Office of Student Services. This office also maintains information regarding transportation and will assist in the formation of student car pools.



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11. Amend the section, PLACEMENT SERVICES, as follows:

## CAREER PLANNING AND PLACEMENT [SERYIGTS]

The Career Planning and Placement Service is located in the McDermott Library. Students are encouraged to contact this office early in their academic careers in order to utilize the service fully in the development of their long range planning.

The Service maintains a library on a wide variety of career options open to today's graduate. The collection of material includes books and pamphlets on a variety of careers, brochures describing areas of public service, catalogs of major graduate and professional schools, and the literature of companies and agencies. Information is also available on numerous summer training programs, teaching internship and travel programs, and other educational opportunities offered during the summer or vacation periods.

Various workshops and seminars dealing with career choice, resume preparation, and other topics are available during the year for student participation.

The Placement Service assists students who are completing their degrees and looking for employment. An extensive program of visits by representatives of business firms, government, educational and social agencies is available to assist students and alumi who have active credential file will be reproduced and forwarded to interested employers upon request of the student. There is a $\$ 1.00$ fee to cover the costs of reproduction and postage each time the file is reproduced and mailed.

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12. Add sections as follows:

STUDENT DISCIPLINE
At The University of Texas at Dallas campus, the judicial coordinator is primarily responsible for administration of student discipline. Students are referred to the Student Handbook and the Office of Student Services for further information on student standards of conduct and disciplinary actions and procedures.

## LOCKERS

The University has a limited number of lockers available for student use while on campus for storage of books and personal belongings. Students who are interested in the rental of a locker should contact the Office of Student Services during registration. Lockers will be available on a first come, first serve basis and will rent for $\$ 1.00$ per semester.

Lockers in the physical instruction building will be available at no charge to those students involved in credit course work during the semesters in which they are enrolled. The use of athletic lockers by other students will be available on a first come, first serve basis for the rental rate of $\$ 1.00$ per semester.

## EFFECTIVE TECHNIQUES CENTER

The Effective Techniques Center (etc) is the service area devoted to reading, writing, and study skills. Students can improve, extend, or enrich these skills while meeting course demands by selecting from the following organized services:

1. Improvement courses which take approximately 10 hours to complete. Course titles include "How to Become a Less Creative Speller" and "Writer's Workshop;"
2. Vantage points which devote one to two hours to timely topics such as "taking essay tests," "taking objective tests," and "skimming/scanning;" and
3. Self-starting topics which center around the language skills needed for advanced college subjects.

Students are encouraged to contact etc personnel by dropping by the center located on the first level of MeDermott or calling 690-2746.

## TUTORING SERVICES

Students seeking assistance in specific academic areas may engage a tutor by making application at the Information Services Desk on the First Level of McDermott Library. Students are referred to qualified tutors for individual academic assistance.

## CO-CURRICULAR ACTIVITIES

The University of Texas at Dallas recognizes that a balanced program of individual activities which provides an opportunity for the expression and development of student interests will stimulate the student to do well academically and aid in the total development of the person. Activities advisers work with the undergraduate colleges, student organizations, and the all-campus programs to assist students in the planning and execution of cultural, social, and recreational activities for the campus. These programs range from concerts to major and current events, lecture series, and symposiums on major topics.
13. Amend the section, TUITION AND GENERAL FEES, as follows:

As a state-supported institution of higher education, The University of Texas at Dallas is required to comply with all state laws in the assessment and collection of tuition, fees and deposits. The tuition, fees and deposits listed herein are subject to change by subsequent amendments to existing state laws. It is the student's responsibility to establish, prior to iegistration, the correct residence classification. This classification may be determined through the Office of the Director of Admissions and Registrar.

In accordance with state law, students are not entitled to enter class or laboratory until they have registered, and all tuition, fees and deposits have been paid. The University cannot accept personal checks for amounts in excess of the total registration cost.

## Tuition

Pursuant to Chapter 54, Texas Education Code, each student who registers is required to pay tuition appropriate to his residence classification, as set forth in the following table, according to the number of semester hours for which registration is completed.

REGULAR SESSION AND
12 WEEK SUMMER TERM

| $\frac{\text { Semester }}{\text { Hours }}$ | $\frac{\frac{\text { Texas }}{\text { Resident }}}{\text { Students }}$ | Non-Resident <br> U. S. Citizens and Foreign Students* $\frac{\text { Enrolled Āf } \overline{t e r}}{6-19-75}$ $6-19-75$ <br> per Note 1. | $\frac{\text { Foreign Students* }}{\frac{\text { Enrolled Prior to }}{}} \frac{\frac{6-20-75 \text { and }}{\text { Enrolled }}}{\text { per Note } 2 .}$ |
| :---: | :---: | :---: | :---: |
| 1 | \$50.00 | \$ 40.00 | \$200.00 |
| 2 | 50.00 | 80.00 | 200.00 |
| 3 | 50.00 | 120.00 | 200.00 |
| 4 | 50.00 | 160.00 | 200.00 |
| 5 | 50.00 | 200.00 | 200.00 |
| 6 | 50.00 | 240.00 | 200.00 |
| 7 | 50.00 | 280.00 | 200.00 |
| 8 | 50.00 | 320.00 | 200.00 |
| 9 | 50.00 | 360.00 | 200.00 |
| 10 | 50.00 | 400.00 | 200.00 |
| 11 | 50.00 | 440.00 | 200.00 |
| 12 | 50.00 | 480.00 | 200.00 |
| 13 | 52.00 | 520.00 | 200.00 |
| 14 | 56.00 | 560.00 | 200.00 |
| 15 | 60.00 | 600.00 | 210.00 |
| $\frac{\text { Each }}{\text { Additional }}$ |  |  |  |
| A student who registers in absentia shall pay a registration fee of $\$ 15.00$ |  |  |  |

SUMMER SESSION (Six-Week Term)

|  | Texas | $\frac{\frac{\text { Non-Resident }}{\text { U.S. Citizens and }}}{\frac{\text { Foreign Students }}{}} \frac{\text { Enrolled After }}{}$ | $\frac{\text { Foreign Students* }}{\text { Enrolled Prior to }}$ |
| :---: | :---: | :---: | :---: |
| Semester | Resident | 6-19-75 | $\frac{6-20-75 \text { and }}{\text { Enrolled }}$ |
| Hours | Students | per Note 1. | per Note 2. |
| 1 | \$25.00 | \$ 40.00 | \$100.00 |
| 2 | 25.00 | 80.00 | 100.00 |
| 3 | 25.00 | 120.00 | 100.00 |
| 4 | 25.00 | 160.00 | 100.00 |
| 5 | 25.00 | 200.00 | 100.00 |
| 6 | 25.00 | 240.00 | 100.00 |
| 7 | 28.00 | 280.00 | 100.00 |
| 8 | 32.00 | 320.00 | 112.00 |

Each
Addítional
$\begin{array}{llll}\text { Hour } & 4.00 & 40.00 & 14.00\end{array}$

A student who registers in absentia shall pay a registration fee of \$15.00
*Subject to Rules and Regulations as promulgated by the Coordinating Board, Texas College and University System, and The Board of Regents of The University of Texas System. Note 1. - Foreign students enrolled for the first time after June 19, 1975 in The University of Texas at Dallas who are citizens of a country that charges citizens of the United States tuition at publicly funded academic institutions more than $\$ 200$ per semester shall be charged the same tuition as required of other non-resident students ( $\$ 40$ per semester credit hour), EXCEPT THAT, where financial need is demonstrated, lower fees as stated in Note 2 shall be applicable. Note 2 . - Foreign students enrolled for the first time prior to June 20, 1975, or after June 19, 1975 BUT who are citizens of a country that charges citizens of the United States tuition at publicly funded academic institutions an amount equal to or less than $\$ 200$ per semester shall be charged \$14 per semester hour but not less than $\$ 200$ per semester or 12 -week summer session and not less than $\$ 100$ for a 6 -week summer teria.

TUITION－AND－GENHRAI－TIFE］ ［REGUAR－SESSION－AND－12－WEFK－SLATMER－HETAM］

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| ［Semester | Resident | Hea－Resident | Fereigm |
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|  | -50 ¢ $\theta \theta$ | －－－80＊$\theta \theta$ | $-2 \theta \theta$－$\theta \theta$ |
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| 5 | $-5 \theta+\theta \theta$ | －－－－－20日＊$\theta \theta$ | $-2 \theta \theta$ т $\theta \theta$ |
|  | $5 \theta$－ 80 | －－－－24＊＊$\theta$－ | $--2 \theta \theta$－$\theta \theta$ |
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|  | $5 \theta$－$\theta \theta$ | －－－－－36ө＊$\theta$－ | $--2 \theta \theta$－$\theta \theta$ |
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## General Fees

Every Student who registers in The University of Texas at Dallas，unless registered in absentia，shall pay the following fees：

REGULAR SESSION AND
12 WEEK SUMMER TERM

|  |  | Student |
| :---: | :---: | :---: |
| Semester | Student | Service |
| Hours | Use Fee | Fee |
| 1 | \$ 6.00 | \$ 2.50 |
| 2 | 12.00 | 5.00 |
| 3 | 18.00 | 7.50 |
| 4 | 24.00 | 10.00 |
| 5 | 30.00 | 12.50 |
| 6 | 36.00 | 15.00 |
| 7 | 42.00 | 17.50 |
| 8 | 48.00 | 20.00 |
| 9 | 54.00 | 22.50 |
| 10 | 60.00 | 25.00 |
| 11 | 66.00 | 27.50 |
| 12 | 72.00 | 30.00 |
| 13 | 78.00 | 30.00 |
| 14 | 84.00 | 30.00 |
| 15 | 90.00 | 30.00 |
| Each |  |  |
| Additional |  |  |
| Hour | 6.00 | -0- |

SUMMER SESSION (Six-Week Term)

| $\frac{\text { Semester }}{\text { Hours }}$ | $\frac{\text { Student }}{\text { Use Fee }}$ | $\frac{\text { Student }}{}$ |
| :---: | :---: | :---: |
| 1 | $\$ 6.00$ | $\frac{\text { Service }}{\frac{\text { Fee }}{}}$ |
| 2 | 12.00 | $\$ 2.50$ |
| 3 | 18.00 | 5.00 |
| 4. | 24.00 | 7.50 |
| 5 | 30.00 | 10.00 |
| 6 | 36.00 | 12.50 |
| 7 | 42.00 | 15.00 |
| 8 | 48.00 | 15.00 |
| Each |  | 15.00 |
| $\frac{\text { Additional }}{\text { Hour }}$ |  |  |

A Medical Service Fee of $\$ 15.00$ for each semester of the Long Session and Twelve Weeks Summer Term, or $\$ 7.50$ for each Six-Week Term of the Summer Session shall be assessed each student who enrolls, unless such student is registered in absentia.

14．Amend the section，REFUND OF TUITION，as follows：
Refund of Tuition and Fees
Upon notification of official withdrawal from the Director of Admissions and Registrar，the business office shall refund tuition and applicable fees as follows：

For the Long Session（Fall and Spring Semesters）and 12－Week Summer Term：
（a）before the first week of class， 100 percent；
（b）during the first week of class work， 70 percent of the applicable portion of the tuition and applicable fees；
（c）during the second week， 60 percent；
（d）during the third week， 40 percent；
（e）during the fourth week， 20 percent；
（f）during the fifth week and thereafter，nothing．
For the Six－Weeks Summer Term：
（a）before the first day of class， 100 percent；
（b）during the first three days of class work of a six－weeks term，a refund of 60 percent of the applicable portion of the tuition and applicable fees；
（c）during the fourth，fifth and sixth day， 50 percent；thereafter， nothing．
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A student who registers at the beginning of the Summer Term for first and second－term courses and who withdraws prior to the beginning of the second six weeks term，will be refunded all fees applicable to the second term．

A student who enters the Spring Semester before receiving Fall Semester grades, and who is required to withdraw because of failure in the work of the Fall Semester, will have all fees for the Spring Semester refunded.

Cash refunds will not be made to the students who request refunds. Instead, refund checks will be mailed to the address left with the


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No refunds will be granted unless application is made within one year after official withdrawal.
15. Delete section, LATE REGISTRATION CHARCE, as follows:



16. Amend section, SUPPLEMENTARY FEES FOR FIELDTRIPS, as follows:

As a general rule, students are expected to furnish their own transportation, food, and lodging for required field trips. In the event a University vehicle is used for transportation, a supplementary transportation fee will be assessed. The amount of the transportation fee will vary depending on the destination of the field trip. Students will be advised of the transportation cost associated with a particular course at the time of registration, and appropriate transportation fees will be assessed at that time. Refund provisions do not apply to this fee.
17. Delete section, CHANGE OF SCHEDULE FEE, as follows:
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18. Amend section, GRADUATION FEE, as follows:

A fee of $\$ 8.00$ is charged for cap and gown rental and each degree candidate pays a $\$ 6.00$ diploma fee.





19. Add sections as follows:

Supplementary Fees for Individual Music Instruction
If you are registered for a course, or courses, in music where individual teaching or coaching is the usual method of instruction, you will pay a fee in addition to the regular tuition. For those courses titled Individual Instruction in Performance, the fee is $\$ 30.00$ per semester or per Summer Session ( 12 weeks). For courses titled Advanced Performance Coaching, the supplementary fee is $\$ 15.00$ per semester or per Summer Session (12 weeks).

Supplementary Fees for Use of Practice Room
If you are registered for courses titled Individual Instruction in Performance, a supplementary fee of $\$ 5.00$ per semester or Summer Session (l2 weeks) will be charged for the use of a practice room for one hour per day. The fee for use of the practice room, two hours per day, will be $\$ 10.00$ per semester or Summer Session (12 weeks).

Supplementary Fees for Certain Art Classes
Supplementary fees will be charged to cover the cost of materials in certain studio art courses. For those courses listed in the catalog under the rubric Studio Arts, the fee is $\$ 10.00$ per semester or Summer Term ( 6 weeks). Except for those courses involving photography, a fee of $\$ 10.00$ per semester or Summer Term ( 6 weeks) is also charged for courses listed under Visual and Environmental Design. The fee is $\$ 15.00$ per semester or Summer Term ( 6 weeks) for photography courses.

Laboratory Fees for Courses in Computer Science
For all courses in computer science, a laboratory fee of $\$ 5.00$ per semester or Summer Term ( 6 weeks) will be charged.
20. Amend the section, FINANCIAL AID, as follows:

FINANCIAL AID AND STUDENT EMPLOYMENT
General
The University has made available to its students several sources of financial assistance. Following is a summary of the types of assistance available. Many of the programs are subject to change without notice by the State or Federal government. Students are encouraged to contact the Coordinator of Financial Aid and Placement with questions or requests for application materials.
A. Texas Public Educational Grant

Under an Act of the 64 th Texas Legislature a grant program was established to provide financial assistance to students. The program is funded by taking twenty-five cents out of each hourly
charge for resident students and $\$ 1.50$ per hour for each non-
resident student. To apply, a student must submit either a
Student's Financial Statement or Parents' Confidential Statement.

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Scholarships
1．State Scholarships and Tuition Waiver Programs There are several scholarship programs available which are funded by the State of Texas．It is recommended that all students who are residents of the State contact the Coordi－ nator of Financial Aid and Placement for a copy of the pamphlet entitled＂Financial Aid for Texas Students［s］＂［This－pemqhze屯］ which provides the criteria for several State funded scholarship and tuition waiver programs．


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2．Private Scholarships

There are several privately－funded scholarship programs avail－ able to students．Interested students should contact the Coordinator of Financial Aid and Placement for specific infor－ mation and application forms for the following scholarship funds：

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There are several low interest loan programs available to graduate students. Repayment of these loans will begin nine months after the student graduates or when the student's enrollment is less than 6 hours a semester.

1. National Direct Student Loan

This program provides a combination of Federal and Institutional funds to be loaned at three percent interest to eligible students. The maximum that can be borrowed from this program is $\$ 10,000$ for the combined undergraduate and graduate education. The minimum rate of repayment is $\$ 30$ per month. To apply, a student must submit a Student's Financial Statement.
2. Hinson Hazlewood College Student Loan Progrann

To apply for this loan the student must be a legal resident of Texas, be accepted for enrollment or enrolled for at least 6 semester hours, meet the academic requirements of the institution, and demonstrate financial need. The current interest rate for this program is seven percent per annuni. Students may borrow up to $\$ 1,500$ per nine month academic year and $\$ 500$ for summer school. The maximum amount which may be borrowed under this program is $\$ 7,500$. Repayment begins nine months after the student ceases to be enrolled for at least 6 hours per semester. Minimum repayment is $\$ 30$ per month and the repayment period may


3. Federally Insured Student Loan Program

Funds from this program are made available to the student from lending institutions such as banks, savings and loan assocciations, and credit unions. The loans are made at seven percent interest and the maximum that can be borrowed for one academic year is $\$ 2,500$. The total amount that can be borrowed for a student's undergraduate and graduate education is $\$ 10,000$. If the applicant's parents or family's adjusted gross income is less than $\$ 15,000$ per year, the Federal government will pay the seven percent interest per year on the loan while the applicant is attending school for at least 6 hours per semester. [Te



4．Other Loan Programs
The Financial Aid and Placement Office maintains a listing of loan funds which are available from other sources such as pri－ vate foundations．Students are encouraged to visit the Office of Financial Aid and Placement to review the intormation regard－ ing these loan programs．
$\frac{D_{0}}{\left[G_{4}\right]}$
Through this program，funds are made available to students for emergency expenses．The loans from this prograrr are to be repaid within the semester they are made．Contributiors to these funds have been made by Mrs．Lloyd V．Berkner，the Kiwanis Club of Richardson and the Richardson Savings and Loan Associatior．

E．Employment Opportunities
［ ${ }_{\mathbf{T}}$ ］
The University will provide a variety of part－time employment opportunities for graduate students including assistantships，the College Work Study program and institutional employment．Students interested in graduate assistantships should apply to the Head of their Graduate Program．Students interested in applyine for the College Work Study program must submit a Student＇s Financial．Iitate－ ment to the Office of Financial Aid and Placement．［IAfeæmetief
 もАе－Reqвөннеま－Өきfiee．］

F．Fellowships
［五］

The Financial Aid and Placement Office maintains a listing of many sources of fellowships for graduate education．［Iatefested－studerts



## ADMISSION TO THE GRADUATE PROGRAMS

1. Amend the introductory material as follows:

Prospective students seeking admission should write to the Director of Admissions. An application form is included at the back of this catalog. When completed, it should be returned to the Director of Admissions. Official transcripts of all academic work beyond high school are required. STUDENTS ARE URGED TO APPLY AS EARLY AS POSSIBLE [FOR-ENROELMENT THE-F@IEOWING-JANEARY--JENE- $\theta$ R-GEPTEMBER]. Address inquiries to: Director of Admissions and Registrar, or to a specific Program Head, The University of Texas at Dallas, P.o. Box 688, Richardson, Texas, 75080.

The requirements for admission to Graduate Study are: [ $\dagger$ 壬t- $\mathbf{t s - 4 m p o r t a n t}$ thet-studente-reeogntae-that-addttienat-requirements-must-be-met-te quatufy-for-admiesten-to-a-Graduate-Begree-Program子-]

1. A Bachelor's Degree or its equivalent from an accredited institution in the United States, as determined and approved by the Executive Dean for Graduate Studies [Gtudy].
2. Fluency in English. Foreign students must submit scores on the Test of English as a Foreign Language (TOEFL). (See page [z8]).

The requirements for admission to a Graduate Degree Program are:

1. Admission to Graduate Study.
2. A grade average of $B$ or better on upper-division (junior and senfor level) and graduate work already taken in the student's major field and related fields.
3. Adequate subject preparation for the proposed graduate major.
4. Students are encouraged to take the Graduate Record Examination administered by the Educational [Edueatien] Testing Service (ETS) and to submit the results as supplementary evidence. This examination is required of all applicants seeking research and/or teaching assistantships. In addition, certain graduate programs also require the GRE for admission. Students who have large numbers of ungraded courses on their undergraduate transcript should also take the GRE. Students applying for the Graduate Program in Management and Administrative Sciences or International Management Studies must submit scores on either the GRE or the Graduate Management Aptitude Test, (GMAT). [Admtesions-fest for-Graduate-8tudy-in-Buetness-(AFGGB)•] (See page [z8]). The Graduate Management Aptitude Test is recommended.
5. Acceptance by the Committee on Graduate Studies.
6. Amend the section, ADMISSION TEST FOR GRADUATE STUDY IN BUSINESS, as follows:

The Graduate Management Aptitude Test (GMAT) [Admferton-Fest-for-Gradate Exudy-in-Business-fAfGGBł] is a three-and-a-half hour aptitude test designed to measure certain mental capabilities important in the study of business at the graduate level. A [satfefaetery] graduate examination (GRE or GMAT) score must be submitted by every applicant to the Graduate

Program in Management and Administrative Sciences or International Management Studies at The University of Texas at Dallas. All correspondence regarding registration, test centers, admission tickets, and score reports should be addressed to: Admission Test for Graduate Study in Business, Educational Testing Service, Box 966, Princeton, New Jersey 08540.

All candidates are advised to take the test as early as possible. Admissions decisions are generally made in the spring; therefore, prospective students are urged to take the examination no later than the February test date in the year prior to their anticipated admission.

Applicants should specify by both institution and code that the test score be sent to:

| Institution | Code |
| :--- | :--- |
| The University of Texas at Dallas | R-6897 |

## GENERAL ACADEMIC REGULATIONS

## GRADUATE PROGRAMS

1. Amend the section, COURSE NUMBERING SYSTEM, as follows:

All courses are identified by a four-digit number preceded by the name (or abbreviation) of the Program. Courses beginning with the number 5 are graduate courses that are [w $\ddagger \pm 1-b e]$ available to selected advanced undergraduates; [ $4 n-1975$; ] these courses are generally of a broad or introductory nature. Courses numbered 6000 and above are, and will be, open only to graduate students; these are generally advanced courses. The second digit of the course number identifies the credit hour value, while the last two digits give the course a unique number.
2. Amend the section, GRADES AND GRADE-POINT AVERAGE, as follows:

Grades used are: A. B. C. F. P[S] (Pass[aetifetetory]), [E-funsatisfetery) $\%$ ] $X$, (incomplete), [NG-fnen-eredtet: $W$ (withdraw[n] and AU (audit).

Grade points are computed on the following basis: A (4 points per semester hour), $B$ (3), $C$ (2), $F(0)$. The grades $P_{2} X$, and $W$ and $A U$ for audit
 receipt of the grade $F$, the new grade will be used in computing the grade point average. The symbol $X$ is reported when the student has not completed all the assignments in a course before its conclusion. Upon completion of the required work, the symbol $X$ may be converted into a letter grade by the instructor if such conversion is made within one calendar year after the filing of the symbol $X$. If not so changed within this time, the symbol $X$ will change to $F$.

Thesis and dissertation receive letter grades only. Students taking Thesis or Dissertation courses, may, at the option of the instructor, be given a grade of $X$, which grade will not be changed until the student has completed his thesis or dissertation, at which time grades will be submitted for all such courses. Students taking research related to thesis or dissertation, may, at the option of the instructor, be given a grade of $X, \underline{P}[G]$, or $E[H]$, as appropriately determined for the time period.

Graduate students may choose, in any course except thesis or dissertation, to be graded either by letter grading (A, B, C, F) or by pass-fail grading ( $P-F)[f(G-U)]$. However, an irreversible decision in this respect must be made by each student no later than the close of registration. In any course in which letter grades are given to one or more students, any student wishing to take the course on a pass-fail basis must obtain the permission of the Instructor and the Graduate Adviser, and be registered accordingly.

The degree candidate is required to have an overall average of at least 3.0 in all work taken in graduate status at The University of Texas at Dallas.

No more than 20 per cent of the hours for any master's degree may be taken on a Pass-Fail ( $P-F)[S-\mathbb{H}]$ ] basis. Since there is no specific number of semester hours designated for the doctoral degree, the number of semester hours taken on a Pass-Fail (P-F) [G-Zt] basis is not 1imited by the 20 per cent maximum designated for the master's degree.
3. Delete the section on CONTINUOUS REGISTRATION:

## [Gontifteue-Regtetration

Đegree-eandtdates-are-expeeted-to-matntain-continuous-regtstratton-untix
ati-degree-requirements-are-satisfted;--ftudents-who-heve-eompłeted
course-registration-tinetuding-the-thesist-must-matntatn-eontinuous-re-
gistrationz-By-fatifng-to-regioter-for-one-semester-hour-or-more-a-
student-breaks-hts-regiatration-and-must-be-re-admitted---A- "re-admitted
studentㅣ-ts-required-to-satisfy-the-euriteufum-requiremente-existing-at
the-time-of-the-re-admiseton--6tudento-must-be-registered-during-the
reeeiting-guidance-towerd-these-or-disuertations;-or-are-ewpeeting-te
graduate-at-the-end-of-the-Gumer-Sessient]
4. Amend the section, Veteran's affairs, as follows:

The VA Representative [GZerk] in the Office of the Director of Admissions and Registrar is responsible for Veteran's benefits. All questions regarding veterans' benefits should be so addressed.

NOTE: Veterans are responsible for notifying the VA Representative [G7erk] of their desire to enroll for benefits.
5. Amend the section, STUDENT VISAS, as follows:

The Assistant to the Registrar [ $¥$ tsa-G7erk] in the Office of the Director of Admissions and Registrar, is responsible for processing student visas at The University of Texas at Dallas. All questions regarding student visas should be so addressed.
6. Amend the section, ADDING AND DROPPING COURSES AND WITHDRAWAL, as follows:

Any student wishing to change his/her class schedule, or course enrol1ment, or to initiate withdrawal from the University or from a course, should follow this procedure:

1. Secure the appropriate form from the office of the Director of Admissions and Registrar.
2. To add a course consult with and secure the approval of the graduate adviser.
[z:--Gonsutz-wtth-and-seeure-approvat-of-the-Graduate-Adviser-for-hts Program:]
3. To drop a course(s) prior to mid-semester, consult with and secure the approval of the graduate adviser, in order to receive a grade of W in the course.
[3r--A-яもudent-may-dzop-a-ceurse-before-mid-semester-wtth-a-grade-o£ W-after-counseltng-with-the-tnstruetor-of-the-courser-After mid-semester--a-student-beeomes-reaponstbte-for-the-eourse-and may-drep-the-eouroe-with-a-grade-of-W;-if-pasetng-and-F-if fatunes]
4. After mid-semester, the student becomes responsible for the course. Any circumstances that are unusual and that would justify dropping a course(s) with a grade of $W$ must be approved by the Executive Dean of Graduate Studies.
[4т--A-धtudent-whe-ftnde-tt-neeessary-to-wthntraw-from-the-Univefaity during-a-semester-must-arrange-for-his-offietat-withdrawaf through-the-Graduate-Adviser-and-Registrar--Any-other-proeedure
 gisteredr]
5. Any other drop/withdrawal procedure other than listed in items 3 and 4 above may lead to fallure in all courses for which the student is registered.
6. If a student withdraws from The University of Texas at Dallas or
[5r] transfers to another institution, he or she may re-enter the University only on the basis of an application for re-admission accompanied by a transfer of credit from all institutions attended after leaving The University of Texas at Dallas. This regulation does not apply to students absent during the Summer Session.
7. Amend the section, RESIDENCE REQUIREMENTS, as follows:

All students must take at least 18 semester hours at The University of Texas at Dallas to qualify for a University of Texas at Dallas degree. A student must be registered in the semester in which he or she graduates from The University of Texas at Dallas.

Students must be registered during the Summer if they are taking courses, or taking required examinations, or receiving guidance toward thesis or dissertations, or are expecting to graduate at the end of the Summer Session.
8. Amend the section, TRANFER OF CREDIT, as follows:

Ordinarily, all work for the Master's Degree must be done at The University of Texas at Dallas. At the graduate level, all general academic institutions in The University of Texas System may, by a procedure established by the institution head, accept credit of equivalent course level from other institutions in the System. Credit for graduate courses taken outside The University of Texas System can be transferred only if approved by the Graduate Adviser and Executive Dean of Graduate Studies [the-Program-Gemmiteeten-Graduate-6tudtesj] and is normally limited to a total of 6 semester hours; transfer of more than 6 hours' credit also requires approval of the Graduate Dean.

## PROCEDURES AND REQUIREMENTS

FOR GRADUATE DEGREES

1. Amend Item 6 of the section, MASTER'S DEGREE, as follows:
2. Filing, in the office of the Graduate Dean by the required date as listed in the Calendar of the Long Session of 1976-77 and Calendar for the Summer Session, 1977 [duzing the-fingt- $\mathbf{1 5}$ eałendar-days-of-the-finel-semester-or-furst-eix-days-ef-the ftnat-summer-term] (a) a Diploma Name Card, (b) an Application for Graduation, and (c) a graduation fee receipt.
3. Amend Item 8 of the section, DOCTOR OF PHILOSOPHY, as follows:
4. Filing, in the office of the Graduate Dean by the required date as listed in the Calendar of the Long Session of 1976-77 and Calendar for the Summer Session, 1977 [durtng-the-ftrst- 15 eatendar-days-of-the-fintz-semester-or-first-stn-days-of-the ftnel-summer-term] (a) a Diploma Name Card, (b) an Application for Graduation, and (c) a graduation fee receipt.
5. Amend the section, FOREIGN LANGUAGE REQUIRED, as follows:
6. Unless otherwise stated in specific Program requirements, all [Aty] doctoral programs have a minimum requirement of proficiency in one relevant foreign language. Specific requirements beyond this minimum are outlined in information on each Program.
7. Minimum foreign language requirements can be satisfied by passing an examination approved by the Dean.
8. Minimum foreign language requirements may be waived by the Dean upon special petition by the appropriate Graduate Program committee on behalf of the candidate.
9. Amend the section, OBJECTIVES, as follows:

The Graduate Program in Biology is presently centered in the area of Molecular Biology. It is expected that other curricular tracks will be added in the near future. The Master of Science degree provides students with the fundamentals of the molecular approach to biological problems and with an introduction to the methodology of research in this area. The Doctor of Philosophy degree is designed for students who show originality in research; it prepares them for research positions in governmental and industrial laboratories, and for academic careers.
2. Amend the section, PROGRAMS, as follows:

First-year students will normally complete a body of Core Courses which [thet] emphasize fundamental aspects of quantitative biology, biological chemistry, physical chemistry of macromolecules, molecular genetics, and cell biology. Students may then proceed to advanced course work in any of the four general areas of Biological Chemistry, Genetics, Biophysics, and Cell Biology. All elective courses are open to any student qualified to take them, but it is expected that students will specialize in one of these four areas.

Research may be undertaken on problems related to enzymes of nucleicacid and protein metabolism; structure and physical chemistry of polynucleotides, nucleic acids, and viruses; chemistry of enzyme active sites; DNA - cell membrane interaction; action of psychoactive compounds on membranes of neural and non-neural cells; spectroscopic probes of metal ion-macromolecular interaction; structure and function of genetic elements; gene function in viruses and microorganisms; the mechanism of recombination; the cell cycle of eukaryotes; [бежняд eyełe íf yeart;
 chemistry and photobiology.

With permission a certain number of elective courses may be chosen from other programs. Additional elective courses will be made available as the need arises. Electives shown will usually be offered only one semester per year and in some cases only once every other year.
3. Amend the section, SPECIFIC DEGREE REQURREMENTS, as follows:

For full participation in the graduate program in [Mełeeqzay] Biology, the student should have a good background in calculus, general physics, organic chemistry, and general biology, including genetics. Entering students not having this background should expect to take some additional course work in their first year or in the summer immediately preceding.

Upon satisfactory completion of the Core Courses (and ffor prospective Ph.D. candidatest the written Preliminary Examination), the student will enter either an M.S. program or a Ph.D. program. A Supervising

Professor will than be appointed for each student, based upon mutual agreement between student and faculty. Shortly thereafter, the Graduate Dean will appoint a Supervising Committee, with the Supervising Professor as chairman, which will help the student plan his elective course curriculum and will oversee his research and thesis or dissertation. The Supervising Committee will normally have three faculty members (for Ph.D. candidates, usually four members plus a member from an academic institution other than The University of Texas at Dallas).

Specific Requirements for M.S. Degree: Requirements for granting of the Master of Science degree include the general ones (see "Procedures and Requirements for Graduate Degrees", page [35]). Theses may reflect either laboratory or library research, or both; this will be determined by the student's Supervising Committee.

Specific Requirements for Ph.D. Degree: Requirements for granting of the Doctor of Philosophy degree include the general ones (see "Procedures and Requirements for Graduate Degrees", page [35]). Students seeking the Ph.D. [in-Meleeutar-Bielegy] are required to pass a written Preliminary Examination after the end of the second semester, at which time the Core Courses should have been completed. Approximately one year thereafter, the student will take an oral Qualifying Examination to determine his fitness to undertake dissertation research. A Dissertation Defense will be conducted after the dissertation has been written. There is no foreign language requirement.
4. Amend section heading as follows:
[MOLEGULAR] BIOLOGY COURSES
5. In the section, CORE CURRICULUM COURSES, amend courses as follows:

Laboratory instruction in biological, biophysical, and biop chemical techniques. Supplementary lectures and demonstrations (2-10) (P-F grading) [ $t(2-4\rangle]$
6. In the section, COLLATERAL COURSES, amend courses as follows:

Methods in Molecular Biology II (5 semester hours) Staff Biochemical and biophysical experiments in molecular biology. Individual laboratory instruction, demonstrations and lectures. (2-6) (P-F grading)

Methods in Molecular Biology III (5 semester hours) Staff Biological experiments in molecular biology. Individual laboratory instruction, demonstration and lectures. (2-6) ( $\mathrm{P}-\mathrm{F}$ grading)
7. In the section, SCIENCE EDUCATION (M.A.T.) SUPPORT COURSES, add the following courses:
Modern Biology (3 semester hours)

| A survey of some central areas of modern biology. Aspects |
| :--- |
| of molecular genetics, bacterial and animal virology, cell |
| biology and neurobiology. | . $\quad$.


8. Amend the section, TOPICS IN BIOLOGICAL CHEMISTRY, as follows:

Bremer, Marsh [Hawrie], Patrick, Sherry, Thompson, Werbin
9. In the section, SPECIAL ELECTIVES, under TOPICS IN BIOLOGICAL CHEMISTRY, amend courses as follows:
$\frac{7413}{[6477]} \frac{\text { Research Seminar in Gene Expression }}{\text { [Trafberiptiea-Өf-Beeteriepkege-Tewfietee] } \quad \text { Bremer }}$
10. Amend the section, TOPICS IN CENETICS, as follows:

Clowes, [Gutzex, Gutz], Harm, Kemper
11. In the section, SPECIAL ELECTIVES, under TOPICS IN GENETICS, delete courses as follows:





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12. In the section, GENERAL ELECTIVES, under TOPICS IN BIOPHYSICS, amend course as follows:

13. In the section, SPECIAL ELECTIVES, under TOPICS IN BIOPHYSICS, add courses as follows:

6432 Developments in Electron Microscopy (4 semester hours) Lang Current research involving electron microscopy of macromolecules. (2-4)

> 7439 Research Seminar in Biophysics ( 4 semester hours) Optical properties of macromolecules (absorption and circular dichroism). Structural alterations in DNA and RNA and the resulting biological effects produced by chemicals, and ultraviolet, visible, and ionizing radiations. Repair processes in cells and viruses, and their relation to recovery (S-U grading) (4-0)
14. Amend the section, TOPICS IN CELL BIOLOGY, as follows:

Bremer, [Gut¥eæ], Guttes, [Guts], [Hew¥ís], Jagger, Rupert
15. In the section CENERAL ELECTIVES, under TOPICS IN CELL BIOLOGY:
a. Delete the following course:





b. Add the following course:

7341 Eukaryote Virology ( 3 semester hours)
$\frac{\text { Survey of viruses of mamalian, plant, and insect tissues, }}{\text { including material from the current literaturc on animal }}$
$\frac{\text { tumor viruses, potential human tumor viruses, mammalian viral }}{\text { fenetics, and mechanisms of viral replication and viral }}$
oncogenesis. $(3-0)$

## GRADUATE PROGRAMS <br> GRADUATE PROGRAM IN CHEMISTRY <br> (M.S.)

1. Amend the section, OBJECTIVES, as follows:

The Master of Science degree is designed to prepare students for [ $\%$ ] (1) positions in industry and research or analytical laboratories, [ $\%$ ]
(2) further training in related scientific fields, [+] or (3) further training in chemistry. The successful degree candicate will have demonstrated broad knowledge via his coursework in chemistry, and initiative and research proficiency via the development, presentation, and defense of a thesis.
2. Add to the section, PROGRAMS, the following:
J. P. Ferraris: Organic solid state and polymer chemistry. Design, synthesis, and characterization of organic charge transfer materials. Investigation of transport, optical and magnetic properties of organic metals and semiconductors.
C. A. Parr: Theoretical reaction and molecular dynamics. Molecular mechanics and potential energies. Computer graphic studies.
3. Amend the section, MASTER OF SCIENCE, as follows:

All M.S. students in Chemistry are expected to demonstrate fundamental knowledge of lecture and laboratory skills by successfully completing the following courses: Chem. 5431, Advanced Organic Chemistry; Chem. 5341, Advanced Inorganic Chemistry; Chem. 5415, Advanced Physical Chemistry; Chem. 5352, Advanced Analytical Chemistry; Chem. 7451, Laboratory Techniques in Analytical Chemistry; and Chem. 7431, Laboratory Techniques in Organic Chemistry (or Chem. 7461, Laboratory Techniques in Biological Chemistry). Well prepared students may request waiver of portions of these requirements. In addition, a student must complete 17 hours of further graduate coursework and present and defend a written thesis. A Supervising Committee will be appointed to guide the student's thesis work and to assess the completed thesis. [Alt-studente-must-complete-the
 furthef-graduate-coursewerk,-fat-least-seven-must-be-in-Ghemíatrył;-1z
 Ghemistry-Faeutey:

The-student-witu-be-guided-in-his-weft-by-a-Gupervising-Gemmitteer--The student-wiłt-atse-make-an-orat-pæesentatien-and-defense-of-his-thests-te thit-Gemmittee-
4. In the section, CHEMISTRY COURSES,
a. Amend courses as follows:

5312 Chemical Dynamics (3 semester hours) Parr Contemporary experimental methods for reaction rate data. Theory of uni-, bi-, and termolecular reactions. Phase space and collision theories of reaction. Mechanisms of reactive collision. Prerequisites: CHEM 5415 or consent of instructor. [547t-and 5314-ет-еquivałent.] (3-0)

| 5313 | Statistical Mechanics (Same as Phys 5313)(3 semester hours) Rapp Classical and quantum statistical mechanics, localized and nonlocalized ensembles. Thermodynamic properties in terms of partition functions for atoms and molecules. Equations of state of non-ideal gases and liquids. Fermi-Dirac and Bose-Einstein statistics with emphasis on extreme degenerate regions. Introduction to the Darwin-Fowler method. Prerequisite: CHM 5415 or consent of instructor. [54 $1 \pm=$ ] (3-0) |
| :---: | :---: |
| 5387 | Independent Study in Chemistry ( 3 semester hours) In conjunction with a member of the Chemistry Faculty, the student will develop a paper or project which emphasizes the ways in which chemical knowledge is confirmed and extended or which leads to improved instruction in chemistry. (3-0) |
| 6319 | Special Topics in Theoretical Chemistry (3 semester hours) Subject matter will vary and the course may be repeated for credit. Examples of topics include inelastic scattering in ion-atom collisions, theoretical calculation of molecular potential curves, semi-classical methods in inelastic scattering theory. Prerequisite: CHM 5415; strongly recommended: <br>  |
| 6322 | Quantum Chemistry (3 semester hours) Detailed treatment of wave mechanics applied to particle-in-abox, harmonic oscillator, and H-atom potentials. Perturbation and variation theory. Approximation methods for atomic and molegular structure. Time-dependent phenomena and transition probabilities. Prerequisite: CHM 5415. [5411] (3-0) |
| 6329 | Special Topics in Physical Chemistry (3 semester hours) Subject matter will vary and the course may be repeated for credit. Examples of topics include molecular beam experiments, scattering theory, computer simulation, and molecular quantum mechanics. Prerequisites: CHM 5415, [54 instructor. (3-0) |
| $\begin{array}{r} 8231- \\ 8931 \end{array}$ | Research in Organic Chemistry (2 to 9 semester hours) <br>  preperatiqe-chemistry-shroutet-regigter-int-thio-courge.-] (0-variable) |
| $\begin{array}{r} 8251- \\ 8951 \end{array}$ | Research in Analytical Chemistry (2 to 9 semester hours) <br>  medern-analytieat-instfuments-sheuta-fegistew-in-thise-eeumser] (0-variable) |
| b. Ad | courses as follows: |
| 5415 | Advanced Physical Chemistry |
|  | Thermodynamics, with introduction to statistical interpretations of macroscopic phenomena; quantum chemistry of atoms and molecules; chemical kinetics of elementary reactions. Prerequisite: CHM 3411, 3312 or their equivalent. (3-0) |
| 7195- | Readings in Chemistry ( $1-3$ semester hours) |
| 7395 | Reading from the contemporary chemistry literature. May not be counted as credit toward the M.S. degree in Chemistry. (0-variable) |


| 31 | Laboratory Techniques in Organic Chemistry（4 semester hours） （0－4） |
| :---: | :---: |
| 7451 | atory Techniques in Analytical Instrumentation（4 semes |
|  | hours）（0－4） |
| 7461 | Laboratory Techniques in Biological Chemistry（4 semester hours） |
|  | （0－4） |
| c．Delete course as follows： |  |
| [5314 | Theqmertaties－and－Thezmedyamites－f3－өemester－hourst <br> Głassieal－thermegtaties－with－diseussien－ef－gtatietieal－meehan－ teat－interpretatient－－6hemieat－and－base－equitibriat－－łdeat－and nen－ideat－£tuider－Kinetie－theorys－trenspert－preperties－－and－an introduetien－te－ehemieat－dynamieधт－－Prexequisitet－－unde¥grad－ utte－physieat－ehemistryr－$(3-\theta)$ ］ |
| [54]: |  <br>  and－statistieat－meehanies，－with－examples－drawn－from－atomie <br>  <br>  |
| ［63Z1－－－Atemie－and－Mełeeułar－Speetreseepy－（Same－as－Phyeies－635z］ （3－semester－heurs） <br>  <br>  pelyөtemie－meleeule日今－өymmetzy－and－applieatiens－өf－gzeup <br>  <br>  6HM－54 $7 \pm \tau-(3-\theta)]$ |  |
|  | －Meleeulaz－Speetreseөpy－f3－semester－heurs） <br> Ełeetrente－9も¥ueture－eq－atems－and－meleeules－inetuding－spin <br>  <br> £ields；－symmetyy－and－applieatiens－e£－g干eup－theexyt－besie－theexy <br>  <br>  |

(M.S., Ph.D.)

## 1. Amend the section, SPECIFIC DEGREE REQUIREMENTS, as follows:

A background in speech pathology, audiology, linguistics, [edueations] psychology or biology is suggested for students entering the study of communication disorders. The records of individual applicants will be reviewed with respect to the student's preparation for the program. Specific preparatory courses will be suggested by the Graduate Adviser if necessary.

The Master of Science Program requires a minimum of 48 semester hours of credit which mush include COMD 6307 and Mathematical Sciences. In addition, students emphasizing Speech Pathology must take COMD 6304, 6319, 6327, $7326,7328,7329,7352$ and 7369 , while those students emphasizing Audiology must take $6304,6310,6130-6630,7136,7318,7326,7350$. The student completethe Master's Degree Program in Communication Disorders will meet the academic requirements for the Certificate of Clinical Competence offered by the American Speech and Hearing Association (ASHA) his or her area of emphasis.

Students may be admitted to the Doctoral Program who have a Master's degree or its equivalent in Communication Disorders or a related field. Students without a Master's degree can be admitted to the Program but will ordinarily be required to complete additional course work specified by the Graduate Adviser.

An individualized degree program will be jointly developed by the student and the faculty. This program will conform to the general degree requirements 1isted on page (see "Procedures and Requirements for Graduate Degrees") and will include six hours of statistics and three hours of computer science.

 63175 -63305-and-7326r--6tudente-emphertetng-Audtetegy-must-take:-63105-73165 $7318_{5}$ 万end- $733 z_{5}$-Geuderte-emphasteing-Gpeeeh-Pathelegy-must-taket-63195-6327,
 manteation-Điserders-witu-meet-the-aeademie-requiremente-for-the-Gertifteate of-6tunieat-Gompetenee-e£fered-by-the-Amertean-Speeeh-and-Heazing-Aseoetation fABHA-4n-either-speeeh-pathełegy-ez-audtelegyt
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2. Amend courses and section headings under section, COMMUNICATION DISORDERS COURSES, as follows:

Speech Science, Speech Pathology, and Language[Gere-Geurses]
6305 Hearing and Speech Science (3 semester hours)
Fundamentals of acoustics and acoustic phonetics; application to the study of speech production and perception; use of the sound spectrograph. [Basie-acousties-and-teoustie-measurements;-the-eoehlea; psyeheaeousties, aecustie-and-phyeielegteat-phenetiest-anezyeis-and өynthesiө-өє-өреее $\boldsymbol{h}_{\boldsymbol{\prime}}$-өреее

6306
Neuroanatomy and Neurogenic Speech Disorders (3 semester hours) Brain mechanisms related to speech, language, and audition. [ B 托fer-entiat-diagnests-and-remediation-of-the-dyeavthrias-and-apzemia-of speeehr] Prerequisite: COMD 3345. [Anetemy-and-Phystetegy-ef-the Hearing-and-Gpeeeh-Meehanisms-(GPA-3305ł-or-the-equivatentr] (3-0)

Language Acquisition [tanguage-and-6egnitien] (3 semester hours) Developmental aspects of language, with special attention to the role of cognitive development in language acquisition. Prerequisite: COMD 3302 [and-eegniteient] (3-0)

Language and Linguistics (3 semester hours) Basic processes underlying language including phonology, morphology, syntax, and semantics. Prerequisite: COMD 3302. (3-0)

Hearing Science and Audiology
6310 Differential Audiological Procedures (3 semester hours) Lecture and clinical experience dealing with audiological procedures used to establish differential diagnoses of auditory disorders. Prerequisites: COMD [6Ө\#] 6304, 3344, 3345. (3-0)
[Adute] Aural Rehabilitation and Hearing Aids (3 semester hours) Hearing aids and group amplification systems. Hearing aid selection procedures. Auditory training, speech reading, social and psychological considerations, and counseling. Prerequisite: COMD [ $6 \ominus \bar{B}$ ] 6304 . (3-0) fAeoustie-performanee-of-hearing-atdej-and-the-etinteal
 and-opeeeh-conservatten-for-the-rehabititettion-ef-patients-with hearing-tmpatmentr--The-seetat-and-psyehetogieat-eensiderations-and eounseting-tn-the-rehabititetion-ef-the-hearing-impaifed-aduter

Experimental Audiology (3 semester hours)
Auditory system responses to simple and complex stimuli, including speech. Electrophysiological techniques and objective audiometric procedures. Application of psychophysical results obtained from human and animal experimentation. Prerequisite: consent of
instructor. [The-respenee-ehameteristies-ef-the-atadtery-syotem-te stmple-and-eempłex-9ttmutif-inetuding-speeeh,-and-the-expezimentet methods-by-whieh-sueh-ehazaeteristies-aze-obtatnedr--Speetat-atten-tien-to-eteetrophyoietegteat-teehniquee-and-objeetive-audtemetrie proeedurest--Emphasis-on-the-applieation-of-psyehephyeieat-theory to-the-anatysie-of-results-obtained-£rom-human-and-animat-experi-mentation--6 6 -63 6 ] (2-3)

| 7350 | Seminar in Audiology (3 semester hours) |
| :---: | :---: |
|  | Review and critique of pertinent literature in audiology. Empha- |
|  | sis on industrial audiology and electronic instrumentation. [Em- |
|  | phasie-review-and-ewitique-ө£-pertinent-itterature-reteting-to approaehes-te-rehabilitettive-teehrifueer] Prerequisite: Consent |
| 7359 | Noise and Hearing Disorders (3 semester hours) |
|  | Effects of noise on hearing. Discussion of population studies. |
|  | Sources and types of noise in industrial environments. Prerequisite: $\operatorname{COMD}$ [6日日] 6305 or consent of the instructor. (3-0) [ $1-\theta$ ] |
| 7335[8335] | Neuroanatomy and Neurophysiology of Sensory Systems (3 semester hours) Intensive study of brain mechanisms and pathways of the auditory and visual systems. Prerequisite: COMD 7346 or consent of the instructor. (3-0) |
| 7336 [8336] | Neuropsychology (3 semester hours) |
|  | Higher brain function; perception, and sensory processes: theoretical foundations of audition and vision. Prerequisite: COMD 7346 or consent of the instructor. (3-0) |
| 7365 [8365] | Human Evoked Responses (3 semester hours) |
|  | Electrophysiological studies of man including electroencephalography, electrocochleography, and early, intermediate, and late evoked responses. Lectures, demonstrations, and laboratory |
|  | experiments. Prerequisite: COMD 7346 or consent of the instructor. (2-3) |
| Behavioral, Biological and Medical Aspects of Communication Disorders |  |
| [Behavierat] and-Medieat-Aspeets-ef-Gemmunieatqen--iteozdeze] |  |
| 6348 | Emotional Support Services (3 semester hours) |
|  | Exploration of various approaches to the emotional needs of communicatively impaired persons and their families, including psychotherapy, counseling, and behavioral management. Prerequisite: consent of the instructor. (3-0) |
| 7341 | Learning Patterns of Sensorially Impaired Children (3 semester hours) |
|  | Assessment, programming, evaluation, and research in the context of developmental intervention with hearing impaired children. Prerequisite: consent of the instructor. (3-0) |
| 7346 | The Neural Basis of Communication [Gemmunieetegy] (3 semester hours) |
|  | An introduction to communication processes within the framewor |
|  | of neuroanatomy and neurophysiology. Neural mechanisms of |
|  | sensory processing and higher brain function. Emphasis on the auditory modality. Prerequisite: COMD 3345. (3-0) [An-intre- |
|  | duetien-te-comminteelegy-within-the-framewofle-ef-neufeanatemy and-neurephysielegyr--Aeuzat-meehenismb-of-вeneory-pzoeeseing and-higher-brain-funetiont--Emphasis-en-the-auditery-medatityr baberatery-ежеreitere-and-demenetratiensi--(z-3)] |

Behavioral Science（3 semester hours）
Study of the roles of cognition，learning and affect in human communication and its disorders．Prerequisite：consent of the instructor．（3－0）［An－intzeduetion－te－the－retee－ef－eegnteten；
łeazning－and－a£́eet－in－human－communieatien－and－íts－díध日ェderes］
7356 ［7456］Delivery of Comprehensive Speech and Hearing Services in the Community（ 3 semester hours）
Program development and implementation，includes discussion of staff selection and development，interagency relationships， private center programs，programs in public schools，and private practice．Prerequisite：consent of the instructor．（3－0）

7361 ［8361］Advanced Cognition and Learning（3 semester hours） In－depth study of cognition and learning as they relate to language development and communication disorders．Prerequisite：COMD 7353. （3－0）

7362 ［8362］Affect and Personality（3 semester hours） In－depth study of emotional development and theories of personality in the context of their relationship to language development and communication disorders．Prerequisite：COMD 7353．（3－0） be repeated for credit）Prerequisite：COMD 7346 or consent of the instructor．（3－0）［Prerequisitet－Gensent－ef－instruetert－－（May－be reperted－for－efeditt

## Support Courses

6115 Clinical Practicum in Communication Disorders（l semester hour） Supervised participation in evaluation and therapeutic management of a variety of communication disorders．Weekly lab required．（May be repeated for credit）Prerequisite：consent of the instructor． （0－10）［8upervised－partiétpation－in－etinieat－pratíeet－－Inteke
 proeesees－and－teehniques－applieable－te－beth－ehitiren－and－adutes． （May－be－repeated－£oz－eredtit）］

6130－6630 Advanced Seminar－Internship in Communicative Disorders（1－6 semester hours）
An intensive internship program in a clinical setting with daily scheduled seminars dealing with the varied aspects of communicative disorders．Special supervised clinical experiences will be selected for intensive study．Concentration may be in audiology and／or speech pathology with emphasis on multi－disciplinary evaluation and treatment．（May be repeated for credit）Prerequisite：consent of the instructor．（varying from 0－3 to 0－18）［ffaziet

| 7198-7398 | Directed Individual Study in Communication Disorders (1-3 semester hours) <br> Individualized program of reading, research or implementation of clinical strategies. (May be repeated for credit) Prerequisite: c [ $\epsilon$ ]onsent of the instructor. (varying from $0-3$ to $0-9$ ) |
| :---: | :---: |
| 8180-8980 | Research in Communication [Gemmunieelegy] (1-9 semester hours) (May be repeated for credit). (varying from 0-3 to 0-27) |
| 3. Add courses under section headings as shown: |  |
| Speech Sciences, Speech Pathology, and Language |  |
| 6319 | Disorders of Articulation (3 semester hours) |
|  | Theoretical bases for the evaluation of abnormal articulation. Advanced approaches to management of articulation disorders. |
|  | Discussion of experimental evidence and areas for further research. |
|  | Prerequisite: COMD 3340. (3-0) |
| 6327 | Disorders of Stuttering and Voice ( 3 semester hours) |
|  | A study of the etiology, symptomatology and phenomenology in dis- |
|  | orders affecting phonation, resonance and rhythm with emphasis |
|  | on procedures and methods for the evaluation and treatment of these disorders. Prerequisite: COMD 3345 or 7346. (3-0) |
| 7328 | Aphasia and Related Disorders ( 3 semester hours) |
|  | The study of etiology, symptomatology, assessment and therapeutic |
|  | techniques for aphasia and other related neurogenic speech and |
|  | language disorders. Differential diagnosis and remediation of the |
|  | dysarthrias and aphasia of speech. Prerequisite: COMD 3345 or |
|  | consent of the instructor. (3-0) |
| 7329 | Methods for Language Disorders (3 semester hours) |
|  | Principles, methods and techniques used for assessing and modifying |
|  | language behavior of preschool and school age children with language |
|  | and learning disabilities. Prerequisite: COMD 6307. (3-0) |
| 7334 | Seminar in Speech Pathology (3 semester hours) |
|  | Advanced study of selected topics in speech pathology with an |
|  | emphasis on differential diagnostic procedures and review and |
|  | critique of pertinent literature. (May be repeated for credit) |
|  | Prerequisite: consent of the instructor. (3-0) |
| 7352 | Organic Disorders in Speech Pathology (3 semester hours) |
|  | A comprehensive study of cleft palate and cerebral palsy with |
|  | reference to speech symptomatology and therapeutic techniques. |
|  | Prerequisite: COMD 3345 or the consent of the instructor. (3-0) |
| 7355 | Behavior Modification in Communication Disorders (3 semester hours) |
|  | Theories and principles of program design for teaching various |
|  | language skills. Discussion of practical applications. Prerequi- |
|  | site: COMD 6307. (3-0) |
| 7357 | Linguistic Analyses (3 semester hours) |
|  | A survey of the techniques and methods of modern linguistics |
|  | including analyses of phonological, syntactic, and semantic systems of natural language. Prerequisite: 3302 or 6317 . (3-0) |


| 7358 | Neurolinguistics (3 semester hours) |
| :---: | :---: |
|  | The study of types of disruption of linguistic systems resulting from |
|  | brain damage. Review of research-literature in the field. Prerequi- |
|  | sites: COMD 3302 or 6317, 7328. (3-0) |
| 7364 | Seminar in Speech Perception (3 semester hours) |
|  | Advanced study of selected topics in acoustic phonetics and speech |
|  | perception. Prerequisites: COMD 3343, 6305 or consent of the |
|  | instructor. (3-0) |
| 7369 | Diagnostic Procedures in Speech and Language Pathology ( 3 semester |
|  | hours) |
|  | Principles and procedures in diagnosis of communication disorders. |
|  | Observation of, and practice in, interviewing techniques, administra- |
|  | tion of, and practice in, interviewing techniques, administration |
|  | and interpretation of standardized tests, construction and use of |
|  | informal tests and differential diagnostic techniques. Prerequisite: |
|  | COMD 6307. (3-0) |
| 7374 | Psycholinguistics (3 semester hours) |
|  | Theoretical and research problems in psycholinguistic processes of |
|  | communication. Emphasis on perception and generation of linguistic |
|  | units. Prerequisites: COMD 3302 or 6317 , consent of the instructor. |
|  | (3-0) |
| 7375 | Language Pathology (3 semester hours) |
|  | A study of the etiology and symptomatology of language disorders in |
|  | children and adults, with particular emphasis on implications for |
|  | audiological testing. Prerequisite: COMD 6307. (3-0) |
| Hearing Science and Audiology |  |
| 6304 | Advanced Clinical Audiology (3 semester hours) |
|  | Study of auditory pathology, symptomatology and measurement. Clinical application and interpretation of speech audiometry, bone |
|  | conduction tests, and masking. Prerequisite: COMD 3341. (3-0) |
| 7326 | Habilitation of Hearing Impaired Children ( 3 semester hours) |
|  | hearing and language deficits of the hearing impaired child |
|  | with emphasis on assessment, habilitation, and educational oppor- |
|  | tunities. Prerequisite: COMD 3341. (3-0) |
| Behavioral, Biological and Medical Aspects of Communication Disorders |  |
| 7340 | Psychological Approach to Physical Disability (3 semester hours) |
|  | Effects of sensory impairment on cognitive and affective development. |
|  | Sociological aspects of physical disability. Prerequisite: consent |
|  | of the instructor. ( $3-0$ ) |

4．Delete courses，under the section headings as follows：
Core Courses

| 45－Seminar－in－Conmonication－Disorders－tt＝Э－semester－hourst An－integrativo－interaction－with－inctwteterb－frew－deetefat core－coursest－－Destgmed－to－emphastze－the mattidisetpitnary aspects－of－the－ftefts－and－to－provide－the－stadent－with－a <br>  <br>  <br>  |
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Speech Science，Speech Pathology，and Languages

|  preedure－and－praetiee－in－the－evaluatien－eq－łenguage－廿ite－ <br>  <br>  $7328-(3-\theta)]$ |
| :---: |
|  Rathelegy－（3－80méter－heuxe） <br>  Ments－mental－zetafdations－emetienal－digturbafee－and－brata <br>  Feliablliもy－ <br>  Prefequigitet－ $600-63 \theta 7-(2-3)]$ |
|  <br>  <br>  turbanee－の£－Feading－Preeeध日－in－ehildfer－ant－aphasiesr－－pre－ Fequiqiter：－ 60 － $6307,-63 \pm 7-(3-\theta)]$ |
| ［7368－＿－－－－Linguistics－and－the－Sign－Language－（3－semeetef－heute） <br>  <br>  <br>  Fequisite：－6 $-60-6317-(3-0)]$ |
|  <br>  quieition－－Impliention日－fof－Femediationr－－Prefequiaitet $\cos -6317-(-2-0)]$ |
| －Sominar－in－Pereeptual－Phenetiee－（ -3 －－emeoter－hourt） <br> Advaned－study－of－seleoted－tepies－in－aeougtie－phenetiee－and speeh－peroeptiont－review－and－exitique－هf－pextinent－1itera tures－With－opeetal－Feferenee－te－the－potential－applieatiens of－acoustie－neasurement－teehniqueg－and－theory－todiagneoio and－Eehabilitationr－（3－ 0 ）］ |

Behavioral and Medical Aspects of Communication Disorders

|  | -Medieat-Aspeets-of-Gommunieative-Gisorders-(Z-semester-hours) Biseases-rełated-to-communieative-disorders--Medłeał-evałaa- <br>  pedtetriess-radiotogys-physient-medtetne-and-rehebtittationt Partieipation-in-ełinieat-conferences-and-speeiał-ełintes-$(z-\theta)]$ |
| :---: | :---: |
| 8340 | -Peyehełegieat-Approach-te-Physieat-Bisabitity-fЭ-semester heurst <br> E£feete-of-sensery-impatrment-on-eognitive-and-affeetive devełopment:--Soetotogieat-aspeets-of-physicat-disabittty-(3- -8 )] |
|  | Advaneed-Gegnitien-and-ظeafning-(3-धemeeter-heurst <br> In-depth-study-of-eognttion-and-łearning-as-they-rełate-to士anguage-devełepment-and-eommunieation-diserderss--Prerequi- <br>  |
|  |  In-depth-study-of-emotionał-devełopment-and-theories-of personatity-in-the-context-of-their-rełationship-to-łanguage devełopment-and-communteation-dtsorders--Prerequisitet GӨВ-7353-(3-0t] |
| [8369 | Seminaf-in-Byain-and-Behavier-(3-semester-hourst <br> Advaneed-study-of-sełeeted-topies-im-braim-and-behavior- <br> Prerequiधitet--Gensent-oq-instruetor-- (May-be-repeated for-eredtef-(3~日)] |

GRADUATE INSTRUCTION IN EDUCATION


GRADUATE PROGRAM IN
ENVIRONMENTAL SCIENCES
(M.S., Ph.D.)

1. Amend the first paragraph of the section PROGRAMS, as follows:

Students with a wide variety of undergraduate preparations are admitted to the Environmental Sciences Program. Before graduation, students must demonstrate a minimum proficiency in the basic natural sciences and mathematics which serve as pertinent background for developing solutions for problems in the environmental sciences [ [ ] within their area of specialization.

## 2. Amend section SPECIFIC DEGREE REQUIREMENTS, as follows:

Students choosing to enter the Graduate Program in Environmental Sciences should have a bachelor's degree in the natural or mathematical sciences, engineering, social or management science or law.

[^11]Before graduating with a Ph.D. degree in Environmental Sciences, students with backgrounds in natural sciences, mathematics or engineering must have completed course work or demonstrate proficiency in chemistry, biology, calculus and geology. Specific requirements in each of these areas will be determined at the time of enrollment of the student in the program. Students with a social or management sciences or law background will have to demonstrate proficiency in several basic areas pertinent to career objectives.

Before-graduating-with-a-Master's-degree-or-Phr\#f-degree-in-Environmentaz Getenees--the-student-must-have-completed-eourse-work-or-demonstrate
 ments-in-eaeh-of-ehese-areas-witu-be-determined-at-the-time-of-envolument-of the-student-in-the-program.]

All full-time (9 or more semester hours) Environmental Sciences students are required to participate in Environmental Sciences seminars during each semester of residence. Exceptions are possible for students who hold employment which prevents attendance at the time of seminar presentations and for students involved in off-campus internship and research.

There are three ways in which a student may satisfy the requirements for the Master of Science degree. In addition to the core courses, a student must complete
(1) six (6) hours of electives selected from one of the topics areas, and a master's thesis (minimum of 6 semester credit hours)
(2) six (6) hours of electives selected from one of the topic areas, and internship at an industry or government laboratory
or
(3) 18 hours of electives.

Master's degree candidates may elect to take a one semester internship with local, state or federal agencies, foundations, or industries. The objective of the internship is to provide the student with the opportunity to gain practical experience in environmental science activities.

Entering students are expected to take the equivalent of an eighteen hour block of core courses as listed below. (The student with previous academic work in any of these areas may have this requirement waived at the discretion of the Graduate Dean.

Environmental Quality Control core courses: 5301, 5302, 5311, 5330; plus any two of the following: $5303,5320,5335,5340$.

Energy and Mineral Resources core courses: 5301, 5302, 5319, 5320, 5311; plus any one of the following: 5303, 5330, 5335, 5340.

Students wishing to pursue the Doctor of Philosophy degree must have a Master of Science degree in Environmental Sciences from UTD or its equivalent. A Ph.D. degree requires a major concentration in one of the three specialization areas in either Environmental Quality Control and Natural Resources Management or Energy and Mineral Resources. A student may select as an alternative a combination of areas, such as the natural science and engineering aspects of air and water pollution control and economic, social sciences, and management aspects of natural resource management.

The Ph.D. degree requires a major consisting of an approved sequence of advanced level courses in the area of specialization. In addition, each degree requires a minor consisting of a sequence of three or more courses supportive of the student's major field. All Ph.D. candidates must successfully complete course work in experimental statistics and computer programming language. The latter is taken in lieu of the foreign language requirement. A dissertation is required and must be, as a result of independent investigation in the student's major area, an original contribution to scholarship. A Ph.D. program normally requires 3.5 to 4.5 years full-time study beyond the bachelor's degree. Research leading to the granting of the Ph.D. is expected to require the equivalent of a full-time effort for a period of at least one year.

For general degree requirements, see "Procedures and Requirements for Graduate degrees," page 35. Concurrent registration in a course and its prerequisite may be obtained by permission of the instructor only.
3. Amend courses in the section ENVIRONMENTAL SCIENCES COURSES, as føllows:

5302 Natural Resources II: Water (3 semester hours)
Hydrologic systems, water resources; water supply, water and wastewater treatment, water pollution control, fate and significance of water pollutants. This course is designed to provide students with the basic concepts necessary to continue their education in waterrelated aspects of Environmental Sciences. (3-0)

5303 Natural Resources III: Earth (3 semester hours) Geological terms; interpretation of geological reports and maps; ground water; fluvial systems; soils, mineral resources; secular climatic change. Includes mandatory field trip. (3-0)
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Ecology (3 semester hours)
General ecological principles as related to productivity, energy transfer, diversity, population, community, and ecosystem function. (3-0)




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Systems Ecology and Environmental Modeling (3 semester hours)
Introductory systems theory, population interaction, and systems analysis techniques applied to the construction and evaluation of ecosystem
level models. Prerequisites ENV 5311, 1 semester calculus. A1so
Fortran programming, which may be taken concurrently with this course. (3-0)
[Envíxenmentat-Medełtmg--(3-semester-heufs)

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Meteorology (3 semester hours)
Absorption, scattering, and distribution of solar radiation in the atmosphere and at the earth surface; water and ice in the atmosphere; atmospheric thermodynamics, hydrodynamics, and instability, transport
processes. Prerequisite ENV 5301. (3-0)
Physics and Chemistry of the Lower and Upper Atmosphere (3 semester hours)
Properties of and interaction between the lower and upper atmosphere; chemistry and transport of air pollutants in the atmosphere. Prerequisite ENV 5301. (3-0)

Biological Effects of Air Pollution (3 semester hours) Biological processes involved with the absorption, fate and pathology of air pollutants; effects of air pollution on the biosphere, with emphasis on terrestrial plants. Prerequisite ENV 5301. (3-0)

Air Pollution and Public Health (3 semester hours)
Acute and chronic public health aspects of air pollution; problems of detection, correlation, and evaluation of epidemiological data.
Prerequisite ENV 5301. (3-0)
Air Pollution Measurement ( 3 semester hours)
Instrumentation and techniques of measurements. Particulate, mist and gas sampling. Isokinetic sampling. Sampling trains. Low volume and high volume sampling techniques. Mass measurement and particle counting, optical techniques. Prerequisite ENV 5301. (2-3)
[Sonrees-and-characteristies-өq-eir-pełtatienㄱ-eeehniques-eq-measure-


Special Topics in Air Pollution and Air Quality Control (3 semester hours) (May be repeated for credit.)
Prerequisite ENV 5301. (3-0)

Surface and Groundwater Hydrology (3 semester hours)
Hydrologic cycle, flood routing, ground water flow, measurement techniques. $(3-0)$
[Hydxełegy-(3-धeffeetez-heu¥et



Aquatic Biology (3 semester hours)
Effects of physical, chemical and biological pollutants on aquatic ecosystems. Prerequisite ENV 5311. (3-0)

Water Pollution and Public Health (3 semester hours)
Acute and chronic public health aspects of water pollution; problems of detection, correlation, and evaluation of epidemiological data. Prerequisite ENV 5302. (3-0)

Water Supply and Water Treatment (3 semester hours)
Engineering design principles for municipal and industrial water supply and water treatment. Prerequisite ENV 5302. (3-0)

Agriculture and Environmental Quality (3 semester hours)
A general survey of the environmental aspects of agriculture and forestry; land use for food production; pesticides; environmental toxicology; food control and public health. Prerequisites ENV 5302, 5311. (3-0)

Marine Biology ( 3 semester hours)
Ecology of micro- and macro-organisms in the seas and estuaries; cycling of energy and matter through the marine ecosystem; food resources of the oceans and their utilization. Prerequisite ENV 5311. (3-0)

Marine Chemistry and Pollution (3 semester hours)
Chemical characteristics of the oceans and estuaries; factors influencing composition and pollution of marine waters. Prerequisite ENV 5302, 6313,6418 . (3-0)

Solar Energy (3 semester hours)
A description of solar energy reaching the earth. Methods of collecting solar energy including flat plate and focusing collectors. Storage of thermal energy. Brief treatment of heat transfer theory. Heating and air conditioning cycles based on thermal energy supplies. Direct conversion of solar energy to electricity. Heat engines to run off low temperature cycles. (3-0)
[Sөłar-energt-fecorery-and-prebłemst--(3- $\theta 子$ ]
Geothermal Energy ( 3 semester hours)
Present knowledge of the location, extent, potential for utilization, and the environmental impact of geothermal resources; geological, hydrological, geochemical, and geophysical models used in detecting geothermal sources; both known and probable geothermal resource distributions throughout the world; case histories of various techniques illustrating procedures necessary for developing, utilizing, and monitoring the enmental impact of geothermal systems. (3-0)
[Potentiat-fer-geethermat-energy-feeovezy-ant-prebłems-ef-geethermat
energy:- $-(3-\theta)$ ]

Mineral Resources I: Ferrous and Nonferrous Metals (3 semester hours) Mining and refining technology; gross world production and consumption; U.S. production and consumption; distribution of known reserves; pollution and environmental health problems within the minerals industry. Prerequisite ENV 5303. (3-0)

Mineral Resources II: Heavy Metals, Uranium and Non-Metals (3 semester hours)
World and U.S. production; consumption and reserves of noble and base heavy metals and of uranium; asbestos, potash, phosphate rock and other non-metals; cornucopianism; mineral politics. Prerequisite ENV 5303. (3-0)

Advanced Aquatic Chemistry ( 4 semester hours)
Applications of advanced chemical principles to water quality control, with emphasis on the environmental chemistry of pollutants in natural water systems and water and wastewater treatment processes. Prerequisite ENV 5302, 6313, 6418. (3-3)

Water Pollution Control (4 semester hours)
Engineering methods and designs of control systems for physical, chemical and biological pollutants from wastewaters. Prerequisite ENV 5302, 6310,6317 . (3-3)

Environmental Biology (4 semester hours)
Biochemical energetics, genetics, and evolution; physiology and interaction with the environment. Prerequisite ENV 5311. (3-3)

Oceanographic and Limnological Techniques ( 4 semester hours)
Oceanographic and limnological field sampling and study methods. A oneweek field trip to the Texas gulf coast is conducted.
Prerequisite ENV 5302, 5311, 6315, 6418. (3-3)
Land Use and Developmental Policies (3 semester hours) (Same as MAS 6327)

Seminar or selected topics in optimal land use models and in the en-
vironmental and economic trade-offs necessary for effective management. (3-0)
 Gemintr-or-धałeeted-tepiee-in-eptimat-tend-tse-medets-and-in-the-enviren-
 $(3-\theta)]$

Economic Planning of the Public Sector (3 semester hours) (Same as MAS 7326)

Presents a variety of applications of operations research techniques in the areas of economics, environmental engineering and urban planning. Several quantitative models are examined and the advantage or limitations of each are investigated from a methodological and practical viewpoint. Prerequisite ENV 5335. (3-0)

Special Topics in Resource Economics (3 semester hours)
(May be repeated for credit). Prerequisite ENV 5335. (3-0)
Environmental Sciences Seminar (1 semester hour)
Discussions presented by students and staff on topics of environmental quality control, energy and natural resources. [eepies] (May be repeated for credit) ( $0-1$ )

|  | Research in Environmental Sciences (3-9 semester hours) (May be ed for credit) (0-9), 27) |
| :---: | :---: |
| 8911 | Environmental Science Internship (9 semester hours) <br> Available for students who choose internship with industry or agencies in the area of environmental control. The student must present proand post-seminars covering internship activities. (May be repeated for credit) <br> (0-27) [ $(\theta-\theta)]$ |
| 4. Add courses in the section, ENVIROMMENTAL SCIENCES COURSES, as follows: |  |
| Methods of filtration. Settling chambers and inertial separators. Grids and filter pads. Low energy and high energy wet scrubbers, charged droplet scrubbers, cloth collectors, electrostatic precipita- |  |
| 6314 | Terrestrial Ecology ( 3 semester hours) Ecological principles applied to the study of terrestrial ecosystems. Emphasis on community production, population dynamics, and sampling methodology. Prerequisite ENV 5311. (2-3) |
| 6319 | Biological Techniques for Assessing Water Pollution ( 3 semester hours) Techniques and approaches commonly used to survey aquatic ecosystems. Prerequisites ENV 5302, 5311 . $(2-3)$ |
| 6321 | Industrial Wastes (3 semester hours) Types, characteristics, and methods of treatment of industrial waste- waters. Prerequisites ENV 6302 and $6418 . \quad(3-0)$ |
| (May be repeated for credit) (3-0) |  |
| (May be repeated for credit) Prerequisite ENV 5340. (3-0) |  |
| 6418 | Water Analysis ( 4 semester hours) |
| Chemical and physical methods for determining the pollutional charac- |  |
| 7360 | Economic Analysis of Government Decision Making (3 semester hours) |
|  | Evaluation of cost-benefit analysis, decision analysis under uncertainty and wilderness and water resource management models. Extensive use of case studies to illustrate each tool. Prerequisite ENV 5335. (3-0) |
| 5. Delet [6318 | courses in the section, ENVIRONMENTAL SCTENCES COURSES, as follows: <br> Water-Anatysie-f3-धemestex-heufsł <br> Ghemieat-and-bietogieat-methede-fer-determining-the-pettutienal-ehar- <br>  |

[^12]
## GRADUATE PROGRAM IN GEOSCIENCES <br> (M.S., Ph.D.)

1. Amend the section OBJECTIVES, by adding a new first paragraph:
Graduate study in Geasciences is designed to prepare students for careers
in industrial, governmental and/or academic endeavors. This preparation
emphasizes breadth of knowledge in Geosciences as well as mastery of one or
more specific speciality areas. The successful degree candidate must
demonstrate knowledge of a speciality and understanding of other relevant
subjects as well as preparing a thesis or dissertation demonstrating an
ability to undertake and successfully complete independent research projects.
2. Amend Item A. 4 of the section SPECIFIC DEGREE REQUIREMENTS, as follows:

Complete a field course. This requirement may be waived by the faculty on the recommendation of the supervising professor. [Netet--studente-are responstbłe-for-ałt-personeł-expenses-rełated-to-fiełd-trips.)]
3. Amend the last paragraph of the section SPECIFIC DEGREE REQUIREMENTS, as follows:

During his first semester in residence, an M.S, or Ph.D. aspirant should select a Supervising Professor upon mutual agreement between the faculty member and the student. Shortly thereafter, the aspirant's Supervising Committee will be appointed, will aid the student in planning his curriculum, and will oversee his research. All theses or dissertations must be approved by the student's Supervisory Committee before the thesis or dissertation defense and the submission of the thesis or dissertation to the University.
4. Amend the first paragraph of the section SPECIFIC DEGREE REQUIREMENTS, as follows:

The research facilities available to students are excellent. They include mass spectrometers, a low level lead laboratory, an X-ray diffractometer, an atomic absorption spectrophotometer, a scanning electron microprobe with energy dispersive capabilities, a scanning electron microscope, experimental petrology equipment including two single-stage piston-cylinder devices for studies up to 1800 degree $C$ and 50 kb and one-atmosphere studies up to 1600 degree $C$ at controlled oxygen fugacities, a paleomagnetic laboratory, an organic geochemistry laboratory including facilities for carbon and nitrogen analyses [analysis] and amino acid analysis, a sedimentology laboratory including flume and an automated settling tube, an array of recording threecomponent magnetic variometers, equipment for seismic studies on land and at sea, a seismic data processing system using a PDP-15 computer, a sixteen channel gain ranged digital field system for electrical and seismic studies, access to a CDC 6600 facility for data reduction and interpretation and a micro-film library of WWSSN records. The University has an IBM 370/155 computer that is available for student use through the UT-Regional Computer Center in North Texas. Other specialized facilities [ $\mathbf{T}$-inefuding-łeboratories for-radteearben-dating-and-for-ehermat-eonduetivitys-diffusivity-and preduettvity-measurements,] are available at other universities in the area.
5. In the section GEOSCIENCES COURSES, amend courses within subsections as follows:

## General

| 5400 | Introduction to Geology <br> Staff [Mitterer,-Parrish;-Presmałt] <br> (4 semester hours) <br> A review of earth processes as a whole: Time and geology; <br> [geomerphotogy;] igneous and sedimentary processes and products; metamorphism; structure; evolution of continents and oceans. <br> Includes [three-two-day] field trips [to-study-a-variety-of <br> geotegte-features-and-roek-types]. This course is open only to those students whose major undergraduate study was in subjects other than geology. This course cannot be used to satisfy degree requirements for Geoscience majors. Laboratory course. (2-6) |
| :---: | :---: |
| 5302 | Petroleum Geology <br> Combs, Mitterer, Urban, Outside Lecturers (3 semester hours) <br> A practical course in petroleum exploration. Porosity and permeability as related to lithology, stratigraphic and structural trapping, regional trends, the origin of oil, log interpretation, geophysical exploration and hydrodynamics of fluid flow will be emphasized. Laboratory course. Prerequisite: Sedimentology and Stratigraphy, [Entroduetory-Gedimentotogy,] Structural Geology. (2-3) |
| 5303 | Geologic Computing <br> Staff [Parrish] <br> (3 semester hours) <br> Application of computer techniques in solving geological problems. Includes instruction in programing languages, computer operation, programming techniques and geologic modeling. Students will be encouraged to develop programming skills in areas immediately related to thesis and dissertation research. Laboratory sessions are included. (2-3) |
| 5[1]204 | Spring Field Trip ([1] 2 semester hours) <br> A study of the geology of a selected region within the United <br> States and/or northern Mexico followed by a 10 to 14 day field <br> trip to the selected region [A-10-to-14-day-erip-te-seleeted <br> regtons-in-the-Hntted-8tates-andfor-northern-Mexteol in order to study the field relationships of geologic features within those regions. Field trip. (May be repeated for credit). (P-F grading) $(1-3)[f \theta-3 t]$ |
| 5405 | Field Geology <br> (4 semester hours) <br> An introduction to the interrelation of geologic features in the field including the fundamental principles and techniques of geologic mapping. Course consists of lectures, 8 to 10 days of detailed field mapping and preparation of a report prepared in professional form. Field trips. Prerequisite: Physical <br> Geology. [Geotogy.] (2-6) |
| $\begin{gathered} \text { [5306-] } \\ 5606 \end{gathered}$ | Field Geology Summer Camp ([3-] 6 semester hours) Staff Intensive study of the stratigraphic and structural relationship within a selected field area. Students are responsible for all personal expenses related to this course. Field trip. (0-40) |

Seminar in Geothermal Energy Resources
Combs (3 semester hours)
Geological, hydrological, geochemical and geophysical methods used in delineating [mapping-out] both known and probable geothermal resources will be considered. Case histories of various exploratory techniques illustrating procedures necessary for detecting, evaluating, and developing geothermal resources will be examined.

## Stratigraphy

Elements of Earth's History (4 semester hours) Staff Overview of historical geology and its relationship to sedimentation, structural geology, stratigraphy and plate tectonics. Laboratory includes sedimentary rocks, paleontology, structural and stratigraphic problems. This course cannot be used to satisfy degree requirements for Geoscience Majors. Laboratory course. Prerequisite: GEO 5400 or consent of instructor. (3-3)

Sedimentology
5445[6]

5346[5]
Sedimentary Petrography II [ $\mathrm{I} \ddagger \mathrm{I}$ ] (4 semester hours) Staff Description, classification and genesis of carbonate grains as seen in thin-section and hand samples. Includes the microscopic identification of calcareous fossils. Laboratory course. (2-6)

Carbonates in Space and Time [Gedimentery-Petrography-玨] Staff (3 semester hours)
Study of the origin, textures, distribution patterns and alteration of recent and ancient carbonate sediments. The chemistry of formation and diagenesis of carbonates will be emphasized. (3-0)

Geochemistry
Biogeochemistry (4 semester hours) Mitterer Composition and distribution of organic matter in sedimentary environment; influence on sedimentary processes; carbonate geochemistry; organic-inorganic interactions; diagenesis; origin of life and petroleum. Laboratory course. Prerequisites: One year of Chemistry, [Intredtetery] Sedimentology or equivalent. (3-3)

Sedimentary Geochemistry ( 4 semester hours)
Mitterer
Organic and inorganic aspects of the sedimentary environment including sediments, water and organisma. Laboratory course. Prerequisites: One year Chemistry, [Intreduetery] Sedimentology or equivalent. (3-3)

Geochronology (4 semester hours)
Halpern
[Heanium-łeads-w] Rubidium-strontium, and potassium-argon and uranium-lead radiometric age dating as applied to the solution of geologic problems. Laboratory course. (3-3)

| Petrology-Mineralogy |  |
| :---: | :---: |
| 5463 | Advanced Mineralogy (4 semester hours) <br> Carter Optical [Etements-ef-optieat] mineralogy, X-ray and chemical properties of rock-forming minerals. Laboratory course. Prerequisite: GEOS 5461. (3-3) |
| Structural Geology-Tectonics |  |
| 5370 | Structural Geology (3 semester hours) Staff [Parrish] |
| 5371 | ```Advanced Structural Geology I Staff [Pammish] (3 semester hours)``` |
| 5372 | ```Regional Geology of North America``` Staff [Hełpern] (3 semester hours) |
| 5373 |  ```(excluding North America)(3 semester hours)``` |
| 5375 | Tectonics (3 semester hours) Staff [Perrish] |
| 6371 | Advanced Structural Geology II (3 semester hours)Staff [Parmieh] |
| 6375 | Global Tectonics (3 semester hours) Helsley [ T -Perrish ] |
| 7379 | Seminar in Tectonics (3 semester hours) [Perrishr] Helsley |
| General Geophysics |  |
| 5482 | Instrumental Techniques in Geophysics (4 semester hours) Combs A discussion of the instruments commonly used in investigating the interior of the earth. Laboratory course. (3-3) |
| [6387] 5383 | Geophysical Implications of Plate Tectonics Landisman |
| Seismology |  |
| 5391 | Digital Geophysical Signal Processing (3 semester hours) Ward Temporal and spatial transform analysis of geophysical signals including use of spectra, bandpass filtering, velocity filtering, and deconvolution filtering. (3-0) |

6. To the section, GEOSCIENCES COURSES, add courses within sub-sections, a follows:

Paleontology

| 5331 | Principles and Methods of Paleontology (3 semester hours) Urban |
| :--- | :--- |
|  | Philosophy and methodology for collection, analysis and interpre- <br> tation of paleontological data. Field trip. Laboratory course. <br> (2-3) <br> 5432 |
|  | Micropaleontology I (4 semester hours) |

General Geophysics

| 5384 | Analysis of Geophysical Data (3 semester hours) Staff |
| :---: | :---: |
|  | An introductory course in the analysis of discrete geophysical |
|  | data as encountered in exploration, treatment of fourier series, |
|  | z-transforms, digital filters, etc. (3-0) |
| 5485 | Geophysical Principles and Techniques Combs |
|  | (4 semester hours) |
|  | Seismology, magnetics, gravity, etc. as tools for understanding |
|  | the earth and its mineral deposits. Prerequisite: permission |
|  | of instructor. (2-6) |
| 6385 | Numerical Modeling in Geophysics (3 semester hours) Ward |
|  | Review of numerical techniques for calculating theoretical |
|  | geophysical observations for earth models with various degrees of |
|  | complexity. Includes the following techniques. Thompson-Haske11, |
|  | finite-difference, WKJB, Cagniard-deHoop, etc. (3-0) |

7. In the section, GEOSCIENCES COURSES, delete courses within sub-sections, as follows:

Paleontology


Sedimentology


> GRADUATE PROGRAM IN
> HUMAN DEVELOPMENT
> (M.S., M.A.T.)

## 1. Amend the section, OBJECTIVES, as follows:

The Graduate Program in Human Development offers the Master of Science and Master of Arts in Teaching degrees. The program is specialized along two lines: Human Ethology \& Communication; and Brain Processes and Cognition.

Human Ethology \& Communication. The term ethology comes from the field of biology, where zoologists have developed methods of studying animals in their natural habitat. Human ethology thus refers to the study of human beings in realistic settings. The field of study shares with biology an interest in evolutionary influences. Language, aggression, territoriality, sexual attraction. altruism, curiosity, and competitiveness are examples of behavior which has had survival value for our species. To understand the deep-rooted lawfulness of such behavior, we must observe its natural expression under different sets of envirommental conditions. The human ethologist must be highly skilled in unobtrusive measurement, and in devising techniques for introducing variations into naturalistic settings.

Brain Processes \& Cognition. Researchers in this area share an interest in the high-speed mental processes that underlie attending, decision-making, and communicative acts. For example, a child on a playground must notice environmental sounds of many types, including language sounds. Research has shown that the right cerebral hemisphere processes environmental sounds, while the left hemisphere processes the sounds of language. To discover this, it has been necessary to use laboratory equipment that precisely controls the onset, location, and composition of sounds, and that measures response speeds (of the child, listening to the sounds) in thousandths of a second.

Such research approaches the neurological and physiological brain processes which ultimately control behavior. More direct research in this area involves techniques of brain stimulation in animals.

Graduates of the Program in Human Development will be qualified to assume positions in research，education，government，and child－oriented services， as well as services for the aged．Their interdisciplinary training will prepare them to join practitioners from related fields in collaborative research and service programs．The Program encourages part－time as well as full－time atten－ dance．
［Phe－Gradaate－Program－in－Human－Hevelopment－offers－the－Master－of－Setence－and Haster－of－Arts－in－Yeaching－degrees：－－The－program－carrently－emphastzes－chtid devetopment－and－eariy－ehitdhood－edueation；－however；－it－ts－planned－to－expand into－other－topics－in－human－devetopment－as－the－demand－artses－

Phe－program－emphasizes－the－ecotogteat－approach－to－research－and－practice－in human－devetopment－－－Yhis－emphasis－has－important－implieations－for－the－way－in－whtch devetopmentat－processes－are－studied：－－モt－assumes－that－severat－constderations are inherent－in－the－design－and－implementation－of－research－and－servicest－－キ才－retevant connections－can－be－made－between－scientiftc－work－in－human－development－and－the naturat－settings－in－which－devetopmentat－phenomena－ocear：－Zł－Interdtscipitnary cottaborations－are－songht－wherever－possibłe，－and－Э广－the－interrełattonshtps－of－att aspects－of－devetopment－tthe－whote－chitdt－are－of－concern－－－Quattties－whtch－the Program－strives－to－devełop－in－stadents－are－łf－a－strong－base－tn－devełopmentał theory－and－methodotogyร－モう－observationat－skitys；－and－Э才－mastery－of－the－toots and－techniques－of－evałuation：－－4o－factititate－devełopment－of－these－quatittes； the－program－utiłizes－coursework；－work－with－chiłdren；－ctass－research－profects； síte－visits－to－chítd－oriented－centers，－and－tnterdisctpitnary－contacts－wth－other programs－at－UYB－and－in－the－Đattas－metropłex：

Oraduates－of－the－Program－in－Human－Đevełopment－wiłt－be－quałtfted－to－assame positions－in－researeh，－education；－government；－and－chitd－oriented－services－－－Their tnterdiscipłinary－training－witu－prepare－them－to－join－practitioners－from－rełated ftełds－in－cotłaborative－research－and－service－programs－－－Yhe－Program－encourages part－time，－as－wett－as－futt－time－－attendance－and－is－not－łimited－to－degree eandidates：］

2．Amend the section，PROGRAM，as follows：
Two degrees are offered for graduate work in Human Development．The Master of Science degree is appropriate for students who want to work in research，or in other areas of developmental application which do not require teacher training．This program should also be selected by students who plan to continue beyond the Master＇s level．

The Master of Arts in Teaching degree should be selected by graduate students who plan teaching careers．Students interested in teaching in public schools must already have certification．The M．A．T．is appropriate for students interested in teaching kindergarten，high school，adult programs，or programs for the aged．This program of study will emphasize instructional principles．
［wo－degrees－are－offered－for－graduatework－1n－Hman－Devetopment－－The Master－of－9eience－and－the－Master－of－Arts－In－Ieachtng－－Mhe－Master－of－sctence degree－is－appropriate－for－students－whowant－to work－1n－research；－cotiege－ceach＝ ing；－or－other－areas－of－devetopmentat－stady whtch－do－not－require－nursery＝kinaer＝ garten－teacher－training：－－The－M．9：－degree－program－shoutd－be－setected－by－stutents who plan－to－continue－their－tratntng－beyond the－Masters－degree－Ievet－－－The Mester－of－Arts－in－Yeaching－degree－shoutd－be－setected－by－graduate－students who płan－to－teach－at－the－pre－schoot－and－kindergarten－tevets－or－work－1n－reiated－eariy ehildhood－edacation－services；－the－M－A－Y－－degree－program－ts－appropriate－for experiented－teachers who－seek professtonat devetopment．］

## 3. Amend the section, FACILITIES, as follows:

Facilities at The University of Texas at Dallas include observation and research laboratories which have been especially constructed for ethological and cognitive studies. Many public and private schools and agencies also provide research opportunities. Special facilities at the Callier Center for Communication Disorders, and at the Health Sciences Center are available for neuroethological training.
4. Amend the section, SPECIFIC DEGREE REQUIREMENTS, as follows:

For general degree requirements, see "Procedures and Requirements for Graduate Degrees," $p$. For admission to the Human Development program in either September or January, applicants should have GRE's (Verbal + Quantitative) of 1000, and a grade point average of 3.0 for the last two years of undergraduate work. If those criteria are not met, the applicant may enter during the summer, for the two six-week sessions. The Proseminar course will be Eiven at that time, and successful completion of the course will admit the applicant to the regular graduate program.

An applicart who is waiting for summer admission may take twc graduate preparatory courses: General Psychology, and Developmental Psychology, as a special student. Such a student should notify the program office in advance that he or she wishes to enroll in a preparatory course, so the course can be scheduled.

## Master of Science

The following course distribution requirements must be completed for the degree of Master of Science:

1. Proseminar ( 6 semester hours).
2. Three seminars. One must be from the area of Human Ethology \& Communication, and one wiust be from the area of Brain Processes 8 Cognition. ( 9 semester hours)
3. Two courses. One must be from the area of Human Fithology \& Communication, and one must be from the area of Brain Processes \& Cognition. ( 6 semester hours)
4. Three research courses. Two of these must be research projects with a faculty member. One may be a statistics course from the Math-Science program. (9 semester hours)
5. A thesis which presents original work investigating a problem in Human Development (6 semester hours)

## Master of Arts in Teaching

The following course distribution requirements must be completed for the degree of Master of Arts in Teaching.

1. Proseminar (6 semester hours).
*2. Four seminars: (a) Language by Eye \& by Ear; (b) Pamily Processes; (c) Individual in the Institution; and (d) Theories of Instruction (12 semester hours).

## 3. One research course ( 3 semester hours).

4. One course from the following: (a) Cognitive Development; (b) Perceptual Development; or (c) Physiological Mechanisms of Development (3 semester hours).

Educational Preparation:
5. Multicultural Education and an education elective (6 semester hours).
6. Principles of Teaching (3-6 semester hours).
7. Demonstration Project. This will typically include some type of educational innovation or curriculum development representing the incorporation of developmental principles into an instructional program. The Project may be combined with student teaching where necessary (3 semester hours)
*Students seeking Kindergarten endorsement on an Elementary Education certificate should substitute the following courses for two of the seminars:

Kindergarten: Organization, Principles, \& Practices (3 semester hours) Learning in Early Childhood and Kindergarten (3 semester hours)
[Applieants-shouid-present-a-broad-backgrount-in-the-behavtorat-sctences and for-edueation---In-additton--they-shoutd-heve-some-proftetency-in-stattsties for-the-soctat-setences:--立-a-studentls-preparation-ts-not-adequate--hetshe may-be-required-to-take-addfetonat-courses-which-wiłt-not-be-counted-toward-the degree:

For-generał-degree-requirements--see-HProcedures-and-Requirements-for Graduate-Begrees그-page-35:

Master-of-Geience
The-fotlowing-course-distribution-requirements mast-be-completed-for-the degree-of-Mester-of-Geierree:

1--Core-fourses-f¥5-semester-hours):
Z.--Four-Courses-from-thr-Adranced-Sequence-in-Human-HeveZopment:--These courses-must-be-from-two-of-the-three-Actvanced-乌equence-areass-- $\ddagger$ Iz semester-hoarst
3.--Ane-eourse-ift-a-rełated-area-from-a-Program-ottside-Human-Bevelopment †--semester-hours)-
4.-A-thesis-whieh-presents-original-work-imvestigating-a-probłem-im-Heman Bevelopment-(6-semester-hours):

Mesterーof－Avesーin－Feaehing

```
The－fołłewing－eourse－distribution－requirements－must－be－compłeted－for－the degree－ef－ifasterーof－Attsーin－Feaching＊
ま－－－Gore－courses－†主5－semester－hoursł：
Zб－Єourses－£чom－єhe－Advaneed－Gequenee－in－Human－Bevełopment－totałting－i5
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``` Advaneed－Gequenee－areas－and－must－inełude－Human－Bevełopment－5334－5634 fdepending－on－hours－desiredto
3ェ－－Өne－eeurse－in－a－rełated－area－frem－a－program－outside－Human－Bevełepment （－3－semester－hours）
4л－A－demenstratien－projeet－whieh－reperts－ehe－devełepment－and－appifeation ef－an－eriginat－teaching－teehnique－appropriate－te－the－age－group－with whieh－the－student－perfermed－supervised－teaehing－（3－semester－hoursi－］
```

5．Amend the section，HUMAN DEVELOPMENT COURSES，by adding the following：
General Courses

| 5301 | General Psychology（3 semester hours） |
| :---: | :---: |
|  | Primarily for special students，this course provides an introduction to |
|  | techniques and concepts of psychological science． |
| 5302 | Developmental Psychology（3 semester hours） |
|  | Primarily for special students，this course provides an introduction to |
|  | techniques and concepts of research in human development． |
| 5303 | Research methods（3 semester hours） |
|  | Basic methods of psychological science．Required for all students |
|  | entering the program． |
| 5600 | Proseminar in Human Development（ 6 semester hours） |
|  | A survey of psychological research in areas of social psychologye |
|  | personality，neuropsychology，language，learning，and thinking． |
|  | Required for all graduate students entering the program． |

Human Ethology and Communication

| 5310 | Courtship Patterns（ 3 semester hours） |
| :---: | :---: |
|  | A review of courtship behaviors in several species，including fish， primates，and human adolescents． |
| 5311 | Infant Attachment（3 semester hours） |
|  | A review of infant attachment behaviors in several species，including baboons，dogs，and humans． |
| 5312 | The Development of Sex Differences（3 semester hours） |
|  | Factors influencing the growth of sex－linked behavior patterns in animals and humans．Such factors include hormones，neurological |
|  | influences，and learning． |
| 5313 | Behavior Modification（3 semester hours） |
|  | Technigues of influencing human behavior through principles of operant |
|  | conditioning． |


| Further work in operant control techniques. |  |
| :---: | :---: |
| 5315 | Language Development (3 semester hours) |
|  | The acquisition of language by several species, including chimpanzees and humans. |
| 5320 | Human Aggression (3 semester hours) |
|  | Factors affecting aggressive behavior in humans, including hormonal influences, brain physiology, and learning from media. |
| 5321 | The Development of Human Groups ( 3 semester hours) |
|  | Evolutionary processes that have influenced grouping, crowding, and territoriality in humans. |
| 5322 | Communication Networks (3 semester hours) |
|  | Patterns of information exchange evolved by several species, including bees, porpoises, and humans. |
| 5323 | Aging in Society ( 3 semester hours) |
|  | Changes in behavior associated with aging in animal and human cultures, |
|  | including baboon, Eskimo, and modern American. |
| $\frac{5330-}{5930}$ | Special Topics in Human Ethology and Communication (3-9 semester |
|  | hours) |
|  | Course content varies; a listing is available for each semester. |
| Brain Processes and Cognition |  |
| 5340 | Cognitive Development ( 3 semester hours) |
|  | Changes in memory, problem-solving, conceptual behavior, and learning through the life span. |
| 5341 | Developmental Education ( 3 semester hours) |
|  | The application of principles of human development to processes of formal education. |
| 5342 | Biofeedback Methods ( 3 semester hours) |
|  | Principles of utilizing information about physiological behavior. |
| 5343 | Advanced Biofeedback Methods (3 semester hours) |
|  | Further work in biofeedback technology. |
| 5344 | Aging \& Intelligence (3 semester hours) |
|  | Changes in measures of general intelligence associated with aging in humans. |
| 5351 | Memory and Attention (3 semester hours) |
|  | The nature of human abilities in picking up, storing, and retrieving information. |
| 5352 | Semantic Networks ( 3 semester hours) |
|  | Models of meaning structures that exist within the human mind. |


| 5353 | Physiological Mechanisms of Development ( 3 semester hours) |
| :---: | :---: |
| Neuropsychological changes associated with human growth and aging. |  |
| 5354 Perception (3 semester hours) |  |
| Human capacities to detect features of space, time, motion, etc., from a theoretical and empirical standpoint. |  |
|  |  |
| 5355 | Perceptual Development (3 semester hours) |
| Changes in perceptual capacities through the life span. |  |
| $\frac{5360-}{5960}$ Special Topics in Brain Pr |  |
| Topics vary; listing is available each semester. |  |
| Seminars in Human Ethology and Communication |  |
| 6310 | Family Processes ( 3 semester hours) |
| Topics vary with the interests of the seminar group. They may include: |  |
| sibling behaviors, birth order effects, father influences, and moral |  |
|  |  |
| 6311 | The Individual and the Institution (3) semester hours) |
|  | Topics vary with the interests of the seminar group. They may |
|  | include: conformity behavior, institutional discouragement in the |
|  | aged, the role of law in behavior, and therapeutic environments. |
| 6312 | Creativity and Society ( 3 semester hours) |
|  | Topics vary with the interests of the seminar group. They may include: |
|  | the effects of formal schooling on creativity, abnormal behavior associ- |
|  | ated with creativity, and drug influences. |
| 6313 | Ecological Influences on Behavior (3 semester hours) |
|  | Topics vary with the interests of the seminar group. They may include: |
|  | the influence of architecture on perception, climate and its effects |
|  | on human behavior, and the need for sensory stimulation and explora- |
|  | tion. |
| 6320 | Field Seminar in Human Ethology and Communication (3 semester hours) |
|  | Seminar to accompany the doctoral field project. |
| Seminars in Brain Processes and Cognition |  |
| 6340 | Language by Eye and by Ear (3 semester hours) |
|  | Topics vary with the interests of the seminar group. They may include: |
|  | learning disabilities, reading, writing, speech perception, and auditory memory. |
| 6341 | Brain Processes in Learning and Memory ( 3 semester hours) |
|  | Topics vary with the interests of the seminar group. They may |
|  | include: the role of the hippocampus in short term memory, REM sleep and neurological growth, and electrophysiological correlates of |
|  |  |
|  | thinking. |
| 6342 | Theories of Instruction (3 semester hours) |
|  | The application of psychological principles to instruction of young children, adults, and the aged. |



| $\frac{7640-}{7641}$ | Advanced Methodology in Brain Processes and Communication (12 |
| :---: | :---: |
| semester hours) |  |
| For doctoral students only, a two-semester sequence in techniques of |  |
|  | research design and methodology. |
| 7398- |  |
| 7698 | Thesis Research ( $3-6$ semester hours) |
| For M.S. students. May be repeated for credit. |  |
| $7699-$ |  |
|  | Doctoral Field Project (6-9 semester hours) |
| Field work leading to the doctoral dissertation. May be repeated for |  |
| 8300- |  |
| 8600 | Dissertation Seminar (3-6 semester hours) |
| May be repeated for credit. |  |
| 8399- |  |
| 8699 Dissertation Research ( $3-6$ semester hours) |  |
|  |  |
| 6. Amend the section, HUMAN DEVELOPMENT COURSES, by deleting the following: |  |
| [Gore-Gourses-¢Requiredt] |  |
|  |  |
|  |  |
|  |  |
| 5383 <br>  An-apptied-course-in-whieh-studemts-witl-work-as-a-group-to-design; earry-out,-and-report-empirifat-researeh-(Prerequisite:--H甘も-530Z): |  |
|  |  |


| draneed-Gourse-Sequence Area-t---6ognitive-Devetopment |
| :---: |
|  |
| 53łt-------The-Devełopmentat-fheory-of-Jean-Piaget-fЭ-semester-hours) Intensive-study-of-Piagetian-theory--its-applieations-to-edueation; and-eurrent-research: |
| $53 \pm 2$ <br> Hotivation- $(9$-semester-hours) Study-of-vartous-systems-for-explaining-motivation-with-speeiá attention-to-anałysis-of-the-rełationship-of-emotion-and-motivation: |
|  |
|  |
|  |
| Area-2:-Affeetive-Bevetopment |
|  |
| $537 \pm$ <br> -The-Ghtłd-in-Femity-and-Geeiety-f3-semester-hours) Gross-eutturat-studtes-in-chitd-devetopment;-anałysis-of-the-modern Ameriean-family,-its-interactions;-and-how-it-funtions-in-society: |
| 53zz-------The-Bisadvantaged-Child-(Э-semester-hours) <br> Study-of-development-of-ehildren-from-disadvantaged-backgrounds, uttlizing-empiricat-studtes-and-cases-from-łtterature: |
| 323-------Persentitity-Development-(3-semester-hours) Intensive-study-of-major-theortes-of-persomatity-devełopment-in ehtltheods-eommonatities-and-divergenetes-of-theories-witit-be-exploreds |
| 4--_---The-Bevetopment-of-Gex-Biffererrees- $\mathbf{H}^{3}$-semester-hours) Theory-and-researeh-on-the-devełopment-of-sex-role-identity;-sex-typed behavior-and-atetitudes: |



## GRADUATE PROGRAM IN HUMANITIES＊

(M.A., M.A.T., Ph.D.)

1．Under section，MASTER OF ARTS AND DOCTOR OF PHILOSOPHY，amend item 4．a． of the subsection，SPECIFIC DEGREE REQUIREMENTS，as follows：
a．Core courses（ 15 semester hours）
Humanities 5300，5304， 5305
Two of the following：Humanities 8313，8314， 8315 ［53日1；－530z\％－5303］
2．Under section，MASTER OF ARTS IN TEACHING（M．A．T．），amend item 4．a．of the subsection，SPECIFIC DEGREE REQUIREMENTS，as follows：
a．M．A．T．Core Courses（12－15 semester hours）：
Humanities Education 5300
Humanities 5300
Two courses from Humanities 8313，8314， 8315 ［53日1，－53日z；－5303］
Humanities 5304 for students planning to write a Master＇s Essay．
3．Under section，HUMANITIES COURSES，amend courses in the subsections indicated，as follows：

## Comparative Literature

3．Theory and Language（3 semester hours）
HUCL 7300 Critical Approaches to Language（3 semester hours） A seminar for non－linguists，in selected problems in language． Possible topics will include language and the mind，language universals，language and society，the origin of language，animal communication，language and women，language planning，child language，and nonverbal communication． An－examination－éf－elassieał－wefles－in－the－ehazaeterizatien－and

 and－myths－ef－łanguage．］

History of Ideas
HUHI 6304 Philosophy of the Natural Sciences（ 3 semester hours） Inquiry into the nature of science in an historical context． Issues concerning methods，goals，principal concepts and his－ torical influences in the development of the natural sciences．

 もimes．］

HUHI 6331 The Philosophy of Technology（3 semester hours）
Historical and philosophical study of the fundamental character of technology and its impact on culture．
［Feehnełegy－and－Se日iety］


 quegtiens－q日ísed－by－もeehnelegieat－devełepfents－］

2. Genre Studies


| HUHI 6333 | Science, Technology, and Romanticism ( 3 semester hours) |
| :---: | :---: |
|  | Study of the interactions between science, technology, and |
|  | philosophy in the late 18th and early 19th centuries, with an |
|  | emphasis on the conceptual basis of science and technology, |
|  | and their relationships to Romanticism. |
| HUHI 6352 | Psychohistory, Biography, and the History of Ideas (3 semester |
|  | hours) |
|  | Considers a variety of ways of applying psychological modes of |
|  | analysis and interpretation to issues in the history of ideas. |
|  | Examines the formal writings of several artists and philosophers |
|  | in light of their biographies, as well as looking at trends or |
|  | movements in the history of ideas in view of collective psycho- |
|  | logical interpretations of them. |
| HUHI 6360 | The Political Philosophies of Hegel and Marx (3 semester hours) |
|  | This seminar will examine Hegel's political philosophy and its |
|  | place in his philosophic system, Marx critique of Hegel, and |
|  | Marx's political philosophy as expressed and in his critical |
|  | relation to Hegel. |
| HUHU 6361 | The Intellectual History of Chinese Communism ( 3 semester hours) |
|  | This course will treat the ideological composition and dynamics |
|  | of the Chinese Communist movement from two analytical perspec- |
|  | tives: one, the confluence of various Chinese and Western ideas |
|  | in Chinese Communism; two, the dialectical relationship of |
|  | ideology and practice in the history of the movement, and the |
|  | conscious harnessing of this dialectic in the political thought |
|  | and leadership of Mae Tse-tung. |
| HUHI 6380 | The Social Pole of the Man of Knowledge (3 semester hours) |
|  | An examination of the social role(s) and the public and |
|  | pedagogical impact of intellectuals, writers and philosophers. |
|  | Emphasis on the critical mission of such men in different |
|  | societies, public response to their work, and problems of the |
|  | communication of ideas. |
| HUHI 7305 | Conceptual Change in Science and Philosophy (3 semester hours) |
|  | The problem of conceptual change has been an important topic in |
|  | the philosophy and history of science since the appearance of |
|  | Thomas Kuhn's Structure of Scientific Revolutions. Recent de- |
|  | bates on the subject strike to the heart of the evolution of |
|  | science and form the focus for this course. |
| HUHI 7331 | Evolution and Society (3 semester hours) |
|  | Social origins of evolutionary biology; pre-Darwinian theories |
|  | of evolution; Darwinism and Social Darwinism; biology, race, and |
|  | imperialism; eugenics and evolutionary theory. |



# GRADUATE PROGRAM IN INTERDISCIPLINARY [GENERAE] STUDIES [*]  

Amend the Graduate Program in GENERAL STUDIES as follows:
The Graduate Program in Interdisciplinary [Generat] Studies, leading to the degree of Master of Arts in Interdisciplinary [General] Studies, is a multidisciplinary curriculum including at least two courses each from humanities, social sciences, behavioral sciences, and natural sciences. Management Science or International Management Studies may be substituted for one area. Special seminars, designed specifically for the program, are also offered. Many of the traditional principles and purposes of higher education in the general studies apply to the program, including the development of cultural perspective from a study of the history of ideas; an appreciation of the intellectual approach to more than one discipline; an understanding of the forces that shape contemporary man and society; and an increased sensitivity to creative expression in different media.

Graduates of the Program in Interdisciplinary [Generat] Studies will have a broad knowledge and a better understanding of many of the social, cultural, and scientific forces which affect the individual and society. The general, rather than the specialized, post-graduate experience can offer the opportunity for meaningful, interesting activity, and the chance to update general knowledge.

PROGRAM
The Graduate Program in Interdisciplinary [Generat] Studies leads to the degree of Master of Arts [Generat-Getdes] at the completion of 33 semester hours of coursework and a special project.

At the beginning of a student's degree program he participates in his choice of Interdisciplinary Seminars which help to orient him to the multi-faceted approach of general studies. Interdisciplinary seminars have the additional benefit for mature students who are returning to a formal educational setting after a lapse of several years. They will have the opportunity to adjust to the demands and rigors of academic endeavors before competing with the regular students in regular classes.

Upon completing work in the interdisciplinary seminars, the graduate student designs with the Adviser an individualized program of courses to fulfill core distribution requirements. Within the general schedule of two courses from each of four category areas (humanities, social sciences, natural sciences, and behavioral sciences), the student constructs a program in which he can creatively accomplish his educational goals. In core

[^13]distribution courses, which are taken from the offerings of other graduate programs at The University of Texas at Dallas, the Master of Arts in
Interdisciplinary [Generał]Studies degree candidate is expected to do the same amount and quality of work as other graduate students in the classes. (If the [Master-of-Generat-Gtudies] candidate elects to transfer to a Master's program in a specific area, the graduate courses which he has taken in that area under the auspices of the Interdisciplinary [Genereł] studies program may [ean] apply toward credit for the Master's degree in the specific area.)

## FACILITIES

Facilities at The University of Texas at Dallas which support other graduate programs are available to students in the Program in Interdisciplinary [Generaz] Studies. Those facilities are briefly described in sections of this Bulletin associated with specific degree programs.

## SPECIFIC DEGREE REQUIREMENTS

Students entering the Interdisciplinary [Generai] Studies Program should have the bachelor's degree or its equivalent. They should be mature and capable of independent study and work.

For general degree requirements, see "Procedures and Requirements for Graduate Degrees," page 35.

For the degree of Master of Arts in Interdisciplinary [Generał] Studies, 33 semester hours of work must be completed. These hours are distributed in the following way:

1. Interdisciplinary Seminars (6 semester hours)

Prior to taking courses selected from the curricula of other graduate degree programs, special interdisciplinary seminars must be completed. The seminars involve broad topics related to the development of man and his world, as well as problems of the contemporary world. Credit offered for the seminars varies, but, on the average, the student takes the equivalent of three (3) semester hours per topic per semester to a total of six semester hours of credit in interdisciplinary seminars.
2. Core Requirements ( 24 semester hours)

From the regular graduate courses offered in this Bulletin, the students elect two courses from each of the following areas: social sciences, humanities, natural sciences, and behavioral sciences, (Two courses in Management Science and/or International Management Studies may be substituted for two courses in one of four category areas.) If the student does not meet the formal prerequisites for a course he elects, he may demonstrate to the instructor's satisfaction a competency which is equivalent to that for which the prerequisite stands.
3. Special Project (3 semester hours)

A special project must be completed. This project may be a traditional thesis or it may be of another form. It may be any type of original work which synthesizes or otherwise reflects the student's coursework and the overall character of the program, established by the Interdisciplinary [Generał] Studies Advisory Committee. The project must be approved by the student's adviser and program committee.

INTERDISCIPLINARY [GENERAE] STUDIES COURSES
INTRODUCTORY COURSES
Course Description
5300 Interdisciplinary Seminar (3 semester hours) May be repeated for credit. Topics will vary each semester.

GRADUATE PROGRAM IN
INTERNATIONAL MANAGEMENT STUDIES
(M.A., PhD.)

1．Amend section M．A．IN INTERNATIONAL MANAGEMENT STUDIES，as follows：
The M．A．Degree in International Management Studies is obtained by completing the program courses outlined below with the total credit hours required．Two program options are available：one for students with non－ business backgrounds and one for individuals with undergraduate degrees in business and public administration．
［Eaeh－Master－ө£－Arts－student－must－eompłete－a－pregram－ef－36－semester－heurs
as－wett－as－earning－a－satisfactory－grade－on－the－written－and－orat－examination
taken－during－the－łast－semester－of－registration－－－Atternatetyテ－the－student－may
ełeet－もe－submit－a－Masterls－thesis－whieh－eeunts－as－three－eredit－hours－toward
the－total－eourse－requírements．］

## 2．Amend section PREREQUISITES，as follows：

Prerequisite knowledge in economics，statistics，accounting and computer programming is a requirement for the program．Deficiencies in any of these areas may be remedied by taking ECO 3301，MAS 5313 or POL EC 5303，MAS 5331， MAS 5152 or MAS 5153 or MAS 5154.

Prerequisite－knowtedge－equivatent－to－one－year－of－economies－introduetion



3．Amend section PROGRAM OF STUDIES as follows：
Non－Business Background Option Core（ 36 semester hours）

| MAS 6341 |
| :--- |
| MAS 6361 |
| Financial Management |
| MAS 6366 |
| Marketing Management |
| IMS 5300 |
| ThS 5310 |
| Int World Economy |
| IMS 5320 |
| International Marketing Management |
| IMS 6320 |
| International Finance and Monetary |
| IMS 6365 |
| Comparational Corporate Finance Management Methods |
| Electives：nine hours |

Business Background Option Core（ 30 semester hours）

| IMS 5300 |
| :--- |
| IMS 5310 |
| Inte World Economy |
| IMS 5320 |
| International Marketing Management |
| IMS 6320 |
| International Corporate Finance 6365 |
| Comparative Management Methods |
| IMS 6360 |
| Electives：International Business Management |

The following sequence of studies is strongly recommended：1）pre－ requisites，2）MAS 6341，MAS 6361，MAS 6366 for Non－Business Majors， 3）IMS 5300 ，4）IMS Core，5）electives from 1 ist of recommended courses supplied by Graduate Advisor，6）IMS 6360.

[^14]A－łist－of－reeommended－courses－in－these－funetionat－areas－may－be－obeained from－the－Graduate－Advisors．］

4．Amend section Ph．D．IN INTERNATIONAL MANAGEMENT STUDIES，as follows：
The program consists of a minimum of 90 semester hours of work（ 60 for students with an appropriate master＇s degree）．The emphasis，however，is not upon completing the required course work but rather upon satisfactorily completing the required General Preliminary Exam，the Qualifying Exam，the Oral Defense of the Dissertation Proposal，and the Final Defense of Dissertation Research．Students are required to participate actively in an ongoing IMS Ph．D．seminar during their entire stay at the University．

Genera1 Preliminary Fxam（8 hour written exam）
IMS MA Core and Prerequisites
ECO 5305 and ECO 5308 or year of intermediate economics taken elsewhere IMS 8340

Qualifier Exam（written and／or oral）
Nine semester hours of research methodology beyond prerequisites
Minor area of concentration
Necessary electives for dissertation research
IMS 8340 （taken a second time）
Dissertation Proposal and Defense
The dissertation is the focal point of the Ph．D．program．A student is well advised to work towards defining the researching his topic during the entire program of studies．
［Prerequisites－are－those－of－the－MァAг－program－er－its－equivatentб－－Program eourse－requirements－eonsist－of－a－program－of－studtes－fat－łeast－60－semester heurst－devełoped－jeintly－by－the－eandudate－and－the－graduate－eommittee－whieh witi－prepare－the－student－te－undertake－dissertation－researeh．］
5. Under section INTERNATIONAL MANAGEMENT COURSES, amend courses as follows:
$\left.\begin{array}{ll}5300 & \begin{array}{l}\text { The World Economy (3 semester hours) } \\ \text { The parameters in the world economy which cause international } \\ \text { business to differ from purely domestic operations. The environ- }\end{array} \\ \text { ment in which international business is conducted, including } \\ \text { both economic relations among nations and environmental factors } \\ \text { that affect business operations within different nations such }\end{array}\right\}$
6. Under section INTERNATIONAL MANAGEMENT COURSES, add courses as follows:

| 5361 International Labor Relations ( 3 semester hours) |
| :--- |
| The history of labor movements in major nations of the world <br> and current labor relations practices and problems of multi- |
| national firms. (3-0) |


| 6302 | ional Bu |
| :---: | :---: |
| Problems and implications arising from the establishment and |  |
|  | operation of business abroad; immigration; rights and |
|  | disabilities of aliens; exchange control; protection by states |
|  | of their nationals; international minimum standard; |
|  | jurisdictional immunities and the act of state doctrine; |
|  | enforcement of foreign country judgements; transnational aspects |
|  | of criminal, economic and tax legislation. Prerequisite: |
|  | IMS 6301 or permission of instructor. (3-0) |
| 7351 | Area Studies - Middle East and North Africa (3 semester hours) |
|  | History of economic development and overview of current |
|  | participation in the world economy. ( $3-0)$ |
| 7352 | Area Studies - Africa (3 semester hours) |
|  | History of economic development and overview of current |
|  | participation in the world economy. (3-0) |
| 7353 | Area Studies - Eastern Europe (3 semester hours) |
|  | History of economic development and overview of current |
|  | participation in the world economy. (3-0) |
| 7354 | Area Studies - Western Europe (3 semester hours) |
|  | History of economic development and overview of current |
|  | participation in the world economy. (3-0) |
| 7355 | Area Studies - Latin America (3 semester hours) |
|  | History of economic development and overview of current |
|  | participation in the world economy. (3-0) |
| 7. Under section INTERNATIONAL MANAGEMENT COURSES, delete courses as follows: |  |
|  |  |
|  | begat-implieations-of-operating-business-enterprises-in-a-muttit netionti-environment.--Topies-inełuded-aret--łegat-status-of |
|  | persons-and-property-within-a-foreign-eountry;-internationaz |
|  | ```instrumentatities;-the-reaeh-of-Iegat-systems,-overfapping-of eonflieting-interests,--and-probłems-of-nationatization, expropriation-and-annument-ef-eontraets-or-eoneessions-in foreígn-еountriesf--f3-0t]``` |
| $350$ | -Gommereiał-Geography-of-the-Paeífe-Basin--f3-semester-hours) Potitieal;-eeonemie--ecologieat,-and-soctat-etements-in-the geography-of-the-region;-resourees,-еxploitation-of-the-sea- <br>  regions.-- $(3-\theta)]$ |
|  (3-semester-hours) <br> Pre-Perry-eontaets;-Perry-1853-1854;-first-H:-G\%-merehants-in 18501s;-Meifit-and-fataho-erass-events-łeading-to-Wortd-War-纴, Alłied-Өeeupatient-trade-imbataneest-foreeasts-for-the-£uture. (3- -9 ] |  |


| －Experting－and－モmporting－－f3－semester－hourst <br>  <br> Gommon－Market，－rebates，－free－trade－rones，－drawbeeks－－tnsuranee， ехрогt－support－probłemsт－most－favored－nation－treaties， exporting－and－merketing－aboard－－－f3－$\theta+$ ］ |
| :---: |
| ［8390－－－－－－－Gonmeretat－おapanese－Łanguage－モ－－f3－semester－hourst －rat－and－writeen－dapanese－－business－voeabulary＿－－$(3-\theta)$ ］ |
|  |
|  |
|  |

## GRADUATE PROGRAM IN <br> MANAGEMENT AND ADMINISTRATIVE SCIENCES <br> (M.A., Ph.D.)

1. Amend section, PROGRAM, as follows:

The Graduate Program in Management and Administrative Sciences stresses the theory and use of applied sciences for successful management and administration of private and public institutions Courses in
accounting
behavioral management science
finance
information systems
marketing management
operations research
[өреғаєing-qegeareh
aeeounting
£inanee
managemeat-sysもems
behaviełat-management-seienee
business-and-pubłie-administzatien]
provide an integrated and detailed knowledge of the functional areas of management as well as analytical tools for effective problem solving. Elective course offerings provide the opportunity for specialization in any of the above areas. Seminars and research on specific projects are designed to develop innovative creativity, and to stimulate the student towards integrated application of the acquired knowledge.
2. Under item 1 of subsection, M.S. IN MANAGEMENT AND ADMINISTRATIVE SCIENCES, under section, SPECIFIC DEGREE REQUIREMENTS, amend subsection, BASIC CORE (18 SEMESTER HOURS), as follows:

Basic Core (18 semester hours)
Each candidate must satisfactorily complete the 18 hour basic core. The basic core includes courses in operations research, cost accounting, financial management, management systems, behavioral management, and an integrative seminar.

Course Description
6312 Quantitative Management Science II
6331 [6334] Accounting II
6341 Financial Management
6451 Management Systems I
6361 Behavioral Management Science I
6305 Readings in Management I
3. Under item 1 of subsection, M.S. IN MANAGEMENT AND ADMINISTRATIVE SCIENCES, under section, SPECIFIC DEGREE REQUIREMENTS, amend subsection CONCENTRATION AREA (18 SEMESTER HOURS), as follows:

Each candidate must also select and complete the requirements specified in a concentration area. Currently, eight areas [the-fize areas-liseted-betew] are available.
a. Accounting
b. Behavioral Management Science
c. Finance
d. Management Science
e. Management Systems
f. Marketing Management
g. Public Administration
h. Special Area Concentration

```
[a---Management
    b---Management-Seienee
    e---Pubłie-Admintigtratien
    d---Management-Sygtems
    e.--Speėaz-Area-Geneentration]
```

Specific course requirements for these areas can be obtained from the office of the Graduate Management Programs [Adziget]. Each concentration requires a minimum of 9 designated credit hours and 9 hours of approved electives. Upon approval of the appropriate discipline coordinators [beth-the-Graduate-Pregram-Head-and-the-Graduate-Adyiser], a candidate may select the Special Area Concentration [te-suit-partieular-eareer
 systems,-pubłie-ingtítutien-management,-insuzanee-management,-and

4. Under item 2 of subsection, M.S. IN MANAGEMENT AND ADMINTSTRATIVE SCIENCES, under section, SPECIFIC DEGREE REQUIREMENTS, amend subsection, PREREQUISITES, as follows:

A bachelor's degree in business or public administration is required, which includes knowledge in calculus, finite math, computer programming, statistics, basic [and-eest] accounting, principles of operations research, business finance, information systems and organizational behavior. [and-business-taw-] Deficiencies in any of these areas may be remedied by taking MAS 5311, MAS 5312, NAS 5351, MAS 5152, MAS 5153, MAS 5154, MAS 5313, MAS 6312, MAS 5331, [MAS-6334,] MAS 6341, [MAS-635 $]$ and MAS 6361.
5. Under item 2 of subsection, M.S. IN MANAGEMENT AND ADMINISTRATIVE SCIENCES, under section SPECIFIC DEGREE REQUIREMENTS, amend subsection CONCENTRATION AREA ( 24 HOURS), as follows:

Each candidate must select and complete the requirements specified in a concentration. Currently, eight [fi*e] areas listed below are available.
a．Accounting
b．Behavioral Management Science
c．Finance
d．Management Science
e．Management Systems
f．Marketing Management
g．Public Administration
h．Special Area Concentration
［a－－Management
b－－－Management－Geienee
e－－－Publie－Administration
d－－Management－fystems
e－－－Speeíał－Area－Geneent¥atior］
Specific course requirements for these areas can be obtained from the office of the Graduate Management Programs［Adviser］．Each concentra－ tion area requires a minimum of 9 designated credit hours plus 15 hours of approved electives．The electives must include one advanced course each in at least three of the above knowledge areas（a－g［d］）．Upon the approval of the appropriate discipline coordinator［beth－the－Grad－ uate－Program－Head－and－the－Graduate－Adziser］，a candidate may select the Special Area Concentration．This joint concentration is designed to suit particular career needs which are not met by the existing concen－
 inełude－łibraチy－－management，－еdueation－systems，－publie－institutien management－－insuzanee－management－－and－heatth－eare－systems．］

6．Under section，SPECIFIC DEGREE REQUIREMENTS，amend the subsection， Ph．D．IN MANAGEMENT SCIENCE，as follows：

The program consists of major－［ead－twe］minor areas，to be determined by the candidate and his doctoral committee．In general，the Ph．D． program includes a management background or masters equivalency require－ ment，advanced Core courses，and doctoral electives．A list of specific course requirements may be obtained from the Office of Graduate Management Programs for any area of concentration．Each doctoral candidate is required to complete a minimum of ninety（90）semester hours of graduate work before a degree may be conferred．［Prereq－


 Gөте－Gөияses－are－the－яame－as－these－in－the－Basie－Gөre－fөr－the－nen－business beekground－M－6：－Рreg干em－lis

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7. Under section, MANAGEMENT AND ADMINISTRATIVE SCIENCES COURSES, amend courses as follows:

Management and Administrative Sciences Courses
5311 Mathematics for Management Sciences I (3 semester hours) Same as MMS 5304. (3-0) [EAementary-methemeties-in-





Mathematics for Management Sciences II (3 semester hours) Same as MMS 5310. Prerequisite: MAS 5311 (MMS 5309) before or concurrently. (3-0) [Etementafy-mathematies





Quantitative Management Sciences I (3 semester hours) Same as MMS 5311. Prerequisite: MAS 5312 (MMS 5310). (3-0) [An-intғeduetien-te-the-basie-theory-and-appitea-





Readings in Management I (3 semester hours)
Integrated reading seminar in marketing, production, value theory, sociology, psychology, computers in society, organization, decision-making, managementpolicy, communication and other topics. Prerequisites $6312,6334,6331,6341,6351,6361$. (3-0)

Administrative Policy (3 semester hours) A study of the application of policy decisions to management effectiveness. Analysis of scope and limitations of policy directives in implementing decisions in com-plex organizations. Case studies. Prerequisites 6312, $6331,6334,6341,6351,6361 .(3-0)$

Quantitative Management Sciences II (3 semester hours) A quantitative introduction to basic techniques in operations research, including: fundamentals of modeling, linear programming problems, simplex method, duality in linear programming, network problems, dynamic programming, inventory models, queuing theory. Prerequisite: MAS 5311, 5312, 5313 or permission from instructor. (3-0)

Mathematical Programming I (3 semester hours) A detailed discussion of optimization techniques of linear models. Topics include [ұетіен-ө£] simplex
 duality theory, [twe-pefsen] variants and special implementation of simplex methods, [Zeqe-sum-gemes,

 Peblemi] sensitivity analysis, parametric programming. $^{*}$

 MAS [53 $\ddagger Z_{-}$] 6312, or permission from instructor. (3-0)

Land Use and Development Policies [Resoufee-Management] (3 semester hours)
Seminar or selected topics in optimal land use models and in the environmental economic trade-offs necessary for effective management. (3-0)

Accounting II (3 semester hours)
The role of accounting systems and information in the process of management decision-making and control for private and public organizations of a profit and nonprofit nature. Topics will include measurement of costs and benefits; information evaluation and processing: managerial planning, budgeting and control; decision and performance models in accounting. Attention will be given to relating advances in quantitative and social sciences to the accounting activities. [Rote-of-ae-



 preeessing-wíth-an-emphasis-płaeed-өn-rełating-łeeent advanees-in-もhe-quantitati千e-and-behavierat-seienees



Financial Management (3 semester hours)
Theoretical and procedural considerations in the administration of the finance function in the individual Uusiness firm: planning, fund raising, controlling of firm finances; specific emphasis is given to working capital management, capital budgeting and cost of capital. $[(3-\theta)]$ Prerequisite: MAS 5331, Corequisite: MAS 5313, or permission from instructor. (3-0)

Economic Models I (3 semester hours)
A quantitative development of the fundamental economic principles underlying the organization of a price system. Market structures; concepts of demand and revenues; costs of production in both the short- and long-run; investor theory and capital market equilibrium. Prerequisite: MAS 5311, 5313, or permission from instructor. (3-0)



| 6361 | Behavioral Management Science I（3 semester hours） An introduction to the application of behavioral science concepts to managerial problems．A review of prevailing theoretical orientations and their explanatory power when focused on individual and organizational case studies．［Intreduetien－te－behavierat－theory－and－human metivatien－and－behavieæт］（3－0） |
| :---: | :---: |
| 6362 | Behavioral Management Science II（3 semester hours） An introduction to organizational theory．An examination of how organizational structure is related to technology， organizational goals，and the environment．A review of organizational development activities and how the con－ gruence of personal and corporate values effect individual behavior in bureaucracies．Prerequisite：MAS 6361. ［fhe－anatysis－ef－the－humands－rote－in－systems－－－Utitizes <br>  sensation－and－pezeeptien，－meter－pexfermanee，－өnd <br>  өє－еөmpłex－integ干ated－яystems．］ <br> （3－0） |
| 7328 | Problems in Environmental Health，Sanitation and Community Planning（3 semester hours） Seminar on the relationship of environmental health to sanitation and community planning．［quatizative－and quニntitaまive－modełs－wiłłま－be－evatuatedr］（3－0） |
| 7347 | Advanced Investment Management（3 semester hours） Special emphasis on computer－based decision models for the management of financial assets．Includes advanced work in financial information structure，security analysis，and portfolio building procedures in a system decision framework．Prerequisite：MAS 6342， 6317 or permission from instructor $[6341,-63 \pm z]$ ．（3－0） |
| 8100－8110 | Colloquium Series in Management and Administrative Sciences（1 semester hour） <br> （S－U Grading）（May be repeated for credit） |
| 8100 | Management Science |
| 8101 | Management Information Systems |
| 8102 | Behavioral Management Science |
| 8103 ［8303］ | Business Systems：Distributional |
| 8104 | Business Systems：Financial |
| 8105 | Business Systems：Manufacturing |
| 8106 | Criminal Justice Systems |
| 8107 | Educational Management Systems |


| 8108 | Health Care Systems |
| :---: | :---: |
| 8109 | Library Systems |
| 8110 | Regional Planning |
| 8020-8920 [83ze | -8330] Readings Series in Management and Administrative Sciences ( 3 semester hours) |
| Investigation administration. | into the literature of topical areas of management and (May be repeated for credit) (0-9). |
| [83z ${ }^{\text {] }}$ | Management Science |
| [83zt] | Management Information Systems |
| [83zz] | Behavioral Management Science |
| [8323] | Business Systems: Distributional |
| [83z4] | Business Systems: Financial |
| [8325] | Business Systems: Manufacturing |
| [8326] | Criminal Justice Systems |
| [8327] | Educational Management Systems (also listed as ED. 8327) |
| [8328] | Health Care Systems |
| [83z9] | Library Systems |
| [8330] | Regional Planning |
| 8030-8930 [8340 | 8350] Seminar Series in Management and Administrative Sciences (3 semester hours) |
| Discussion of administration. | selected concepts and theories in management and (May be repeated for credit). (0-9). |
| [8340] | Management Science |
| [8343] | Management Information Systems |
| [834z] | Behavioral Management Science |
| [8343] | Business Systems: Distributional |
| [8344] | Business Systems: Financial |
| [8345] | Business Systems: Manufacturing |
| [8346] | Criminal Justice Systems |
| [8347] | Educational Management Systems |
| [8348] | Health Care Systems |

Thesis (3 semester hours)
(May be repeated for credit) (0-9)
Dissertation (3 semester hours)
(May be repeated for credit) (0-9)
8. Under section, MANAGEMENT AND ADMINISTRATIVE SCIENCES COURSES, add courses as follows:

| 5361 | Organizational Theory ( 3 semester hours) |
| :---: | :---: |
|  | This course is designed to explore the evolution and |
|  | development of organization theory with a focus on the |
|  | major theoretical constructs underlying the rationale |
|  | for organizations. Specific emphasis will be directed |
|  | toward the analysis of organizations from a perspective |
|  | of closed/open system models, the strengths and weak- |
|  | nesses of each model, and the need for synthesis. Pre- |
|  | requisites: BAPA 4362 (Behavioral Management) or |
|  | BAPA 3361 (Organizational Behavior). (3-0) |
| 5365 | Labor Relations (3 semester hours) |
|  | Provides an in-depth analysis of union-management |
|  | relations and is oriented towards the application of |
|  | behavioral science principles and concepts in the |
|  | issues surrounding the areas of negotiation, collec- |
|  | tive bargaining, and arbitration. Additional topics |
|  | will include the analysis of selected labor acts from |
|  | 1890 to the present day as well as the function and |
|  | structure of the Federal Mediation Board and the |
|  | National Labor Relations Board. Prerequisite: |
|  | Permission of the instructor. (3-0) |
| 6310 | Applications and Modelling Techniques of Linear Pro- |
|  | gramming ( 3 semester hours) |
|  | Detailed presentation of LP model building concepts |
|  | and techniques, including structure and use of matrix |
|  | generators, report writers and optimizers of LP codes. |
|  | Students design and implement many different linear |
|  | models for problems arising, e.g. from transportation |
|  | networks, production allocation, multi-period schedul- |
|  | ing, financial planning. Prerequisite: MAS 6312, or |
|  | permission from instructor. (3-0) |
| 6318 | Inventory Control (3 semester hours) |
|  | The application of operations research methods to the analysis of deterministic and simple stochastic models. |
|  | Lot size models and their extensions, price break, |
|  | Wagner-Whitin, Modigliani Holn models, multi-product |
|  | and echelon models. Simple stochastic models. (3-0) |


| 6320 |  |
| :---: | :---: |
|  | $\frac{\text { Analysis of selected applications of Operations Research to prob- }}{\text { lems in both the private and public sectors with emphasis on the }}$ |
|  |  |
|  | formulation of problems and the use of $0 . \mathrm{R}^{\text {. }}$ techniques for their |
|  | solution, Prerequisite: MAS 6312 or permission from instructor. |
|  | (3-0) |
| 6324 | Application of Management Science to Public Systems (3 semester |
|  | hours) <br> Formulation and solution of problems in the area of public systems |
|  |  |
|  | using management science techniques will be stressed. Typical areas will include: location of facilities, scheduling of man- |
|  |  |
|  | power, models of police operations, rapid transit facilities, de- |
|  | sign of utility lines, etc. Prerequisite: MAS 6313 or permission |
|  | from instructor. $(3-0)$ |
| 6330 | International Dimensions of Accounting |
|  | International measurement and reporting problems in accounting; |
|  | the accounting function and activities in various international |
|  | environments. Accounting concepts, standards, methods, and prac- |
|  | tices in foreign countries and their relationship to U.S. account- |
|  | ing. Foreign currency translation; taxation; performance measure- |
|  | ment of international entities. Accounting for International op- |
|  | erations and multinational enterprise accounting. Comparative accounting systems. Financial reporting of foreign and multi- |
|  |  |
|  | national corporations, Case studies. Prerequisites: MAS 5331 or |
|  | permission from instructor. (3-0) |
| 6332 | Accounting Systems, Evaluation and Administration (3 semester |
|  | hours) |
|  |  |
|  | accounting systems for private and public organizations. Governmental accounting, including accounts of institutions, municipal- |
|  |  |
|  | ities, and state and federal government. Performance budgeting |
|  | and systems analysis. Accounting and economic decisions. Inte- |
|  | gration between micro and macro accounting systems. Prerequisite: |
|  | MAS 5331 or permission from instructor (3-0) |
| 6334 | Economic Accounting (3 semester hours) |
|  | An examination of the accounting concepts and techniques necessary to measure economic activities of national (macro) and governmental |
|  |  |
|  | units; similarities and contrasts of problems in enterprise, gov- |
|  | ernment and national income accounting, Determination of value- |
|  | added; classification and valuation difference. Appraisal of macro accounting statements, flows and balances. e.g., national |
|  |  |
|  | Income and product accounts; input-output tables; flow of funds |
|  | accounts; and national balance sheets. Use of macro and micro |
|  | accounts for private and public sector economic analysis, policy and planning e.g. allocation of national resources; social indica- |
|  |  |
|  | tors and corporate social performance measurement; human resource |
|  | accounting. Prerequisite: MAS 5331 or equivalent. (3-0) |



| 7310 | Dynamic Programming (3 semester hours) |
| :---: | :---: |
|  | The basic ldeas of recursion and the functional equation approach |
|  | will be introduced, Various applications will be introduced and |
|  | these will include: resource allocation, knapsack, shortest route |
|  | problems, etc. The subject will cover all of the following: the |
|  | theoretical basis, formulations and computational aspects. Pre- |
|  | requisite: MAS 6312 or permission from instructor. (3-0) |
| 7320 | Applications of Operations Research II (3 semester hours) |
|  | A second course in O.R. applications (see MAS 6320). Topics re- |
|  | quiring additional theoretical background will be covered. Pre- |
|  | requisite: MAS 6312 and either MAS 6313 or MAS 6316 or permission |
|  | from Instructor. (3-0) |
| 7352 | Computer System Evaluation (3 semester hours) |
|  | Selecting the right computer system is important to an organization. |
|  | This course reviews the charactexistics of hardware devices and |
|  | software systems for processing and transmission of data, empha- |
|  | sizing the properties which are critical to the user. Measurement |
|  | devices and analytical techniques are addressed for the support of |
|  | trade-off analysis to evaluate desirable capabilities in the rede- |
|  | sign or acquisition of computer configurations. Prerequisite: |
|  | MAS 6351 or permission of instructor. (3-0) |
| 7360 | Laboratory Research Methods (3 semester hours) |
|  | An examination of the problems and procedures involved in conduc- |
|  | ting rigorous research in behavioral laboratories, Topics will |
|  | include the philosophy of science; theory, inference, and gener- |
|  | alization; experimental design; ethics; and experimental artifacts. |
|  | Students will be expected to conduct a research project as part of |
|  | this course, Prerequisites: Inferential statistics or permission |
|  | of instructor. (3-0) |
| 7361 | Field, Action, and Evaluation Research (3 semester hours) |
|  | This course is designed to evaluate critically the advantages of |
|  | research based on fleld experiment, fleld study, survey analysis, |
|  | participant observation, content analysis, interviewing, cross- |
|  | cultural study, simulation, demographic and data archives methods. |
|  | Integration of research designs and multimethod techniques will |
|  | be emphasized. The class will select a hypothesis, and each stu- |
|  | dent will select one of the above methods to test the hypothesis. |
|  | Course will consist of oral presentations and discussions of stu- |
|  | dent research proposals based on above methods of data collection. |
|  | Prerequisites: MAS 7360 a basic course in statistics. (3-0) |
| 7362 | Complex Organizations and Bureaucracies (3 semester hours) |
|  | Bureaucracies and complex formal organizations in various institu- |
|  | thonal settings and the relationship among organizations in the |
|  | community, Informal structures, Internal conflict, integrative |
|  | mechanisms, and the dilemmas of professional and administrative |
|  | demands will be emphasized. Prerequisite: MAS 6362 or equiva- |
|  | Ient. (3-0) |


| 7364 | Collective Bargaining (3 semester hours) |
| :---: | :---: |
|  |  |
|  | lective bargaining in the public and private sector, grievance and |
|  | arbitration process, and international aspects of collective bar- |
|  | gaining. Prerequisites: MAS 5365 or permission of instructor. |
|  | (3-0) |
| 7365 | Social Psychology of Organizations (3 semester hours) |
|  | Critical analysis of current social psychological theories with |
|  | emphasis on implications for the study of organizational roles ${ }_{2}$ |
|  | leadership, power, decision-making, structure, organizational ef- |
|  | fectiveness and change. Frerequisite; MAS 6362. (3-0) |
| 7366 | Marketing Management (3 semester hours) |
|  | An advanced study of special topics of interest in marketing. May |
|  | be repeated for credit when the topic varies. Prerequisite: |
|  | MAS 6366. (3-0) |
| 7368 | Market Theory |
|  | A review of the development and current state of marketing thought |
|  | Permission of instructor required. |
| 7369 | Advanced Marketing Models |
|  | An in-depth review of the current popular marketing models. |
| 7370 | Promotion (3 semester hours) |
|  | A study of the promotion decisions of marketing managers. Evalu- |
|  | ation of promotional effectiveness and the different methods of |
|  | promotion will be covered. (3-0) |
| 9. Under section, MANAGEMENT AND ADMINISTRATIVE COURSES, delete courses: |  |
|  <br>  <br>  |  |
|  |  |
|  |  <br>  <br>  <br>  |

> GRADUATE PROGRAM IN
> MATHEMATICAL SCIENCES
> (M.S., M.A.T., Ph.D.)

1. Amend the section OBJECTIVES, as follows:

The Mathematical Sciences Program at UTD offers graduate study in three areas: applied mathematics, computer science, and statistics. These areas are in constantly increasing demand. [The-need-for-appited-mathematies, computer-seienee-and-statisties-is-constantzy-growing] As other sciences mature; problems which require their [its] use are numerous and pressing, and their [ $\ddagger$ ts] practitioners are eagerly employed. The University of Texas at Dallas Graduate Program in Mathematical Sciences will concentrate on these areas, with many study and research tracks including several that are strongly interdisciplinary. The present requirements listed below include programs in statistics, computer science, and applied analysis (differential equations, relativity theory, numerical methods, etc.) as well as joint programs where the student may do a major part of his work in certain areas of applications. These programs could lead to careers in the three major areas themselves as well as in such fields as physics, environmental sciences, management science, and so on.
2. Under the section SPECIFIC DEGREE REQUIREMENTS, amend major headings and sub-sections as follows:

## a. Under MASTER OF ARTS IN TEACHING:

Resource Area: 12 additional [9] semester hours in Mathematical Sciences (approved by Graduate Adviser).
b. Amend the 3 rd and 4 th paragraphs of the section MASTER OF SCIENCE, as follows:

There are three options from which the student may choose and within each option there are several tracks. Many of the tracks are joint with some area of application and require work in both Mathematical Sciences and the area of application. If a student wishes a track not listed below, he may submit a proposed degree program for approval by the Program Head [Graduate-Pregram].

All electives must be approved by the Graduate Adviser. Substitutions for required courses may sometimes be made if approved by the Graduate Adviser. Instructors may waive stated prerequisites for students with equivalent experience.
c. Amend track IF of the STATISTICS OPTION, as follows:

Track IF. Statistics and Quantitative Management: Rigorous training in quantitative methods is becoming increasingly important in functional management decisions. Choose one course from each of three of the following five sets of MAS courses: $(5361,6361),(5331,6331)$, (6342), (6351, 6352), (7349). Choose one additional MAS course at 6000 level or above and remaining electives from MAS or MMS courses numbered 5000 or above. MMS 7330 is recommended.
d. Amend track 2 H of the COMPUTER SCIENCE OPTION, as follows:

Track 2H. Computer Science and Management: Complete four courses from among MAS 6305, 6306, 6312, 6331, 6341, 6351, 6361. Remaining electives may be chosen from MMS courses related to the student's area of interest.
e. Amend track 3A of the APPLIED ANALYSIS OPTION, as follows:

Track 3A. Applied Analysis: Complete three more courses from the above 11st and/or $\operatorname{MMS} 5351,5352,6329,7301,7302,7305$. Choose remaining electives from MMS courses numbered 5000 and above. Nonthesis students may choose 6 hours of graduate courses outside of MMS.
3. In the section MATHEMATICAL SCIENCES COURSES, amend courses as follows:

| 5301 | Elementary Analysis I (3 semester hours) <br> Real numbers, functions of several variables, limits, continuity, differentiability, integrals, vectors and vector functions. Frerequisite: Calculus through multivariable calculus. [one-year-of] (3-0) |
| :---: | :---: |
| 5330 | Computer Science II ( 3 semester hours) |
|  | Computer structure and organization, machine language, addressing techiques and digital representation of data. Use of assembly |
|  | language for various applications. Operating system interfaces, |
|  | job control language, and macros. Programming techniques: sub- |
|  | routines, arrays, 11sts. The programming activity: design, docu- |
|  | mentation, coding techniques, debugging, testing. Prerequisite: |
|  | MMS 5303 or permission of the instructor. (3-0) [Gemputer |
|  | strueture-and-organtzetiont-maehtne-Zanguaget-4nstruetion-exeeu-tifort-addreosing-teehntquers-and-dugitat-representation-of-data symbette-eodthg-and-assembly-nystems.--Ese-of-assembly-language for-vartoue-programang-applteotuenst--Frezequiettet--4M6-5303-or 3331ヶ-(3-07] |
| 5331 | Computer Science III ( 3 semester hours) |
|  | Advanced programing techniques: structured programming, table |
|  | driven programs. File organization: peripheral device character- |
|  | istics, input/output structures, sequential and random access |
|  | files, physical and logical file organization. System programming |
|  | fundamentals: recursion, reentrancy, decision tables. Program- |
|  | ming practice in PL/I and job control language. Prerequisite: |
|  |  efuttrg-topieosath-ab-assemblers £4te-and-table-struetures,-ttme-sherfng;-and-tetecommunteatienst <br>  $А$ АВ-ーетет--Ря |
| 6329 | Applied Probability and Stochastic Processes (3 semester hours) |
|  | This is an intermediate level course which does not require measure theory. The basic random processes used in random modeling are |
|  | discussed. This includes branching, birth-and-death, and stationary processes. Areas of applications are chosen from such topics |
|  | as control theory, traffic theory, queueing, reliability, inventory, theory of epidemics and contagion, learning models, etc. |
|  | Prerequisite: MMS 5351, (3-0) |

Compiler Construction (3 semester hours)
Analysis of grammar and syntax of several programming languages. Algorithms for syntactic analysis: recognizers, backtracking, operator precedence techniques. Semantics of grammatical constructs: reductive grammars. Relationship between formal languages and automata, Prerequisite: MMS 6350 [534e]. (3-0)

Non-Numerical Computing (3 semester hours)
Use of computers for non-numerical applications. Topics from word and text processing, language translation, information retrieval, Introduction to language understanding systems symbolic manipulation of mathematical formulae. Prerequisite: MMS 5345. (3-0)
[Hse-of-computers-4n-applteatiens-where-4nformation-4s-ner-

 MAS-5330T- (3-0t]

Computer Graphics (3 semester hours)
Geometry relevant to computer graphics. Translations, rotations, perspective projections, stereo views. Manipulation of points, lines, planes, Visibility calculations. The hidden-1ine/hiddensurface problem. Generation of line-drawing and continuous-tone images. Realistic renderings of 3-dimensional objects. Passive and interactive systems. Survey of current hardware and software systems. Introduction to computer-aided design, computer animation, and curved-surface formulations. Prerequisite: MMS 5345 and matrix theory, (3-0) [Amelytedeat-geometry-supporting-eompu-ter-graphteor-Mentpuletion-of-pointes-itneer-plenes,-eter--Paesive and-tnteraetive-eomputer-graphteər-6emputer-atded-drafting-and

 added-deetgnt-6omputer-antmatient--Prerequtetter--2M6-5303-or 3337ヶ- $(3-6)]$
4. To the section MATHEMATTCAL SCIENCES COURSES, add the following courses:

| 5107 | Introduction to FORTRAN (1 semester hour) |
| :---: | :---: |
|  | An introduction to programming in FORTRAN. Based primarily on |
|  | self-study materials. No credit allowed to Mathematical Sciences |
|  | majors, (1-0) |
| 5108 | Introduction to APL (1 semester hour) |
|  | An introduction to programming in APL. Based primarily on self- |
|  | study materials, No credit allowed to Mathematical Sciences majors. (1-0) |
| 5304 | Applied Mathematical Analysis for Non-Majors (3 semester hours) |
|  | Techniques of mathematical analysis applicable to the social, be- |
|  | havioral, and management sciences. Graphical representations, |
|  | differential and integral calculus of one and many variables. |
|  | No credit allowed to Mathematical Sciences majors. (3-0) Same as |
|  | MAS 5311 |


| 5310 | Applied Mathematical Analysis for Non-Majors II (3 semester hours) |
| :---: | :---: |
|  | Techniques of mathematical analysis applicable to the social behavioral and management sciences. Elementary difference equations, |
|  |  |
|  | set theory, matrix algebra and its applications. No credit allowed |
|  | to Mathematical Sciences majors. (3-0) Same as MAS 5312 |
| 5311 | Applied Statistics for Management Sciences (3 semester hours) |
|  | Introduction to the theory and methods of statistics used most |
|  |  |
|  | distributions, measures of location, measures of variation, index |
|  | numbers, probability, Bayes Theorem, Games and Decisions, introduc- |
|  | tion to simulation, sampling distributions, point and interval |
|  | estimation (classical and Bayesian), statistical decisions (hypothesis testing), simple correlation and regression. This course |
|  |  |
|  | may not be taken for credit by MMS Option 1 or Option 3 majors. |
|  | Prerequisite: MMS 5309 and 5310 or equivalent. (3-0) |
| 5312 | Applied Statistics for Management Sciences II (3 semester hours) |
|  | Intermediate statistical theory and methods used extensively in |
|  | management and business. Emphasis will be placed on the concepts |
|  | and use of the theory and methods. Topics include: multiple re- |
|  | gression and correlation, innear models, analysis of residuals, weighted regression, survey sampling, introduction to time series |
|  |  |
|  | analysis, the multivariate normal distribution, discriminant analysis, cluster analysis, principal component analysis, factor |
|  |  |
|  | analysis, canonical correlation. This course may not be taken for |
|  | credit by MMS Option 1 or Option 3 majors. Prerequisite: MMS 5311 |
|  | or equivalent. ( $3-0)$ |
| 5333 | Discrete Structures and their Use in Computing |
|  | (3 semester hours) |
|  | Topics in discrete mathematics relevant to computing. Mathematical |
|  | logic, sets and representation of data, Boolean algebras and sequential circuits, graph theory, formal languages and grammars. |
|  |  |
|  | Prerequisite: Background In modern algebra or permission of the |
|  | Instructor. (3-0) |
| 5340 | Digital Logic Design ( 3 semester hours) |
|  | Basic digital circuits, data representation. Analysis and synthe- |
|  | sis of combinatorial and clocked sequential circuits. Medium- and large-scale integration digital components. Register-transfer |
|  |  |
|  | level zepresentation of digital systems. Introduction to design |
|  | of a digital computer. Prerequisite: MMS 5330, (3-0) |


| 5353 | Applied Statistics and Data Analysis for Non-Majors I |
| :---: | :---: |
|  | (3 semester hours) |
|  | Introduction to statistical methods and theory with heavy emphasis |
|  | on applications in the social, natural, and managerial sciences. |
|  | Concepts of variability, sampling, point and interval estimation, |
|  | testing hypotheses, correlation, simple regression, one- and two- |
|  | way analysis of varfance, Use of a standardized computer package |
|  | w111 be made in this course so that the concentration will be on |
|  | applicability, appropriateness, and utility of the statistical |
|  | theory and methods, This course may not be taken for credit by |
|  | MMS Majors. (3-0) |
| 5354 | Applied Statistics and Data Analysis for Non-Majors II |
|  | (3 semester hours) |
|  | Designed for users of statistics. Emphasis will be on the appro- |
|  | priate use, utility and limitations of the methods discussed. Use |
|  | of a standardized computer package is stressed, Topics from |
|  | applied multiple regression and correlation; residual analysis; |
|  | graphical techniques for data analysis; multi-way analysis of |
|  | variance; multi-way contingency table analysis; analysis of co- |
|  | variance; discriminant analysis; multiyariate analysis of invari- |
|  | ance; principal component and factor analysis. Prerequisite: |
|  | MMS 5353 or MMS 3353 or MMS 3316 or SS 3302 or equivalent. This |
|  | course may not be taken for credit by MMS Majors. (3-0) |
| 6350 | Systems Programming ( 3 semester hours) |
|  | Assemblers and loaders. Interrupt-driven programming, buffering |
|  | techniques. Introduction to compilers, interpreters, micropro- |
|  | gramming, and operating systems. Prerequisite: MMS 5331. (3-0) |
| 6351 | Computer System Design (3 semester hours) |
|  | Design of digital systems including computers and peripheral in- |
|  | terfaces. Microprogramable vs. hard-wired control units. Micro- |
|  | processor organization, Use of microprocessors in system design. |
|  | Case studies in small computer system design. Prerequisite: |
|  | MMS 5340, (3-0) |
| 6352 | Computer System Architecture ( 3 semester hours) |
|  | Computer design problems: instruction sets, memory organization, |
|  | addressing, input/output structures, Higher-level computer |
|  | structures, such as multiprocessor systems and computer networks. |
|  | Case studies including microprocessors, mini computers, machines |
|  | of historical interest, and large scale machines. Prerequisite: |
|  | MMS 6350, MMS 6351, or consent of the instructor, (3-0) |


| 354 | Software Engineering (3 semester hours) |
| :---: | :---: |
| Programpling techniques, Topics from system design methodology, |  |
| program test methods, documentation, software economics, port- |  |
|  |  |
| ware project organization and control. Case histories of software |  |
| projects. Prerequisite; MMS 5330 or consent of the instructor. |  |
|  |  |
| 6363 | Introduction to the Theory of Computation (3 semester hours) |
|  | Finite automata and Turing machines, decidability and undecid- |
|  | ability, formal languages, introduction to predicate calculus. |
|  | Verification of flowchart programs and ALGOL-1ike programs. Flow- |
|  | chart schemas. Prerequisite: MMS 5333. (3-0) |
| 6364 | Survey of Artificial Intelligence (3 semester hours) |
|  | Study of attempts to design machines which exhibit intelligent |
|  | behavior. Representation of knowledge. Topics from goal-directed |
|  | systems, general problem solving, game-playing, theorem proving, |
|  | question-answering systems, scene analysis and robotics, History |
|  | and social implications, Prerequisite: MMS 6362. (3-0) |
| 7363 | The Design and Analysis of Computer Algorithms ( 3 semester hours) |
|  | The study of efficient algorithms for various computational pro- |
|  | blems. Sorting, manipulation of data structures, graphs, matrix |
|  | multiplication, the Fast Fourler Transform, arithmetical opera- |
|  | tions, pattern matching, Prerequisite: MMS 5345. MMS 6363 is |
|  | recommended, (3-0) |
| 7378 | Operating Systems (3 semester hours) |
|  | Review of batch processing, real-time, and time-shared operating |
|  | systems. Implementation techniques for parallel processing, over |
|  | all structure of multiprograming systems. Resource management. |
|  | File system design, Performance measurement and evaluation, Case |
|  | studies. Prerequisite: MMS 6350, (3-0) |
| 8380 | Supervised Teaching (3 semester hours) |
|  | Preregulsite: Graduate standing in mathematical sciences and |
|  | permission of the instructor. (3-0) |
| 5. From the section, MATHEMATICAL SCIENCES COURSES, delete the following courses: |  |
| [5333--------Applited-Algebra-f3-semestev-heurs子 <br>  Wtth-an-emphaoto-en-semigroupst-elgebrete-theory-of-meehtres-and <br>  qutrtet--A-semester-ef-modern-atgebrat- $-(3-\theta+]$ |  |



GRADUATE PROGRAM IN PHYSICS
(M.S., Ph.D.)

1. Amend the section FACILITIES, as follows:

For atmospheric and space physics there are facilities for the design, fabrication and testing of such rocket and satellite-borne instrumentation as mass-spectrometers, low energy particle detectors, retarding potential analand ultraviolet photometers and spectrometers. Experiments conceived and implemented here have been incorporated into many of the major NASA satellites and probes and into many smaller rocket and balloon flights. The faculty and students continue to participate in many major NASA satellite and space probe programs, including Viking, Pioneer Venus, Atmosphere Explorer, Electrodynamic Explorer, Pioneer, IMP, Apo110, $0 G 0$ and ISIS. Visible airglow emissions are also observed from the ground at various sites in North and South America.

In atomic and molecular physics there exist both pulsed and flowing after-glow systems with visible and ultraviolet tandem double monochromators, a vacuum ultraviolet spectrometer and a nicrowave interferometer available for diagnostics. An H-P 2100 cn-1ine instrumentation computer is avallable for rapid data acquisition and real-time analysis situations.

A high energy laser project provides facilities for the study of superradiant emissions from high density plasmas created by pulsed irradiation with electron beams of gigawatt peak power. The basic excitation transfer mechanisms important to quantum electronics can be studies in a unique fluorescent spectroscopy system employing several tuneable dye lasers. Pulsed and continuous tuneable dye lasers are also used in high resolution studies of atomic and molecular structure by multiphoton absorption spectroscopy.

In applied physics, facilities include three minicomputer systems used in conjunction with specialized data acquisition and control modules to collect and analyze research data in atomic physics, laser and applied physics laboratories.

In experimental solid state studies of the optical properties of solids, a low temperature modulation spectroscopy apparatus is used which includes an 0.3 meter scanning monochromator and a liquid helium optical dewar. Theoretical techniques for determining the electronic structure of solids are currently being developed using a PDP $11 / 45$ and an IBM 370-155 computer.

Theoretical studies in relativity are facilitated by software libraries developed on campus. Laboratory facilities at the university support the search for extraterrestrial nutrino sources (massive stars collapsing into neutron stars and black holes). Experiments are conducted at Homestake Gold Mine in Lead, S. Dakota and the limestone mine in Barbarton, Chio.
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#### Abstract

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2. In the section, PHYSICS COURSES, amend courses under the curricular headings noted, as follcws:

Applied Physics
Elements of Digital Circuits (3 semester hours)
Introduction to digital hardware; theory and operation of discrete and integrated logic circuits; logic families; [MOS-deviees;] simplification of logic functions; logic design of counters, shift registers, and arithmetic circuits. Lab fee required. (2-2)

Data Acquisition and Computer Interfacing (3 semester hours) Real time data acquisition; linear-digital conversions, nonlinear systems, sampling systems; instrumentation techniques; [feedbaek-theory,-stebitity-] monitoring and control functions. Lab fee required. (Normally follows 5323). (2-3)

Atcmic and Molecular Physics
6351 Quantum Thecry of Atoms and Molecules (3 semester hours)

Solid State Physics
$\frac{5371}{[637 \pm} \quad$ Introduction to Solid State Physics
3. In the section, PHYSICS COURSES, add courses under the curricular headings noted as follows:

Basic Courses
5407 Quantum Physics (4 semester hours)*
Survey of Quantum Mechanical Phenomena in Modern Physics; and molecular spectroscopy; quantum statistics; band theory of solids; particle scattering and radiation; nuclear models, reactions and stability; elementary particles.
*With approval, Phys. 5407 may replace Phys. 5400
Applied Physics
$5327 \quad$ Electronics (3 semester hours) $\quad$ AC circuits; transient analysis; active circuits; operational

Quantum Electronics


Atomic and Molecular Physics


GRADUATE PROGRAM
IN POLITICAL ECONOMY [ $\ddagger$
(M.A., Ph.D.)

1. Amend the Section, PROGRAMS, as follows:

In addition to set of basic coure courses students will be encouraged to take selected skill modules in areas where they are deemed to be deficient in light of their needs and interests. There are five areas of concentration within The Political Economy Program: a) Theory, Methodology, and Research Skills: b) Urban Political Economy; c) Cross-National Political Economy; d) Industrial Political Economy; and 3) Public Policy and Public Finance.




 tient]
2. Delete Footnote from program description:



3. Amend the section, SPECIFIC DEGREE REQUIREMENTS, as follows:

All students are required to take basic core courses described below. Students pursuing the Master of Arts degree must select one program area for specialization and students pursuing the Ph.D. degree must select two program areas for specialization. Individuals who can demonstrate proficiency in economics and/or statistics may be exempted from some of the basic courses, designated by $\dagger$.

For general degree requirements, see "Procedures and Requirements for






 Graduate-Deg干ee日,:"-page-35т]

Core Courses
Theories of Political Economy
Approaches to Public Policy
Public Finance and Economic Policy Making
Micro Economics $\dagger$
Macro Economics $\dagger$
Data Analysis $1 \dagger$

Public Policy and Public Finance
Law and Public Policy*
Evaluation Research for Social Programs*
Public Policy Towards Business*
Organizational Behavior*
State-Local Finance and Budgeting*
Political Economy of Intergovernmental Relations*
Post Industrial America - Institutions and Issues*
The Political Economy of Developed Nations*
Public Choice*
Industrial Political Economy
Public Policy Towards Business*
Labour and Human Resources
Post Industrial America - Institutions and Issues*
Technology Politics and Society*
Urban and Regional Political Economy
State-Local Finance and Budgeting*
Urban Political Economy
Political Economy of Intergovernmental Relations*
Urban Economics
Regional Development Theory and Policy Analysis
Organizational Behavior*
Cross National Political Economy
International Political Economy
The Political Economy of Developed Nations*
The Political Economy of Developing Nations
Technology, Politics and Society
Organizational Behavior*
Methodology and Research Skills
Public Choice*
Evaluation Research for Social Programs*
Law and Public Policy*
Communications Skills
State Local Finance and Budgeting*
Research Design and Methods
Advanced Quantitative Methods

* Courses in more than one option
$\pm$ Other courses may be substituted for these if the candidate has already had acceptable preparation in these areas.

4. In the section POLITICAL ECONOMY COURSES, amend courses as fcllows:

| 6334 International Political Economy |  |
| :---: | :---: |
| [63z土 | Internationat-Eeenomtes] (3 semester hours) <br> A survey of the economics of the world economy: institutions, international trade theory, international finance, the role of multinational corporation, political and economic integration, and the role of the oil exporting countries. |
| 6335 | The Political Economy of Developing Nations |
| [632z---- | -Eeonemie-and-Pelitieal- -evetepment] (3 semester hours) <br> The political economy of the development process, with emphasis upon the developing nations. Topics include the nature of underdevelopment, the role of population growth, investment policies, market versus nonmarket strategies, international trade and assistance, the role of culture and tradition in the development process, and relationships between political and economic development. |
| 6348 | Research Design and Methods |
| [636z - | -Beatgn-and-Implementatien-é-\&urvey-Researeh] <br> (3 semester hours) <br> Topics include research design, questionnaire construction, sampling, interviewing and mail questionnaires, coding and data preparation, scaling and index construction and analysis, reporting, and utilization of results. |
| [8101-] 8301 | Independent Study (1-3 semester hours) <br> Independent study of readings and/or research. Open only to graduate students with approval of the Graduate Adviser. |
| 8301[8398] | Thesis (3 semester hours) |
| 8302[8399] | Dissertation (3 semester hours) |
| 5. To the section, POLITICAL ECONOMY COURSES, add courses as follows: |  |
| 5301 | Theories of Political Economy ( 3 semester hours) |
|  | A historical overview of the development of theories of political economy including contemporary theories. Included will be analyses of Marx, Institutionalists, Schumpeter, Galbraith and the URPE economists. |
| 5302 | Public Choice |
|  | Introduction to the fundamentals of public choice including rationality, self-interest, utility theory, exchange theory, cyclical majorities, the paradox of voting, single peaked preferences coalitions of minorities, and theories of voting. |
| 5303 | Approaches to Public Policy |
|  | Examines various theories analysing policy making behavior, both at the level of the whole society and for particular policy areas, and attempts to assess their validity by applying them to specific areas of policy making. |


| 5304 | Public Finance and Economic Policy Making |
| :---: | :---: |
|  | Analyses and describes the making of national economic |
|  | policy. Deals with budgetary policy on both the revenue and |
|  | expenditure sides and with such demand management areas as |
|  | fiscal, monetary and wage price policy. |
| 5305 | Micro Economics $\dagger$ |
|  | The basic supply-demand tools, applied to the markets for |
|  | commodities, labor and capital. Efficiency, equity and |
|  | income distribution. The micro economics of taxes, pellution |
|  | and industrial regulation. |
| 5306 | Macro Economics $\dagger$ |
|  | The theory and modeling of systems for the simultaneous |
|  | determination of levels of national income, employment, |
|  | prices, wages and interest. |
| 5307 | Data Analysis 1 t |
|  | Descriptive statistics, introductory probability and basic |
|  | principles of inference. Parametric and non-parametric tests |
|  | of statistical hypotheses. Introduction to correlation and |
|  | regression. |
| 5308 | Data Analysis $2 \pm$ |
|  | Econometrics - multivariate data analysis using linear |
|  | methods, with emphasis on multiple regression and its appli- |
|  | cation, and including an introduction to factor analysis. |
| 5210 | Mathematics Module |
|  | This short course will introduce and familiarise students |
|  | with various topics in advanced mathematics. The emphasis |
|  | will be placed on the application of various techniques. |
|  | Included among the topics of discussion will be calculus and |
|  | linear algebra. |
| 5211 | Computer Skills Module |
|  | This short course assumes no previous computer knowledge. |
|  | It introduces the student to elementary computer operations, |
|  | computer arithmetic and elementary and intermediate computer |
|  | programming using the RASIC language. |
| 5112 | Legal Problem Solving Module |
|  | This module will include an introduction to the basic re- |
|  | sources of law libraries, the types of questions covered |
|  | under both Common Law and statuatory law, and common legal |
|  | techniques such as Shepardising, cross-referencing and keys. |
| 5113 | Statistical Resources Module |
|  | This will include an introduction to the various sources |
|  | of data that are most often used in economics, political |
|  | science and sociology. Data generated by the Bureau of |
|  | Census, referenced in the Federal Statistical Directory, and |
|  | accessible through various private corporation and agencies |
|  | will be discussed. |




| 7301 | Special Topics in Political and Economic Theory |
| :--- | :--- |
| 7302 | Special Topics in Public Choice |
| 7303 | Special Topics in Public Policy and Finance |
| 7304 | Special Topics in Industrial Political Economy |
| 7305 | Special Topics in Urban and Regional Political Economy |
| 7306 | Special Topics in Cross－National Political Economy |
| 7307 | Special Topics in Methodology and Research Skills |

6．From the section，POLITICAL ECONOMY COURSES，delete courses as follows：

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| ［63ez <br> Uwben－Petttiee－f3－semeeter－heurat <br> The－ <br>  <br>  <br>  gevernmentez－¥etetioner］ |
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|  <br>  －tudies－in－topieal－azeats－inetuding－the－nature－and－dtetwibu－ tion－ef－pubite－servieee－withtn－the－eity－and－the－petttieat <br>  |
|  <br>  for－eredtertl． |

> GRADUATE PROGRAM IN
> SCIENCE EDUCATION (M.A.T.)

1. Amend section as follows:

RECOMMENDED [REQUIREA] COURSES IN PRIMARY
AREA OF SPECIALIZATION

| Molecular |  | Table 1 |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Environmental |  |  |
| Biology | Chemistry | Sciences | Geosciences | Physics |
| BIO 5411 | CHM 5381 | ENV 5301 | GEO 5400 | PHY 5341 |
| BIO 5421 | CHM 5383 | ENV 5302 | GEO 5420 | PHY 5342 |
| BIO 5441 | CHM 5385 | ENV 5303 | GEO 5312 | *PHY 5400, |
|  |  |  |  | 5311, 5321 |
|  |  |  |  | 5330, 5381 |
|  |  |  | 5322 |  |
| BIO 5342 | CHM 5387 | ENV 5311 | GEO [5375] | and 5341 |
| *Select tw | urses from | list. |  |  |

2. Amend section as follows:

RECOMMENDED [REQU¥REA] COURSES IN SECONDARY
AREA OF SPECIALIZATION

| Molecular <br> Biology | Chemistry | Environmental <br> Sciences | Geosciences | Physics |
| :--- | :---: | :---: | :---: | :---: |
| BIO 5411 | *CHM 5381, | *ENV 5301, | *GEO 5400, | PHY 5341 |
| BIO 5342 | 5383,5385 | 5302,5303 | 5420, | PHY 5342 |
|  | and 5387 | and 5311 | 5312 and |  |
| *Select two courses from this list. | 5322 [5375] |  |  |  |

3. To the section, BASIC COURSES, add courses as follows:


GRADUATE PROGRAM IN
SPECIAL EDUCATION
（M．S．）
1．Amend the first paragraph of the section，OBJECTIVES，as follows：
The program in special education leading to the degree of Master of Science emphasizes field based experiences and academic studies designed to facilitate the educational development of exceptional children．Objec－ tives of the program include competence in the analysis of learning pro－ cesses，synthesis of behavioral objectives，strategies of intervention and evaluation of outcomes．The program utilizes an hypothetical－deductive approach within a scientific framework to better prepare individuals to educate children who，because of physical，mental，social or emotional differences，fail to realize their potential abilities in routine educa－ tional settings，and who，therefore，require special strategies to facili－ tate learning．［The－piegzam－in－speetał－edueatien－łeading－te－the－degree－éf




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2．Amend the section，PREREQUISITES，as follows：

Applicant must hold or be eligible for a Provisional Certificate in the State of Texas．Applicant should have a background in behavioral sciences［sueh－as］（psychology，sociology，speech pathology，or education．）

3．Amend items $B$ ，D，and E of the section，SPECIFIC DEGREE REQUIREMENTS，as follows：

B．A formal investigation project reported in thesis format［ex－a demenstratien－prefeet］which reports data showing the effects of measurable intervention techniques．

D．This course work must include SED 5300，SED 5301，SED 5302，SED 5303，［GEA－54日4，－SEB－5Z日6－－GEB－85日5－］and 8306 ［ - ］as well as a thesis．Credit for one or more of these core courses may be granted by the Head of the Graduate Program in Special Education for those students demonstrating competency by examination or other appropriate means．

E．Course distribution requirements are as follows：
1．Eighteen semester hours of core course work，including a thesis．

2．Eighteen semester hours of specialized course work．Selection of the specialization is predicated upon the prior training of the student，the recommendation of the faculty，and career as－ pirations of the student．
4. Add two sections, as follows:

> REQUIRED COURSES (18 hours)

| 5300 | Research and Issues in Special Education |
| :--- | :--- |
| 5301 | Learning Theories and Their Application to the Exceptional Person |
| 5302 | Strategies for Emotional, Social and Behavioral Instruction in |
| $\frac{\text { the Classroom }}{5303}$ | Strategies for Teaching: Cognitive Domain |
| 8306 | Measurement and Evaluation in Special Education |
| 8398 | Thesis |

COURSES IN SPECIALIZED AREAS (18 hours)
Early Education of the Handicapped

| 5315 | Early Education of Handicapped Children: Provisions, Problems |
| :--- | :--- |
| 5316 | and Forecasts  <br> $5317-$ Development of Readiness Skills <br> 5318 Young <br> 5312 Parents and Family: Relation to Exceptional Children's Educa- <br> 6325 Internship in Early Education for Handicapped Children |

## Emotionally and Socially Maladjusted

5304 Developmental Approach to Emotional Disturbance: Assessment, Planning and Intervention
5305 Psycho-educational Consultation in the School or Intervention
5312 Parents and Family: Relation to Exceptional Children's Educa- tional Progress

6324 Comprehensive Residential Treatment

5. Delete the section, CORE COURSES, as follows:
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(деquired-өf-ałł-students)


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6. To the section, SPECIAL EDUCATION COURSES, add the following courses:

| 5300 | Research and Issues in Special Education (3 semester hours) |
| :---: | :---: |
|  | A general overview of major research, legislation and litigation |
|  | plus analysis of current issues and trends in the field of |
|  | special education. |
| 5301 | Learning Theories and Their Application to the Exceptional Per- |
|  | son (3 semester hours) |
|  | A study of theoretical approaches to learning and experience |
|  | In their application to individualized instruction. |
| 5302 | Strategies for Emotional, Social and Behavioral Instruction in |
|  | the Classroom (3 semester hours) |
|  | A study of approaches for establishing a total climate for growth |
|  | in a classroom setting. Introduction to systematic problem solv- |
|  | ing processes and techniques in dealing with affective problems. |
|  | Course projects provide field experience in implementing and |
|  |  |


| 5303 | Strategies for Teaching: Cognitive Domain (3 semester hours) |
| :---: | :---: |
|  | A review of theory and research dealing with the development of |
|  | reasoning, strategies for assessing cognitive development and |
|  | procedures to be used in the implementation of Piagetian theory |
|  | in the school and home. |
| 8306 | Measurement and Evaluation in Special Education (3 semester |
|  | hours) |
|  | Analysis and interpretation of formal testing procedures; tech- |
|  | niques of formative and summative evaluation for decision making. |
| 8398 | Thesis (3 semester hours) (0-9) |
| 8304 | Independent Study ( 3 semester hours - May be repeated for credit) |
| 6316 | Internship in Elementary Education of Exceptional Pupils (3) |
|  | semester hours) |
|  | Supervised and directed experiences in elementary education pro- |
|  | grams for exceptional pupils. |
| 6317 | Internship in Secondary Education of Exceptional Pupils (3) |
|  | semester hours) |
|  | Supervised and directed experiences in secondary education pro- |
|  | grams for exceptional pupils. |
| 6326 | Internship in Severely and/or Multiply Handicapped Pupils Programs |
|  | (3 semester hours) |
|  | Supervised and directed experiences in a program for the severely |
|  | and/or multiply handicapped. |
| 6325 | Internship in Early Education of Handicapped Children (3 semester |
|  | hours) |
|  | Supervised and directed experiences in early childhood education |
|  | for handicapped children. Designed to meet experiential needs |
|  | of individual student:s and to provide opportunity for practical |
|  | application of theoretical approaches. |
| 5314 | Systems Approaches to Teaching Exceptional Children (3 semester |
|  | hours) |
|  | Designed to develop competency in a systems approach to designing |
|  | new and inproved strategies in the existing curricula for excep- |
|  | tional pupils. |
| 5315 | Early Education of Handicapped Children: Provisions, Problems |
|  | and Forecasts (3 semester hours) |
|  | A review and analysis of research findings, experimentation, and |
|  | current trends in curriculum organization, procedures and materi- |
|  | als used in developing programs for young handicapped children. |
|  | Evaluation of programs, materials and methods plus critical review |
|  | of national program models. |
| 5316 | Development of Readiness Skills (3 semester hours) |
|  | Analysis of practices and principles which use the exceptional |
|  | childs ${ }^{\prime}$ interaction with his natural environment as an education- |
|  | al tool. Presents review of the historical, philosophical, and |
|  | psychological foundations of developmentally based methods with |
|  | emphasis on Piagetian approaches to reading and math readiness |
|  | skills. |


| $\begin{aligned} & 5317- \\ & \hline \end{aligned}$ | Experience in Appraisal of and Programming for the Develop |
| :---: | :---: |
|  | Young ( 3 semester hours each, total 6 semester hours) |
|  | Practice in administering, scoring, interpreting and communicat- |
|  | ing results of assessments which can be administered by class- |
|  | room teachers plus prescription writing and program design for |
|  | the remediation of basic deficits. |
| 8300 | Interdisciplinary Studies Legal Provisions for the Exceptional |
|  | Citizen (3 semester hours) |
|  | Analysis of federal and state legislation and litigation that |
|  | provides services and assures equal quality of life to excep- |
|  | tional citizens. |
| 8301 | Interdisciplinary Studies: The Interrelations of Physical, Occu- |
|  | pational and Educational Therapy ( 3 semester hours) |
|  | Provides information and ongoing experience in effecting a team |
|  | approach in supplying physical, occupational and educational |
|  | services to exceptional persons. |
| 8302 | Interdisciplinary Studies: Metabolic Aspects of Development |
|  | and Learning (3 semester hours) |
|  | Consideration of research on the biochemical basis of behavior, |
|  | on genetics and on the application of the findings in training |
|  | programs for exceptional persons and their families. |
| 5313 | Sensory Processes in Learning ( 3 semester hours) |
|  | Understanding of the roles of auditory, visual, kinesthetic and |
|  | tactile modalities and their various combinations in the process |
|  | of learning; includes review of screening and assessment tech- |
|  | niques to use with multihandicapped or lower functioning children. |
| 8303 | Problems in the Education of the Visually Handicapped (3 semester |
|  | hours) |
|  | Discussion of research on visually impaired persons plus introduc- |
|  | tion to and experience with specialized strategies for teaching |
|  | blind or partially sighted children with additional handicaps. |
| 8305 | Communication Techniques ( 3 semester hours) |
|  | Introduces techniques of oral, manual, and acoupedic approaches |
|  | to communication with handicapped children. Includes instruc- |
|  | tion in oral approaches, acoupedics, body language and natural |
|  | gestures, finger spelling and sign language. Theoretical founda- |
|  | tions of total communication will be investigated. |
| 5307 | Braille (3 semester hours) |
|  | Instruction in Grade II Braille, plus discussion of readiness |
|  | techniques and materials for multihandicapped blind children. |
| 5308 | Pre-vocational and Vocational Needs of Severely and Multiply |
|  | Handicapped Persons ( 3 semester hours) |
|  | Analysis of pre-vocational and life skill training needs as well |
|  | as methods for working with the severely and multihandicapped. |
|  | Introduction to rehabilitation systems and alternative placements. |


| 5304 | Assessment, |
| :---: | :---: |
|  | Planning and Intervention ( 3 semester hours) |
|  | Study of levels and problems in emotional development. A develop- |
|  | mental conceptual framework will be introduced for assessment of |
|  | emotional problems and for devising and implementing intervention |
|  | strategies. |
| 5305 | Psycho-educational Consultation in the School or Intervention |
|  | Setting ( 3 semester hours) |
|  | Study of effective consultative and collaborative processes in |
|  | schools to maximize student learning. Course project includes |
|  | consultation with teachers regarding students and classroom |
|  | experiences. |
| 5312 | Parents and Family: Relation to Exceptional Children's Educa- |
|  | tional Progress (3 semester hours) |
|  | Understanding the cultural, social and economic factors of learn- |
|  | ing as they may be applied to working with parents and families |
|  | with exceptional children, plus experience in parent training. |
| 6324 | Comprehensive Residential Treatment ( 3 semester hours - can be |
|  | repeated) |
|  | Formulation, implementation and evaluation of objectives in |
|  | residential treatment programs. |
| 8304 | Independent Study |
|  | (3 semester hours - can be repeated) |
| 5306 | Language/Learning Disabilities: Trends, Research, Issues and |
|  | Programs (3 semester hours) |
|  | An in-depth study of the field of Language/Learning Disabilities, |
|  | with particular emphasis on the research which is relevant to |
|  | each of the current approaches. Consideration will also be given |
|  | to the role of parents, lay and professional groups, legislation |
|  | and controversies. |
| 6319 | Language/Learning Disabilities: Advanced Diagnostic Procedures |
|  | and Intervention Strategies in Reading ( 3 semester hours) |
|  | Study and training in the use of diagnostic instruments and inter- |
|  | vention strategies approprlate to the L/LD field, including such |
|  | instruments as the ITPA, the Informal Reading Inventory and the |
|  | Detroit Test of Learning Aptitudes and such approaches as the |
|  | Fernald, the Orton-Gillingham and the Language Experi.ence. Con- |
|  | sideration will be given to the assets and liabilities of each |
|  | approach and complementary procedures which should be included |
|  | in educational plans. |
| 6320 | Language/Learning Disabilities: Advanced Diagnostic and Inter- |
|  | vention Strategies in Mathematics ( 3 semester hours) |
|  | Study and training in the assessment, profiling, programming, and |
|  | evaluation in the area of mathematics. Three types of diagnosis |
|  | and their implications for teaching strategies will be investi- |
|  | gated. The use of a mathematics laboratory approach for math |
|  | instruction and the construction and development of instructional |
|  | materials also will be investigated. |


7. From the section, SPECIAL EDUCATION COURSES, delete the following courses:


|  |  heursf <br> Knewłedge－ef－human－de₹ełepment－£rom－coneepeien－onward－with－con－ eern－£өr－the一е££еets－of－physiotegieat－mat́unetien－at－any－stage－ <br>  grammatie－eөnsíderatien－毛er－the－meter－impeifed－persen－－f3－$\theta$－ |
| :---: | :---: |
| 5312 | －Farents－and－Famityt－－Aełatien－te－Exeeptienat－Ghiłdrens－Eduea－ もienat－Progress－$(3-$－semestez－hours） <br> Endergtanding－the－euttufat－－seeial－and－eeonemie－faetors－of－7eafn－ ing－es－they－may－be－epplied－te－werting－with－pafents－and－£amitites <br>  （3－8） |
|  | －Sensexy－Рұeeesser－in－Geafning－（3－semestex－keurs） <br>  <br>  <br>  $(3-\theta)$ |
|  |  heurs <br> Веғеłeping－eempeteney－in－a－systems－appreaeh－te－designing－new－end <br>  ehtud¥ent－ー $(3-\theta)$ |
| $53 \pm 5$ |  <br>  speeiat－emphasis－en－ifemediatien－ef－qeading－and－mathematieat－disa－ <br>  |
| $63 \geq 3$ | － <br> Supe干zised－and－diғeeted－екречienees－in－łanguage－and－łearning－dis－ <br>  shtp－experiences－－－Genferences－with－the－student－witu－fełtewt Wғitten－sumarites－and－evatuatiens－of－the－internship－witu－be－pze－ <br>  eeeperating－ageney－and－the－adziser－－－$-\theta-67$ |
| $63 z 4$ |  f3－sешеяteғ－heuғs） <br>  $f \theta=-z-6)$ |
| $6325$ | ```Intexnship-in-Eexiy-6hitdheed-Edueatien-£eq-Hendieepped-6hitdzen- f3-semestex-houzs子-```  ```fex-handieepped-ehiłdren:--(0-6)-``` |
| $6326$ |    ```dғen-9-pregzam- (-6-6)``` |
| $\begin{aligned} & 6 \pm 27 \\ & 6327 \end{aligned}$ | Internshíp－in－Teaehing－Gífもed－and－Tałented－Ghíquren <br>  <br> Superษised－and－díeeted－eжperienees－werking－with－もhe－gífted－and <br>  |


| $\begin{aligned} & 8102 \\ & 830 \end{aligned}$ |  <br> －Tepte－ $7 \div-$ Researeh－Metheds－in－Speetaz－Edueatien <br>  <br> Fepie－3！－－Gurrent－Researeh－in－Đжеерもtenat－6hitdren <br> Tep ie－4！－－Researeh－ef－Ghitdren－with－Vtsuat－Prebłems <br> тepie－5：－－Researeh－e£－6hiłdren－wteh－Auditery－Prebłems <br> 7epie－6：－－Researeh－ef－6ífted－and－Fatented－6hytdzen <br>  |
| :---: | :---: |
| $\begin{aligned} & 8104- \\ & 8394 \end{aligned}$ | dependent－Study－f（－3－semestez－houxs $-(\theta \div-3-9)$ |
| $8305$ | －Өeeumentatien－Preeedures－（3－semester－heufs）－ <br> Experienee－in－devełeping－proeedures－をe－be－used－єe－eełłeet－and <br>  <br>  <br>  も主e日：－（ $\theta$－6） |
| 830 | － <br> f3－sемеяtеғ－hөurя子 <br> Empeqienee－in－fermat－assessment－preeedurest－－testing－and－intex－ <br>  <br>  <br>  <br>  ełinieat－ímpression－－－How－to－devetep－teehniques－te－detineate－the P¥obłems－presented－by－the－ehiłd metheds．－－Formatu＊e－evałuatłont－－sełf－eorreeting－proeedures－used－ An－a－day－by－day－basts－もo－keep－the－serviee－on－target－－－Sumative <br>  <br>  <br>  9єtdent－peqfeqmanee－－－$(\theta-6)$ |
| 8387 |  |
| 8398 | Thesiss－（3－semesteq－heufs）－（ $\theta-9)$ ］ |

## THE MEETING OF THE BOARD OF REGENTS

 OF
## THE UNIVERSITY OF TEXAS SYSTEM

## PART TWO

[Including Deputy Chancellor's Docket No. 5 in Part (The University of Texas at El Paso through The University of Texas System School of Nursing) and the Report of Securities Transactions for the Permanent University Fund and Trust and Special Funds]

March 26, 1976

Austin, Texas

## THE UNIVERSITY OF TEXAS AT EL PASS

E1 Pas, Texas

February 24, 1976

Deputy Chancellor E. D. Walker
The University of Texas System
601 Colorado
Austin, Texas 78701

Dear Deputy Chancellor Walker:

The docket for the March 26, 1976 meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.


The following contracts, grants and amendments have been signed by the appropri- : ate official upon the recommendation of the respective technical directors. I recommend approval and ratification of the signatures.

1. Award Letter, dated December 8, 1975, whereby the President, Gulf Oil Foundation, Gulf Building, Pittsburgh, Pennsylvania 15230, awards $\$ 2,500.00$ as a contribution in support of the Cross-Cultural Southwest Ethnic Study Center. The majority of the expenditures from this award will be made in El Paso County.
2. Contract, dated December 18, 1975, whereby the Mayor Pro-Tem, City of E1 Paso, Texas awards $\$ 10,595.00$ for two curatorial assistants for the Museum of Arid Land Biology for a period not to exceed June 30, 1976. The majority of the expenditures from this award will be made in El Paso County.
3. Grant No. GA SS7602, Dated January 9, 1976, whereby the Secretary, the Rockefeller Foundation, 1133 Avenue of the Americas, New York, New York 10036, awards $\$ 18,000.00$ toward support of an educational/leadership development internship for Miss Glenda E. Gill, for the period of one year beginning approximately January 1, 1976. The majority of the expenditures from this award will be made in E1 Paso County.
4. Grant-in-Aid, dated January 16, 1976, whereby the Executive Vice President, Alfred P. Sloan Foundation, 630 Fifth Avenue, New York, New York 10020, awards $\$ 11,000.00$ in support of planning for the development of a program to increase minority participation in engineering, for the period January 16, 1976 through May 31, 1976. The majority of the expenditures from this award will be made in E1 Paso County.

## THE UNIVERSITY OF TEXAS AT EL PASO

Amendments to 1975-76 Operating Budget March 26, 1976

EDUCATIONAL AND GENERAL
RESIDENT INSTRUCTION
COLLEGE OF EDUCATION
Curriculum and Instruction

1. Appoint Soledad Gurrola (non-tenure) as Adjunct Assistant Professor effective January 16, 1976 for the 1976 Spring Semester, without salary from the University. (RBC 250)

Educational Administration and Supervision
2. Appoint Frank X. Trujillo as Assistant Professor (Visiting) effective January 16, 1976 for the 1976 Spring Semester, at a nine-months rate of $\$ 13,000.00$ with the necessary funds in the amount of $\$ 6,500.00$ to come from Unallocated Salaries - Faculty. (RBC 251)

LIBRARY
3. Reappoint Linda Siler-Regan as Head, Documents, Microforms and Maps Department effective December 1, 1975 through August 31, 1976, at her annual rate of $\$ 12,337.00$ with the necessary funds in the amount of $\$ 9,252.74$ to come from Unallocated Salaries - Other. (RBC 252)

OPERATION AND MAINTENANCE OF PHYSICAL PLANT
Building Maintenance
4. Transfer of Funds:

From: Building Maintenance - Classified Salaries \$3,000.00
To: Building Maintenance - Wages 2,000.00
General Services - Maintenance and Operation
$1,000.00$
For: Transfer between departments and dissimilar appropriations. This represents recovery of labor charges from the departments on work orders and the funds are best utilized in these areas. (RBC 253)

THE UNIVERSITY OF TEXAS AT EL PASO


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February 25, 1976
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Mr. E. D. Walker
Deputy Chancellor
The University of Texas System
601 Colorado Street
Austin, Texas 78701
Dear Mr. Walker:
The docket for the March 26,1976 , meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.


THE UNIVERSITY OF TEXAS OF THE PERMIAN BASIN March 26, 1976 Meeting

GRANTS, CONTRACTS AND AGREEMENTS - (FEDERAL)
The following contract has been executed in behalf of The University of Texas of the Permian Basin. I recommend approval and ratification.

1. Modification to Contract SBA-0245-PMA-76, by which the Small Business Administration, Washington, D. C. provides $\$ 2,500$ additional funds for the period of $12 / 31 / 75$ through $6 / 30 / 76$. The program for the support of management counseling and technical assistance to small business concerns continues under the direction of Dr. Bernard Tucker, Associate Professor of Management. Ector County.

THE UNIVERSITY OF TEXAS OF THE PERMIAN BASIN March 26, 1976 Meeting

RECOMMENDED AMENDMENTS TO THE 1975-76 OPERATING BUDGET
GENERAL INSTITUTIONAL EXPENSE:

## News and Information

1. Appoint Richard C. Seaman as Director of News and Information (Code 1000), News and Information at 1.0000 time at an annual salary rate of $\$ 16,500$ for the period 11/27/75-8/31/76. Source of Funds: $\$ 9,631.09$ in budgeted position and $\$ 2,927.20$ from Maintenance and Operation, News and Information. (RBC \#65)

## RESIDENT INSTRUCTION:

Office of the Dean, College of Science and Engineering
2. Terminate $E$. Lee Harrisberger as Dean (Code 1000), Office of the Dean, College of Science and Engineering, effective close 12/31/75. (RBC \#63)
3. Appoint Horace Bledsoe as Acting Assistant Dean (Code 1000), Office of the Dean, College of Science and Engineering at . 5000 time at an annual salary rate of $\$ 21,733$ for the period 12/29/75 5/31/76. Source of Funds: Administrative Salaries, Office of the Dean, College of Science and Engineering. "The position of Acting Assistant Dean for the College of Science and Engineering is being created upon the resignation of the Dean of that College. An Acting Dean is not planned; instead the Acting Assistant Dean will administer the college under the direction of the Vice President for Academic Affairs. When a Dean of the College is appointed, the temporary position of Acting Assistant Dean will be abolished." NOTE: Dr. Bledsoe has a concurrent appointment (without tenure) as Assistant Professor of Physics (Code 0030), Faculty, College of Science and Engineering at . 5000 time for the period 12/29/75-5/31/76 at an academic salary rate of $\$ 14,500$ for 9 months. (RBC \#68)

Faculty, College of Science and Engineering
4. Terminate E. Lee Harrisberger (term tenure) as Professor of Engineering (Code 0010), Faculty, College of Science and Engineering effective close 12/31/75. (RBC \#62)
5. Change the status of Horace Bledsoe (without tenure), Assistant Professor of Physics, Faculty, College of Science and Engineering (Code 0030), from 1.0000 time to .5000 time at the academic salary rate of $\$ 14,500$ for 9 months for the period of 12/29/75-5/31/76. Source of Funds: Budgeted position. NOTE: Dr. Bledsoe has a concurrent appointment as Acting Assistant Dean, Office of the Dean, College of Science and Engineering at . 5000 time for the period 12/29/75-5/31/76 at an annual salary rate of \$21,733. (RBC \# 69)

RECOMMENDED AMMENDMEN'TS TO THE 1975-76 OPERATING BUDGET

## Faculty, College of Arts and Education

6. Appoint Inez Gaskins as Lecturer (without tenure) in Pedagogical Studies (Code 0050), Faculty, College of Arts and Education at . 5000 time at an academic salary rate of $\$ 9000$ for 9 months for the period $1 / 16 / 76-5 / 31 / 76$. Source of Funds: Faculty Salaries, Faculty, College of Arts and Education. (RBC \#64)
7. Appoint James S. Fagan (without tenure) as Visiting Assistant Professor of Pedagogical Studies (Code 0032), Faculty, College of Arts and Education at 1.0000 time at an academic salary rate of $\$ 12,000$ for 9 months for the period $1 / 16 / 76-5 / 31 / 76$. Source of Funds: Faculty Salaries, Faculty, College of Arts and Education. (RBC \#70)
8. Appoint Dick Chappell (without tenure) as Lecturer, Physical Education and Health (Code 0050), Faculty, College of Arts and Education at . 2500 time at an academic salary rate of $\$ 20,250$ for the period $1 / 16 / 76-8 / 31 / 76$. Source of Funds: Faculty Salaries, Faculty, College of Arts and Education. NOTE: Mr. Chappell has a concurrent appointment at . 5000 time as Director, Learning Resources Center and . 2500 time as Director, Computer Services Division. (RBC \#73)

LEARNING RESOURCES CENTER:

## Director's Office

9. Change the status of Dick Chappell as Director (Code 1000), Learning Resources Center, Director's Office from . 7500 time to .5000 time at an annual salary rate of $\$ 27,000$ for the period 1/16/76-8/31/76. NOTE: Mr. Chappell has a concurrent appointment at . 2500 time as Lecturer (without tenure), Physical Education and Health, Faculty, College of Arts and Education and .2500 time as Director of Computer Services Division. (RBC \#72)

## Library Services Division

10. Transfer of Funds:

From: Unallocated, Physical Plant Maintenance and Operation $\$ 26,640$

Unallocated, All Other
Library Expense 14,209
To: $\begin{aligned} & \text { Books, Periodicals and } \\ & \text { Bindings }\end{aligned} \$ 40,849$
For: To increase budget to appropriated amount.
(RBC \#76)

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RECOMMENDED AMENDMENTS TO THE 1975-76 OPERATING BUDGET
Library Services Division (cont.)
11. Transfer of Funds:
    From: Classified Salaries,
    Library Services Division $ 3,345
    Maintenance and Operation
    Library Services Division 5,000
    Unallocated, All Other
    Library Expense 7,600
    TO: Wages, Library Service Division $15,945
    For: To provide additional
    wage money.
    (RBC #78)
Unallocated, All Other Library Expense
12. Transfer of Funds:
    From: Wages, Instructional Media
        Division, Learning Resources
                Center
                            Equipment, Instructional Media
                        Division, Learning Resources
                        Center
        1,000
    Travel, Instructional Media
        Division, Learning Resources
        Center
        6 0 0
    To: Unallocated, All Other
        Library Expense
                                    $ 7,600
    For: To provide a reduction of
        budgeted amounts to actual
        level of anticipated expen-
                ditures for 1975-76.
    (RBC #77)
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PHYSICAL PLANT OPERATION:

Police Department
13. Terminate James Love as Chief of Police (Code 1000), Police Department effective close 12/31/75. (RBC \#66)

Unallocated, Physical Plant Operation and Maintenance

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14. Transfer of Funds:
    From: Maintenance and Operation,
    Custodial Services
    Equipment, Custodial Services 15,000
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THE UNIVERSITY OF TEXAS OF THE PERMIAN BASIN
March 26, 1976 Meeting

RECOMMENDED AMENDMENTS TO THE 1975-76 OPERATING BUDGET
Unallocated, Physical Plant Operation and Maintenance (cont.)

| To: | Unallocated, Physical Plant <br> Operation and Maintenance |
| :--- | :--- |
| For: | To provide a reduction of <br> budgeted amounts to actual <br> level of anticipated expen- |
| (RBC \#74) ditures for 1975-76. |  |

15. Transfer of Funds:

From: Wages, Building Maintenance \$11,000
Equipment, Building Maintenance 30,000
To: Unallocated, Physical Plant $\begin{aligned} & \text { Operation and Maintenance }\end{aligned} \$ 41,000$
For: To provide a reduction of budgeted amounts to actual level of anticipated expenditures for 1975-76.
(RBC \#75)
16. Transfer of Funds:

From: Maintenance and Operation, Grounds Maintenance
$\$ 5,000$
Equipment, Grounds Maintenance

45,000
To: $\begin{aligned} & \text { Unallocated, Physical Plant } \\ & \text { Operation and Maintenance }\end{aligned} \$ 50,000$
For: $\quad$ To provide a reduction of budgeted amounts to actual level of anticipated expenditures for 1975-76.
(RBC \#79)

THE UNIVERSITY OF TEXAS AT SAN ANTONIO
Office of the President
February 27, 1976

Deputy Chancellor E. D. Walker
The University of Texas System
601 Colorado Street
Austin, Texas 78701

## Dear Deputy Chancellor Walker:

The docket for the March 26, 1976 meeting of the Board of Regents is submitted to you for recommendation and presentation to the Board.

I recommend approva1.


THE UNIVERSITY OF TEXAS AT SAN ANTONIO
March 26, 1976 Meeting


GIFTS: Acceptance is recommended for the following gifts which have been received:


A single asterisk preceding the name of the donor indicates no letter of transmittal from the donor. Two asterisks following the dollar amount indicate a noncask gift.

TRAVEL FOR FACULTY AND STAFF: The following travel is reported in accordance with Section 13.35 of Chapter III, Part Two of the Regents' Rules and Regulations for government of The University of Texas:

1. Geraldine J. Garcia, Guard, University Police, February 2, 1976 through April 16, 1976, to Austin, Texas, to attend The University of Texas System Police Academy for basic training required by The University of Texas System in order for police officer trainees to be commissioned upon successful completion of police academy training. Expenses in the approximate amount of $\$ 1,668.54$ to be paid from University Police, Travel account.

THE UNIVERSITY OF TEXAS AT SAN ANTONIO
GRANTS, CONTRACTS, AND AGREEMENTS (FEDERAL)
March 26, 1976 Meeting

GRANTS, CONTRACTS, AND AGREEMENTS (FEDERAL): Approval is requested for the following:
U. S. Department of Interior

National Park Service
Harpers Ferry Center
Contracting Office
Harpers Ferry, West Virginia 25425

1. Modification No. 1 of Purchase Order No. PX-1100-3-1819

LBJ Old Ranch
This project is to include the production and installation of silk-screen, photography, and other graphic applications. Construction is to be of individual masonite panels in preparation for photo mounting and display fixtures will be included in the work. The Institute of Texan Cultures will complete this project.
Project period extended from December, 1975 to June 30, 1976
No additional funds
Bexar County, Texas
U. S. Department of Agriculture

Soil Conservation Service
P. O. Box 648

Temple, Texas 76501
2. Purchase Order No. 1186-TX-SCS-76

Archaeological Survey for Salado Creek Watershed
This purchase order is for equipment, labor and all work necessary to perform additional archaeological study and prepare a report on Sites 41 BX 300 and 41 BX 301 on Site 13 A of the Salado Creek Watershed to determine the importance or real significance of the site and to determine whether further excavation and/or recovery will be required.
Dr. Thomas R. Hester, Project Director
Dated January 15, 1976
\$4,395.00
Bexar County, Texas
National Science Foundation
Washington, D. C. 20550
3. Grant No. SMI76-05378

Student Science Training for High Ability Secondary School Students
This project will provide unique educational and research participation for twelve high ability high school students.
Dr. Helen Oujesky, Project Director
January 26, 1976 through October 31, 1977
$\$ 21,400.00$
Bexar County, Texas

THE UNIVERSITY OF TEXAS AT SAN ANTONIO
GRANTS, CONTRACTS, AND AGREEMENTS (STATE)
March 26, 1976 Meeting


GRANTS, CONTRACTS, AND AGREEMENTS (STATE): Approval is requested for the following:

1. Interagency Contract (76-77)-0877 between The University of Texas Health Science Center at San Antonio and The University of Texas at San Antonio, signed by Vice President E. M. Mahon, whereby meeting rooms for conferences and meetings will be made available at the Lutcher Center at times mutually agreeable to both agencies. The amount of contract shall not exceed $\$ 2,000.00$ during fiscal year 1975-76 nor $\$ 2,000.00$ during fiscal year 1976-77. Contract shall begin January 1, 1976 and sha11 terminate August 31, 1977.

Texas Education Agency
Department of Occupational Education and Technology
201 East Eleventh Street
Austin, Texas 78701
2. Contract No. 62350191 (Revised)

Occupational Analysis of Day Care Workers and Supervisors in the State of Texas
This project will study and analyze tasks performed by child care workers and will determine competencies and training needs of various stages of career development.
Dr. Robert T. Alciatore, Project Director
Project period July 1, 1975 through February 29, 1976
$\$ 30,576.00$ (reimbursable amount)
Bexar County, Texas
the university of texas at san antonio
GRANTS, CONTRACTS, AND AGREEMENTS (NON-GOVERNMENTAL)
March 26, 1976 Meeting

GRANTS, CONTRACTS, AND AGREEMENTS (NON-GOVERNMENTAL): Approval is requested for the following:

Alamo Area Council of Governments
Three Americas Building
San Antonio, Texas 78205

1. Agreement between AACOG and The University of Texas at San Antonio, signed by President Peter T. Flawn, whereby The University of Texas at San Antonio shall provide all necessary services for the development and presentation of a re-creational-open site suitability analysis adequate in scope and detail to serve as a general guide for the future location and design of recreational and support facilities along the length of and land area adjacent to Cibolo Creek from Lookout Road to IH 10. Project to be completed by June 30, 1976
\$3,500.00
Bexar County, Texas
San Antonio Union Junior College District
1300 San Pedro
San Antonio, Texas 78284
2. Amendment to Agreement of Specifications and Prices for Data Processing Services This is an agreement between The University of Texas at San Antonio and San Antonio Union Junior College District, signed by Vice President E. M. Mahon after approval by The University of Texas System Administration, whereby prices for purchase of needed data processing services will be generally lower. This amendment is effective February 1, 1976.

TRINCO, Incorporated
715 Stadium Drive
San Antonio, Texas 78284
3. Specification Supplement for Batch Processing

This is an amendment to an agreement between The University of Texas at San Antonio and TRINCO, Incorporated, signed by Vice President E. M. Mahon after approval by The University of Texas System Administration, whereby prices for purchase of needed data processing services will be increased. This amendment is effective January 1, 1976.

Zion Child Development Center
702 Cincinnati Street
San Antonio, Texas 78201
4. Off-Campus Agreement, College Work Study Program

The purpose of this agreement is to provide work to students eligible to participate in the College Work Study Program and the form of the agreement has been previously approved by The University of Texas System Administration. Signed by Vice President E. M. Mahon
January 31, 1976 through August 31, 1976
Hourly wage for undergraduate students shall not exceed $\$ 2.46$
Hourly wage for graduate students shall not exceed $\$ 2.90$
the university of texas at san antonio
March 26, 1976 Meeting

GRANTS, CONTRACTS, AND AGREEMENTS (NON-GOVERNMENTAL): (continued)
Kenwood Community Center
3510 N. Main Avenue
San Antonio, Texas
78212
5. Off-Campus Agreement, College Work Study Program

The purpose of this agreement is to provide work to students eligible to participate in the College Work Study Program and the form of the agreement has been previously approved by The University of Texas System Administration. Signed by Vice President E. M. Mahon February 19, 1976 through August 31, 1976
Hourly wage for undergraduate students shall not exceed \$2.46 Hourly wage for graduate students shall not exceed $\$ 2.90$

Minnie Stevens Piper Foundation
201 North St. Mary's Street
San Antonio, Texas 78205
6. Off-Campus Agreement, College Work Study Program

The purpose of this agreement is to provide work to students eligible to participate in the College Work Study Program and the form of the agreement has been previously approved by The University of Texas System Administration.
Signed by Vice President E. M. Mahon February 1, 1976 through August 31, 1976
Hourly wage for undergraduate students shall not exceed \$2.46 Hourly wage for graduate students shall not exceed $\$ 2.90$

The American Lutheran Church
422 South Fifth Street
Minneapolis, Minnesota 55415
7. Check No. 031696 received from The American Lutheran Church. Funds received will be set up in an agency fund account and handled by The University of Texas at San Antonio as an agent for The American Lutheran Church. Mr. Salvador H. Gomez, Director of Student Financial Aid is in charge of administering the $\$ 400.00$ scholarship.
the university of texas at san antonio
RECOMMENDED AMENDMENTS TO THE 1975-76 BUDGET
March 26, 1976 Meeting

## GENERAL ADMINISTRATION AND STUDENT SERVICES

## Purchasing

1. Increase the salary of Mr. Richard S. Moore, Assistant Director of Purchasing, from an annual twelve month rate of $\$ 10,200.00$ to an annual twelve month rate of $\$ 10,800.00$ effective January 1, 1976. Additional funds needed for this change are to be transferred from Unallocated - General Administration. (RBC 143)

## GENERAL INSTITUTIONAL EXPENSE

## Office of Sponsored Projects

2. Appoint Dr. Gary Moore as Veterinarian ( $7.5 \%$ time) at an annual twelve month rate of $\$ 20,000.00$ for the period January 15, 1976 through August 31, 1976. Funds for this appointment are to be transferred from Unallocated General Institutional Expense. (RBC 144)

## RESIDENT INSTRUCTION

## College of Business

## Division of Accounting and Business Data Systems

3. Reappoint Mr. Kenneth R. Jones (non-tenure) as Lecturer ( $67 \%$ time) at an academic nine month rate of $\$ 6,600.00$ for the period January 16, 1976 through May 31, 1976. Funds for this change are to be transferred from Unallocated - Faculty Salaries. (RBC 145)
4. Reappoint Mr. William P. Kearns (non-tenure) as Lecturer ( $33 \%$ time) at an academic nine month rate of $\$ 8,478.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 146)
5. Reappoint Ms. Elizabeth A. Eliassen (non-tenure) as Lecturer ( $25 \%$ time) at an academic nine month rate of $\$ 12,753.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. Ms. Eliassen is also appointed (75\% time) in the Office of Institutional Studies. (RBC 147)

## Division of Economics and Finance

6. Appoint Mr. Laurence R. Beneke (non-tenure) as Lecturer ( $25 \%$ time) at an academic nine month rate of $\$ 8,000.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 120 Revised)
7. Appoint Mr. David Martinez-Serna (non-tenure) as Visiting Professor (without salary) for the period January 16,1976 through May 31, 1976. (RBC 148)
8. Appoint Mr. Henry F. Garcia (non-tenure) as Lecturer ( $25 \%$ time) at an academic nine month rate of $\$ 8,000.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 149)

## RESIDENT INSTRUCTION

## College of Business

Division of Economics and Finance (continued)
9. Appoint Mr. Robert S. Flaniken (non-tenure) as Lecturer ( $25 \%$ time) at an academic nine month rate of $\$ 8,000.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 150)
10. Appoint Mr. Charles M. McManuis (non-tenure) as Lecturer ( $25 \%$ time) at an academic nine month rate of $\$ 8,000.00$ for the period January 16,1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 151)
11. Appoint Dr. John E. Skogland, Jr., (non-tenure) as Lecturer ( $25 \%$ time) at an academic nine month rate of $\$ 8,000.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 172)

## College of Fine and Applied Arts

## Division of Art and Design

12. Reappoint Ms. Wendy V. Edwards (non-tenure) as Lecturer ( $67 \%$ time) at an academic nine month rate of $\$ 9,000.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 141)
13. Appoint Mr. Patrick McInroy (non-tenure) as Lecturer ( $33 \%$ time) at an academic nine month rate of $\$ 9,000.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 152)
14. Appoint Mr. Felipe Reyes, Jr., (non-tenure) as Lecturer ( $67 \%$ time) at an academic nine month rate of $\$ 9,000.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 153)
15. Appoint Dr. David S. Storey (non-tenure) as Lecturer (33\% time) at an academic nine month rate of $\$ 9,000.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 174)

## Division of Music

16. Reappoint Ms. Bess E. Hieronymus (non-tenure) as Lecturer ( $40 \%$ time) at an academic nine month rate of $\$ 12,500.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 154)
17. Reappoint Ms. Doris M. Harrel (non-tenure) as Lecturer ( $63 \%$ time) at an academic nine month rate of $\$ 12,500.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 155)

## RESIDENT INSTRUCTION

## College of Humanities and Social Sciences

Division of English, Classics and Philosophy
18. Remove from leave of absence and appoint Dr. Elizabeth A. Francis (nontenure) as Associate Professor at an academic nine month rate of $\$ 16,000.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 142)

## College of Multidisciplinary Studies

## Division of Bicultural-Bilingual Studies

19. Reappoint Mr. Emilio Zamora, Jr. (non-tenure) as Lecturer ( $33 \%$ time) at an academic nine month rate of $\$ 8,400.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 157)
20. Appoint Ms. Kathryn J. Caragonne (non-tenure) as Lecturer ( $33 \%$ time) at an academic nine month rate of $\$ 7,200.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 170)

## Division of Education

21. Reappoint Dr. Michael A. Zaccaria (non-tenure) as Faculty Associate ( $60 \%$ time) at an academic nine month rate of $\$ 19,566.00$ for the period January 1, 1976 through February 29, 1976. Funds for this appointment are to come from the division's Faculty Salaries account and from a Texas Education Agency grant. (RBC 156)

## Division of Environmental Studies

22. Reappoint Mr. Gary L. Turnock (non-tenure) as Lecturer ( $33 \%$ time) at an academic nine month rate of $\$ 7,800.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 131)
23. Reappoint Dr. Jose N. Uranga, Jr., (non-tenure) as Lecturer ( $33 \%$ time) at an academic nine month rate of $\$ 9,000.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 132)
24. Reappoint Mr. Robert B. Hunter (non-tenure) as Lecturer ( $33 \%$ time) at an academic nine month rate of $\$ 10,800.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 133)
25. Reappoint Dr. David L. Davidson (non-tenure) as Lecturer ( $33 \%$ time) at an academic nine month rate of $\$ 11,400.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 134)

## RESIDENT INSTRUCTION

## College of Multidisciplinary Studies

Division of Environmental Studies (continued)
26. Reappoint Mr. Alexander Caragonne (non-tenure) as Lecturer ( $33 \%$ time) at an academic nine month rate of $\$ 9,600.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 135)
27. Reappoint Mr. Arthur W. Busch (non-tenure) as Lecturer ( $33 \%$ time) at an academic nine month rate of $\$ 12,000.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 136)
28. Reappoint Mr. Robert R. Ashcroft (non-tenure) as Lecturer ( $33 \%$ time) at an academic nine month rate of $\$ 7,800.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 137)
29. Reappoint Mr. Adolph Eisenmenger (non-tenure) as Lecturer ( $33 \%$ time) at an academic nine month rate of $\$ 9,000.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 138)
30. Reappoint Dr. Robert 0. Clark (non-tenure) as Lecturer ( $67 \%$ time) at an academic nine month rate of $\$ 10,200.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 139)
31. Appoint Mr. Anthony A. Athens, Jr., (non-tenure) as Lecturer ( $33 \%$ time) at an academic nine month rate of $\$ 7,800.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 140)
32. Reappoint Dr. J. H. U. Brown (non-tenure) as Professor (without salary) for the period January 16, 1976 through May 31, 1976. Dr. Brown is also appointed as Coordinator of Southwest Research Consortium and as Professor of Physiology (without salary and without tenure) at The University of Texas Health Science Center at San Antonio. (RBC 158)
33. Cancel the appointment of Dr. David L. Davidson (non-tenure) as Lecturer ( $33 \%$ time) at an academic nine month rate of $\$ 11,400.00$ for the period January 16, 1976 through May 31, 1976. Dr. Davidson's class failed to make, thus cancelling the need for his services. (RBC 169)

## College of Sciences and Mathematics

Division of Allied Health and Life Sciences
34. Change the source of funds for Dr. Jerry L. Phillips (non-tenure) as Assistant Professor at an academic nine month rate of $\$ 15,000.00$ for the period January 16, 1976 through May 31, 1976. Dr. Phillips has been appointed at $25 \%$ Faculty Salaries, but has been increased to $50 \%$ Faculty Salaries. Funds needed for this change are to be transferred from Unallocated - Faculty Salaries. (RBC 159)

THE UNIVERSITY OF TEXAS AT SAN ANTONIO March 26, 1976 Meeting

## RESIDENT INSTRUCTION

## College of Sciences and Mathematics

## Division of Earth and Physical Sciences

35. Appoint Dr. John W. Morgan (non-tenure) as Associate Professor at an academic nine month rate of $\$ 15,200.00$ for the period January 16, 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 160)
36. Appoint Dr. Sandra Y. Weinstein (non-tenure) as Instructor ( $25 \%$ time) at an academic nine month rate of $\$ 12,000.00$ for the period January 16 , 1976 through May 31, 1976. Funds for this appointment are to be transferred from Unallocated - Faculty Salaries. (RBC 161)

## ORGANIZED RESEARCH

## Center for Archaeological Research

37. Appoint Dr. Richard E. W. Adams as Faculty Associate (without salary) for the period January 16, 1976 through August 31, 1976. Dr. Adams is also appointed as Dean of the College of Humanities and Social Sciences and as Professor (tenure) in the Division of Social Sciences. (RBC 162)
38. Appoint Dr. Joel D. Gunn as Faculty Associate (without salary) for the period January 16, 1976 through August 31, 1976. Dr. Gunn is also appointed as Assistant Professor (without tenure) in the Division of Social Sciences. (RBC 163)
39. Appoint Dr. Norman D. C. Hammond as Faculty Associate (without salary) in the Center for Archaeological Research for the period December 1, 1975 through May 31, 1976. (RBC 168)

## BUDGET TRANSFERS

Transfer of Funds
40. Amount of Transfer: $\$ 18,795.58$

From: Unallocated - General Administration, Classified Salaries \$ 1,092.25 Maintenance and Operation 10,200.00
Unallocated - General Institutional Expense, Maintenance and Operation 4,000.00
Unallocated - Departmental Operating Expense, Classified Salaries
Unallocated - Organized Activities Related to Instruction, Maintenance and Operation
Physical Plant, Utilities, Administrative and Professional Salaries 2,500.00

To: Office of the President, Maintenance and Operation
$\$ 1,000.00$
Office of the Vice President for Business Affairs, Maintenance and Operation

1,000.00

THE UNIVERSITY OF TEXAS AT SAN ANTONIO
March 26, 1976 Meeting

BUDGET TRANSFERS
Transfer of Funds
41. To: (continued)

Office of the Director of Accounting,
Wages
Maintenance and Operation
Purchasing,
Classified Salaries 92.25
Maintenance and Operation $\quad 1,000.00$
Travel
1, 200.00
Office of the Dean of Students, Maintenance and Operation

2,000.00
News and Information, Maintenance and Operation 4,000.00
Division of Economics and Finance, Classified
Salaries
Division of Music, Classified Salaries 160.00
Division of Bicultural-Bilingual Studies, Classified Salaries
175.33

Office of Instructional Services, Classified Salaries
528.00

Physical Plant, Utilities, Wages 2,500.00
For: To provide the above departments with funds necessary to meet their staffing and operational requirements. (RBC 164)
42. Amount of Transfer: $\$ 30,800.00$

From: Unallocated - Departmental Operating Expense, Classified Salaries
$\$ 4,000.00$ Maintenance and Operation

20,000.00
Unallocated - Instructional Administration, Maintenance and Operation

4,300.00
Division of Allied Health and Life Sciences, Computer Services

2,500.00
$\begin{array}{lll}\text { To: } & \begin{array}{l}\text { Division of Music, Maintenance and Operation } \\ \text { College of Multidisciplinary Studies, Office }\end{array} & \$ 1,500.00\end{array}$
of the Dean, Travel $1,800.00$
College of Science and Mathematics, Office of the
Dean, Maintenance and Operation
Division of Allied Health and Life Sciences, Maintenance and Operation

5,000.00 Travel

2,500.00
Division of Earth and Physical Sciences, Maintenance and Operation

17,500.00
For: To provide the above departments with funds necessary to meet their operational needs. (RBC 165)

THE UNIVERSITY OF TEXAS AT SAN ANTONIO

## BUDGET TRANSFERS

Transfer of Funds
43. Amount of Transfer: $\$ 1,678.27$

From: Unallocated - Faculty Salaries \$ 1,678.27
To: Division of Allied Health and Life Sciences, Teaching Assistant Salaries
\$ 1,678. 27
For: To provide funds necessary for the employment of part-time Teaching Assistants. (RBC 166)
44. Amount of Transfer: $\$ 15,046.55$

From: Institute of Texan Cultures Administration and General Services, Administrative and Professional Salaries $\$ 5,964.42$ Classified Salaries

2,087.80
Fabrication, Classified Salaries
1,944.00
University Police, Classified Salaries 50.33
Physical Plant, Wages
5,000.00
To: Institute of Texan Cultures
Records, Classified Salaries \$ 153.00
Research, Wages
1,500.00
University Police, Wages
5,050. 33
Unallocated, Maintenance and Operation
8,343.22
For: To provide the various Institute of Texan Cultures departments with operating funds. (RBC 167)
45. Amount of Transfer: $\$ 5,000.00$

From: Staff Group Insurance Premiums, Maintenance and Operation
\$ 5,000.00
To: Accrued Sick Leave Benefits, Wages
\$ 5,000.00
For: To establish an account for the payment of accrued sick leave benefits. (RBC 171)
46. Amount of Transfer: $\$ 20,000.00$

| From: | Unallocated, Central Technical Services | $\$ 5,000.00$ |
| :--- | :--- | ---: |
|  | Sales and Services (via additional income) | $15,000.00$ |

To: Central Technical Services, Maintenance and $\begin{gathered}\text { and Operation }\end{gathered} \quad \$ 2,000.00$
Purchase of Materials for Resale 18,000.00
For: To provide additional funds necessary to the operational requirements of this department. (RBC 173)

THE UNIVERSITY OF TEXAS AT SAN ANTONIO
March 26, 1976 Meeting

## BUDGET TRANSFERS

Transfer of Funds
47. Amount of Transfer: $\$ 14,111.00$

| From: | Unallocated - Auxiliary Administration | \$ 4,527.00 |
| :---: | :---: | :---: |
|  | Parking Facilities, Classified Salaries | 4,584.00 |
|  | Workshops, Seminars and Institutes, |  |
|  | Maintenance and Operation | 5,000.00 |
| To: | Auxiliary Administration, Classified Salaries | \$ 4,527.00 |
|  | Parking Facilities, Wages | 4,584.00 |
|  | Workshops, Seminars and Institutes, Wages | 5,000.00 |
| For: | To provide these departments with funds necessary |  |
|  | to meet their operational requirements. (RBC 175) |  |

UT SAN ANTONIO UNDERGRADUATE CATALOG CHANGES: Approval is recommended for the following changes in the Undergraduate Catalog for 1977-1978 (pages SA-15 through SA-328):and－non－teaehtng－persennełs－with－respeet－te－student－andFexas－Systems－and－wfth－respeet－もo－sもudent－and－faeułtyhousing－sizuated－on－premises－se－owned－or－eeeupieds－neitherFhe－Untrepsity－of－Fexas－System－ner－any－of－its－єempenent
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THE UNIVERSITY OF TEXAS AT SAN ANTONIO BULLETIN PUBLISHED MONTHLY BY THE UNIVERSITY OF TEXAS AT SAN ANTONIO VOLUME IV［II］MAY 1976 ［日GFOBER－7974］NUMBER 5 ［70］ Second Class Postage Paid at San Antonio，Texas

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[^16]I. Calendar

Fall Semester, 1976

| August 23-26 | Monday-Thursday. Registration, Orientation, Advisement. 1 |
| :---: | :---: |
| August 30 | Monday. Classes begin. |
| September 4 | Friday. Last day to add a class without special permission. |
|  | Last day for late registration. Deadline for Fall, 1976, graduates to apply for graduation. |
| September 6 | Monday. Holiday. |
| September 13 | Monday. Last day to add a class. |
| September 24 | Friday. Last day to drop a course without a grade. Last day |
|  | for students to withdraw and receive a partial refund of |
|  | tuition and fees. |
| November 15 | Monday. Last day to drop a course or withdraw from the |
|  | semester. |
| November 25-27 | Thursday-Saturday. Thanksgiving Holidays. |
| December 13-18 | Monday-Saturday. Final examinations. |
| December 18 | Saturday. Semester closes. |

Spring Semester, 1977

| January 10-13 | Monday-Thursday. Registration, Orientation, Advisement. ${ }^{1}$ |
| :---: | :---: |
| January 17 | Monday. Classes begin. |
| January 21 | Friday. Last day to add a class without special permission. |
|  | Last day for late registration. Last day for Spring, 1977, graduates to apply for graduation. |
| January 28 | Friday. Last day to add a class. |
| February 11 | Friday. Last day to drop a course without a grade. Last day |
|  | for students to withdraw and receive a partial refund of tuition and fees. |

[^17]| April 4-9 | Monday-Saturday. Spring vacation. |
| :---: | :---: |
| Apri1 11 | Monday. Last day to drop a course or withdraw from the |
|  | semester. |
| May 9-14 | Monday-Saturday. Final examinations. |
| May 14 | Saturday. Semester closes. |
| May 15 | Sunday. Commencement. |
| Summer Session, 1977 |  |
| May 30-31 | Monday-Tuesday. Registration, Orientation, Advisement. ${ }^{2}$ |
| June 1 | Wednesday. Classes begin. |
| August 19 | Friday. End of summer session. |
| Note: A more detailed calendar for the summer session will be announced inthe Summer Session Schedule for Classes. |  |
|  |  |

${ }^{2}$ A more detailed calendar for registration, orientation, and advisement will be issued by the Registrar.

Fall Semester, 1977

| August 22-25 | Monday-Thursday. Registration, Orientation, Advisement. ${ }^{3}$ |
| :---: | :---: |
| August 29 | Monday. Classes begin. |
| September 4 | Friday. Last day to add a class without special permission. |
|  | Last day for late registration. Deadline for Fall, 1977, graduates to apply for graduation. |
| September 5 | Monday. Holiday. |
| September 12 | Monday. Last day to add a class. |
| September 23 | Friday. Last day to drop a course without a grade. Last day |
|  | for students to withdraw and receive a partial refund of |
|  | tuition and fees. |
| November 14 | Monday. Last day to drop a course or withdraw from the |
|  | semester. |
| November 24-26 | Thursday-Saturday. Thanksqiving Holidays. |
| December 12-17 | Monday-Saturday. Final examinations. |
| December 17 | Saturday. Semester closes. |
| Spring Semester, 1978 |  |
| January 9-12 | Monday-Thursday. Registration, Orientation, Advisement. ${ }^{3}$ |
| January 16 | Monday. Classes begin. |
| January 20 | Friday. Last day to add a class without special permission. |
|  | Last day for late registration. Last day for Spring, 1978, |
|  | graduates to apply for graduation. |
| January 27 | Friday. Last day to add a class. |
| February 10 | Friday. Last day to drop a course without a grade. Last day |
|  | for students to withdraw and receive a partial refund of |
|  | tuition and fees. |

[^18]| April 3-8 | Monday-Saturday. Spring vacation. |
| :---: | :---: |
| April 10 | Monday. Last day to drop a course or withdraw from the |
|  | semester. |
| May 8-13 | Monday-Saturday. Final examinations. |
| May 13 | Saturday. Semester closes. |
| May 14 | Sunday. Commencement. |
| Summer Session, 1978 |  |
| May 29-30 | Monday-Tuesday. Registration, Orientation, Advisement. ${ }^{4}$ |
| May 31 | Wednesday. Classes begin. |
| August 18 | Friday. End of summer session. |

Note: A more detailed calendar for the summer session will be announced in the Summer Session Schedule of Classes

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HISTORY

On June 5, 1969, the legislative act creating The University of Texas at San Antonio as a component institution of The University of Texas System was signed into law by the Governor. By this legislation directing that The University of Texas at San Antonio offer "courses leading to such customary degrees as are offered at leading American universities," the Legislature of the State of Texas established a new public institution of higher learning that would serve both undergraduate (lower and upper division) and graduate students. The legislation further stipulated that The University be "one of the first class."

In May, 1970, the Board of Regents of The University of Texas System accepted a gift of approximately 600 acres of wooded land located sixteen miles northwest of the center of San Antonio to serve as the permanent campus [size] for The University of Texas at San Antonio. [eampus-] Shortly thereafter administrative and planning offices were established in the former Maison Blanche building on the grounds of HemisFair Plaza.

By the end of 1970 , a master conceptual plan for the permanent campus was approved by the Board of Regents, and by June, 1971, final plans and specifications for the first seven permanent buildings of the campus were completed. After completion of the site improvement work, construction contracts were awarded in May, 1972, calling for a completion date of May, 1974, subsequently revised because of construction delays.

In January, 1972, temporary classrooms and offices were acquired in northwest San Antonio in the Koger Executive Center at the intersection of Loop 410 and Babcock Road. Graduate students enrolled for the first time at the Koger site in June, 1973. These facilities were occupied by The University until buildings on the new campus became available. Upper-division junior and senior students were accepted on the permanent campus in September, 1975; and lower-division students were registered in June, 1976.

In the Spring of 1972 the Board of Regents of The University of Texas System and the Coordinating Board, Texas College and University System, gave approval to UT San Antonio's academic organization of five Colleges with seventeen Divisions and to its proposed fifteen graduate and twenty-seven undergraduate [forty-twe] degree programs, $[-]$ now increased at the undergraduate level to thirty-one. Subsequently the College of Multidisciplinary Studies and the College of Sciences and Mathematics were reorganized, so that the five Colleges of The University currently are composed of 15 [74] Divisions. UT San Antonio also has a Division of Continuing Education.

Purpose and Philosophy

Through programs of a multidisciplinary character, UT San Antonio strives to eliminate the isolation of disciplines and to reflect the integrated nature of societal issues and problems. To achieve this goal, The University [an\#ieipates ełese] collaborates [eeł子aberation] closely with the other two component institutions of the UT System located in San Antonio, the Health Science Center (composed of the Medical School, the Dental School, the Graduate School of Biomedical Sciences, the School of Allied Health Sciences) and The University of Texas School of Nursing at San Antonio (a branch of The UT System School of Nursing).

For the added benefit of students, faculty, and community, UT San Antonio is committed to cooperative planning with all institutions of higher education in San Antonio and the surrounding region. The University is committed also to cooperate with the San Antonio community to improve accessibility to library resources; provide internships with local professions and businesses; offer continuing education institutes, seminars, and special activities; and utilize local, non-university personnel with [ef] special talents and abilities to enrich classroom instruction.

ORGANIZATION

The University of Texas at San Antonio is a component institution of The University of Texas System. Governance of The University [Its-gevepament] is vested in the nine-member Board of Regents of The University of Texas System whose members are appointed biennially by the Governor, with the advice and consent [apppovał] of the Senate, for six-year staggered term. [with-three-terms-expiring-every-もwo years:]

The Board of Regents delegates administrative authority to the Deputy Chancellor of The University of Texas System. The administrative authority of [and-respeasi biłiłもy-far] each component institution, such as The University of Texas at San Antonio, is in turn delegated to the President of that component.

The President at UT San Antonio is assisted by a staff including an Executive Vice President, a Vice President for Academic Affairs, and a Vice President for Business Affairs. The Executive Vice President provides the President with advice and counsel on all phases of University operations. He represents and acts for the President when the latter is unable to be present. The Vice President for Academic Affairs provides the President with advice and counsel on academic matters and acts as liaison between the President's Office and the several Deans as well as with faculty committees concerned with academic affairs. With approval of the Board of Regents of a non-traditional administrative structure for graduate education at UT San Antonio, the administrative functions that ordinarily are the responsibility of a Graduate Dean are carried out by the Vice President for Academic Affairs. As the administrative officer responsible for graduate education,
 the Council on Graduate Education. The Vice President for Business Affairs provides the President with advice and counsel on fiscal affairs and has direct responsibility for the business operation of The University including operation of the physical plant. This officer is responsible for budget preparation and analysis.

## ACCREDITATION




 Ву-а-Gөmmít




The University of Texas at San Antonio was granted full accreditation at the graduate level by the Southern Association of Colleges and Schools in December 1974. Because accreditation applies retroactively within the year awarded, all

UT San Antonio degrees have been awarded by an accredited institution. The University expects to be evaluated for full accreditation at the undergraduate level in October 1976 with accreditation to be granted before the end of the year.

THE JOHN PEACE LIBRARY

The John Peace Library of The University of Texas at San Antonio [Eibpapy], named in 1974 in honor of the late former Chairman of The University of Texas System Board of Regents, has undergone rapid development and expansion since 1972, when work began on the development of collections. As of Fall, 1975[4] the available collections of [in] the library numbered 162,000 processed [ $2 \theta 5 ; \theta \theta \theta$ ] volumes; [ef-processed-materiats:] 44, 700 volumes in microform; 6,000 federal, state and local documents; and 293,000 pieces of microforms. The library subscribes to approximately 2,000 periodicals and receives as a designated depository a wide variety of federal, state, and local documents. In addition, the library has extensive holdings in microform of government documents, research reports, and newspapers. All materials have been selected to support the teaching and research needs of UT San Antonio.

The U.T. San Antonio special collections and rare books focus on Western Americana and on Texana. A truly distinguished collection of books and documents for research in the period of the Texas Republic has been made available through the generosity of the late John Peace. [former-Ehairman-of-the- $\boldsymbol{F}$-System-Beard of-Regents:] The Ewing Halsell Foundation provided funds for purchase of the Morris Cook J. Frank Dobie Collection. The library has also acquired a large collection of Western Americana from R. W. Warden of Montana. In addition, the library holds the architecture collection of Ralph H. Cameron and the Bible collection of Harry and Alma Dietert. The Piper Foundation assisted The University in the purchase of The San Antonio Collection, an extensive collection of materials on the history of San Antonio, from Ray Walton.
U.T. San Antonio is a participant in the Regional Historical Depository Program sponsored by the Texas State Library. This archive preserves and makes available to researchers a wide variety of public and private documents from a 22-county region surrounding San Antonio. The archive is housed at the Institute of Texan Cultures on the HemisFair Plaza.

The library building [;-schedułed-for-comptetion-in-7ate-7975;] is designed to offer full services and convenience to students and faculty. The majority of books and periodicals are [wiff-be] on open shelves for browsing and ease of access. In addition to the traditional library facilities, the John Peace [ $\mathrm{H}-\mathrm{F}=-$ Sah-Antenie] library [wiłt] also has [have] full audio-visual capability and music listening facilities. Carrels, group study rooms, lounges, and faculty studies are conveniently located throughout the building to provide ideal study conditions. A required freshman course orients students in the use of libraries in general and the John Peace [ $\mathrm{HFF}_{\text {San-Antoniols }}$ ] Library in particular. A staff of highly qualified subject-specialist librarians is available for consultation and assistance. ${ }^{1}$

THE COMPUTER CENTER

The Computer Center provides modern computational facilities for research and academic programs in addition to support for administrative data processing. A small [timesharing] computer system (PDP-11/45) is available for student and faculty use. This computer may be expanded in capability [;however;] through communication with large-scale computers, such as those at The University of Texas at Austin.

## THE LUTCHER CENTER

The Lutcher Center is a conference facility of The University of Texas System. Responsibility for administration and supervision of the Lutcher Center is assigned to the President of The University of Texas at San Antonio.

[^20]The Lutcher Center supports the administrative and developmental programs of The University of Texas System and its component institutions. It also provides space, facilities, and services, [and-a-suitabłe-envipenment] for educational [seducationalfy-rełated] and public service programs of component units of The University of Texas System. The Center may also be used by other public and private educational institutions and by groups engaged in public service.

THE INSTITUTE OF TEXAN CULTURES


 Fexes-histery-threugh] located on HemisFair Plaza in downtown San Antonio, is a statewide educational research and dissemination center focusing on Texas history and culture. This center is concerned principally with collecting, organizing, and interpreting information on Texas subjects and with producing films, filmstrips, slides, tapes, [shews;-and] publications, and [traveling] exhibits on these subjects for statewide use on television, in classrooms, in museums, and at public gatherings for the benefit of the people of Texas.

THE CENTER FOR STUDIES IN BUSINESS, ECONOMICS, AND HUMAN RESOURCES

The Center for Studies in Business, Economics, and Human Resources is the research center of the College of Business. The major objective of the Center is to provide students and faculty of The University with an adequate environment for problem solving and community-related research. While the Center is an integral part of the College of Business, it effectively interacts with the faculty of all the other colleges to provide an [tputy] interdisciplinary approach to research and business education.

The focus of activity at the Center is on rigorous application of theories and research techniques to produce useful information for public and private decision making. [Fhree-majer-appreaehes-are-utifized-at-the-Єenter-te-atzain-this
ebjeetive] Specialized data files are maintained on a continuing basis, while a research library and information systems guide interested users to sources of information. The knowledge and experience of The University's faculty are utilized to solve specific problems in the broad categories of management, finance, administration, planning, economic feasibility, production, economic impact, anti-trust laws and procedures, international trade, environmental protection, and manpower utilization. Graduate students have the opportunity of applying research methods through research assistantships, and [fpuiもfuł] discourse between academicians, specialists, community leaders, and students is encouraged through conferences and seminars which bring well-known scholars and professionals to San Antonio.

## CENTER FOR ARCHAEOLOGICAL RESEARCH

The Center for Archaeological Research, located in the Division of Social Sciences, was established in September, 1974. Among its objectives are preparation of students in archaeology; promotion of archaeological research in the South and South Central Texas region; carrying out necessary archaeological assessments for federal and state agencies as required by legislation and executive orders; and providing aid to local agencies and citizens who need the services of trained archaeologists. The Center's staff includes a number of graduate students. They, along with other Center personnel, carry out archaeological surveys in Bexar, Starr, Kendall, Comal, Gonzales, Karnes, Jim Wells and other South Texas counties. Other Center projects include a broad study of the archaeological and historical resources of the San Antonio-Guadalupe River Basins and support of regional archaeological surveys and excavations.

## CENTER FOR APPLIED RESEARCH AND TECHNOLOGY

The Center for Applied Research and Technology (CART) is the research center of the College of Sciences and Mathematics. The major goals of CART are to provide for expanded research opportunities in the applied sciences for faculty and graduate students, to provide an educational opportunity whereby individual skills can be developed to fill employers' needs for applied scientists, and to
provide research-related services for the community at large. Although CART is a part of the College of Sciences and Mathematics it interacts with the faculty of other Colleges and with the local research community through the Southwest Research Consortium.

Emphasis is on interdisciplinary research in the earth, life, and physical sciences, Efforts have been concentrated in chemical, environmental, energy, and health-related studies. CART serves as a focal point for applied science research activities at The University by providing guidance and programs for contract and grant management and by furnishing analytical services and research support for faculty and students. Exceptional students have an opportunity to gain valuable work experience through CART's technical service and research programs.

CENTER FOR LEARNING AND DEVELOPMENT RESEARCH IN EDUCATION
The Center for Learning and Development Research in Education, located in the College of Multidisciplinary Studies, is designed to stimulate basic and applied research in learning and development, particularly as it refers to the educational process. Faculty and students from this College as well as faculty and students from other Colleges of The University, are encouraged to study problems appropriate to this area. The objectives of the Center include: promotion of research in learning and development in education; development of cooperative faculty-student research; cooperation with school districts, social service agencies, and community agencies on problems of mutual interest; and solicitation of funds for appropriate activities.

The Center's role consists of identifying and coordinating faculty, student, and community interests, needs, and resources. Faculty members from the College and The University, with interest and training in learning and development in education, are encouraged to participate in projects related to the Center's activity.

THE UNIVERSITY [HF-SAN-ANFONFO] BOOKSTORE


#### Abstract

The University Bookstore, owned and operated by UT San Antonio, is located on the first level of the Science-Education Building adjacent to the Student Lounge. The store provides a complete stock of all required and recommended books for UT San Antonio courses. In addition, the University Bookstore carries a complete line of general school supplies, writing instruments, art materials, soft goods, decals, greeting cards, and a variety of gift items. [Fhe-HF-San-Antenie-Beokstere;--ewned-and-operated-by-Fhe-University;-maintains an-on-eampus-store:--Alt-efficiat-textbeoks-are-kept-in-stoek---With-the-opening өf-the-entire-eampus;-the-store-witf-be-tocated-өn-the-first-tevet-of-the-Seience Edueatiөn-Buifding-adjaeent-to-the-Student-teunge---At-that-time--equipment; supplies;-sundries;-and-other-items-wit7-be-avaifable:]


## THE UNIVERSITY CAFETERIA

The University Cafeteria, located in the heart of the campus on the first level of the John Peace Library, provides meals and fountain service to the university community. Owned and operated by UT San Antonio, the Cafeteria serves breakfast, hot lunches, and features short orders, soft drinks, and fountain items. Catering for both large and small groups is available. Further information may be obtained from the Cafeteria.
III. [¥£.子 TUITION, FEES, CHARGES, PENALTIES AND DEPOSITS

Introduction

Students are [net] entitled to enter class or laboratory only after [untił] their tuition, fees, and deposits have been paid. [ ${ }^{\star}$ ] Payment may be made by personal check for the exact amount due, provided the bank transit number is encoded thereon in compliance with revised Federal Reserve Bank regulations. Checks for larger amounts, if the difference is to be paid in cash to the students, cannot be accepted. In paying by check, students should exercise care. A bad check, whether given by mistake or otherwise, unless it is the admitted error of the bank concerned, is likely to delay actual payment and thus result in a penalty as outlined in the section on Bad Check Charges. The University does not maintain a check cashing service for students. It is recommended that students establish checking accounts in local San Antonio banks before enrolling in order that they can easily cash checks in the city. Many local merchants will not cash out-of-town checks.

## Tuition

Pursuant to Subchapter B, Chapter 54, Texas Education Code, each student who registers at UT San Antonio is required to pay tuition ${ }^{2}$ according to the number of semester credit hours for which registration is completed and according to his/her residence classification, as set forth in the tables
 fełtews:]

[^21]Iuition Each Semester

| Number | Residents of Texas | Nonresidents |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| $\frac{\text { of hours }}{\text { taken }^{3}}$ |  | $\xrightarrow{\text { U. S. }}$ | $\frac{\text { Foreign }}{\text { Students }} 4$ |
| 1 | 50.00 | 40.00 | 200.00 |
| $\frac{2}{3}$ | 50.00 | 80.00 | 200.00 |
| $\underline{3}$ | 50.00 | 120.00 | $\underline{200.00}$ |
| 4 | 50.00 | 160.00 | 200.00 |
| 5 | 50.00 | 200.00 | 200.00 |
| $\underline{6}$ | 50.00 | $\underline{240.00}$ | $\underline{200.00}$ |
| 7 | 50.00 | 280.00 | 200.00 |
| 8 | 50.00 | 320.00 | 200.00 |
| $\underline{9}$ | 50.00 | 360.00 | $\underline{200.00}$ |
| 10 | 50.00 | 400.00 | 200.00 |
| 11 | 50.00 | 440.00 | 200.00 |
| 12 | 50.00 | 480.00 | 200.00 |
| 13 | 52.00 | 520.00 | 200.00 |
| $\frac{14}{15}$ | 56.00 | 560.00 | 200.00 |
| 15 | 60.00 | 600.00 | $\underline{210.00}$ |
| $\frac{16}{17}$ | 64.00 | 640.00 | $\frac{224.00}{238}$ |
| $\frac{17}{18}$ | 68.00 | $\frac{680.00}{72000}$ | $\frac{238.00}{25.00}$ |
| 18 | 72.00 | 720.00 | $\underline{252.00}$ |
| 19 | 76.00 | 760.00 | $\underline{266.00}$ |
| $\frac{20}{21}$ | 80.00 | $\frac{800.00}{}$ | $\frac{280.00}{}$ |
| $\underline{21}$ | 84.00 | 840.00 | $\underline{294.00}$ |
| Each Additional Hour | -r 4.00 | 40.00 | 14.00 |

${ }^{3}$ Tuition for resident or nonresident students registered for thesis or dissertation credit only is $\$ 12.00$ for residents of Texas and $\$ 50.00$ for nonresidents (U.S. citizens and foreign students) in those instances where such credit is the final credit-hour requirement for the degree in progress. For residence requlations, see the Appendix of this catalog.
${ }^{4}$ Foreign students who registered for the first time before June 20, 1975 are charged $\$ 14.00$ per semester hour, with a minimum of $\$ 200.00$ per semester.

Foreign students who register for the first time after June 19, 1975 are charged $\$ 40.00$ per semester hour of credit, unless (1) an exception for financial need can be demonstrated through the Student Financial Aid Office; or (2) the Coordinating Board, Texas College and University System, certifies that the student's home country charges U.S. citizens at publicly funded colleges and universities a tuition fee equal to or less than $\$ 200.00$ per semester. Students in (1) and (2) above are charged the previous tuition fee of $\$ 14.00$ per semester hour, with a minimum of $\$ 200.00$ per semester.

Tuition Each Summer Session

| Number | Residents of Texas |  |  | Nonresidents |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\frac{\text { of hours }}{\text { taken }^{5}}$ | Weeks | Weeks | $\frac{12}{\text { Weeks }}$ |  | $\text { We } \frac{6}{e k s}$ | Weeks | $\frac{12}{\text { Weeks }}$ |
| 1 | 25.00 | 37.50 | 50.00 | 40.00 | 100.00 | 150.00 | 200.00 |
| $\underline{2}$ | 25.00 | 37.50 | 50.00 | 80.00 | 100.00 | 150.00 | 200.00 |
| $\underline{3}$ | $\underline{25.00}$ | 37.50 | 50.00 | 120.00 | 100.00 | 150.00 | $\underline{200.00}$ |
| $\underline{4}$ | 25.00 | 37.50 | 50.00 | 160.00 | 100.00 | 150.00 | 200.00 |
| 5 | 25.00 | 37.50 | 50.00 | 200.00 | 100.00 | 150.00 | 200.00 |
| $\underline{6}$ | $\underline{25.00}$ | $\underline{37.50}$ | $\underline{50.00}$ | $\underline{240.00}$ | $\underline{100.00}$ | $\underline{150.00}$ | $\underline{200.00}$ |
| 7 | 28.00 | 37.50 | 50.00 | 280.00 | 100.00 | 150.00 | 200.00 |
| $\overline{8}$ | 32.00 | 37.50 | 50.00 | 320.00 | 112.00 | 150.00 | $\underline{200.00}$ |
| $\underline{9}$ | $\underline{36.00}$ | $\underline{37.50}$ | $\underline{50.00}$ | $\underline{360.00}$ | $\underline{126.00}$ | $\underline{150.00}$ | $\underline{200.00}$ |
| 10 | 40.00 | 40.00 | 50.00 | 400.00 | 140.00 | 150.00 | 200.00 |
| 11 | 44.00 | 44.00 | 50.00 | 440.00 | 154.00 | 154.00 | 200.00 |
| $\underline{12}$ | 48.00 | 48.00 | 50.00 | 480.00 | $\underline{168.00}$ | $\underline{168.00}$ | $\underline{200.00}$ |
| 13 | 52.00 | 52.00 | 52.00 | 520.00 | 182.00 | 182.00 | 200.00 |
| 14 | $\underline{56.00}$ | 56.00 | 56.00 | $\underline{560.00}$ | $\underline{196.00}$ | 196.00 | $\underline{200.00}$ |
| Each Addi- |  |  |  |  |  |  |  |
| tional Hour | 4.00 | $\underline{4.00}$ | $\underline{4.00}$ | 40.00 | 14.00 | 14.00 | 14.00 |


 sessïn:]
${ }^{5}$ Tuition for resident or nonresident students registered for thesis or dissertation credit only is $\$ 12.00$ for residents of Texas and $\$ 50.00$ for nonresidents (U.S. citizens and foreign students) in those instances where such credit is the final credit-hour requirement for the degree in progress. For residence regulations, see the Appendix of this catalog.
${ }^{6}$ Foreign students who registered for the first time before June 20, 1975 are charged $\$ 14.00$ per semester hour, with a minimum of $\$ 200.00$ per twelve-week summer session.

Foreign students who register for the first time after June 19, 1975 are charged $\$ 40.00$ per semester hour of credit, unless (1) an exception for financial need can be demonstrated through the Student Financial Aid Office; or (2) the Coordinating Board, Texas College and University System, certifies that the student's home country charges U.S. citizens at publicly funded colleges and universities a tuition fee equal to or less than $\$ 200.00$ per semester or 12 -week summer session or comparable period, or $\$ 100.00$ per 6 -week summer term or comparable period. Students in (1) and (2) above are charged the previous tuition fee of $\$ 14.00$ per semester hour, with a minimum of $\$ 200.00$ per twelve-week summer session.

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[Nonresidents-f甘-S:-citizensł:--Nonresidents-who-are-citizens-of-the-Hnited-States-
wił7-be-charged-tuition-at-the-rate-0f-$40:00-per-semester-heur-0f-epedq=-fer-whieh
they-are-enrot7ed:]
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minimum-өf-$}00=00-for-eaeh-gummer-sesg\dot{*}
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Residence Regulations

A student entering or re-entering The University of Texas at San Antonio [fer-the first-time;-өr-a-student-re-entering-Fhe-University-after-an-absente-өf-mere-than one-semester;-must] may be required to file a [eompleted] residence questionnaire. The student's status as a resident or nonresident will be made in accordance with [Subehapter-B;-Ehapter-54;-0f] the Texas Education Code.][*] If the applicant has [ $\ddagger \boldsymbol{q}-\boldsymbol{i n}$ ] any doubt about his status, he/she should consult the Director of Admissions and Registrar prior to registration. [Students-whe-are-łegatły-ełassified-as
 registration:] There can be no change in residence classification except under the express authorization of the Registrar.

Penalty for Payment of Tuition Under Incorrect Residence Classification

Responsibility for registering under the proper residence classification rests with the student. A student who wrongly pays the Texas, rather than the nonresident, tuition is subject to a penalty of $\$ 10.00$ for each registration under incorrect residence classification. In addition, if a student has obtained residence classification by virtue of deliberate concealment or misrepresentation of facts, he/she may be subject to disciplinary action.
$7[*]_{\text {A detailed description of the residence regulations is offered in the }}$ Appendix of this catalog.

## Student Use Fee and Student Service Fee [Required--Stadent-Service-Fee]

Each student who registers at UT San Antonio is required to pay student use and service fees ${ }^{8}$ according to the number of semester credit hours for which registration is completed, as set forth in the table below:

| $\frac{\text { Semester }}{\text { Hours }}$ | $\begin{aligned} & \text { Student } \\ & \hline \text { Use Fee } \end{aligned}$ | Student <br> Service <br> Fee |
| :---: | :---: | :---: |
| 1 | 4.00 | 2.50 |
| $\overline{2}$ | 8.00 | 5.00 |
| $\underline{3}$ | 12.00 | $\underline{7.50}$ |
| 4 | 16.00 | 10.00 |
| 5 | 20.00 | 12.50 |
| $\underline{6}$ | $\underline{24.00}$ | 15.00 |
| 7 | 28.00 | 17.50 |
| $\overline{8}$ | 32.00 | 20.00 |
| $\underline{9}$ | $\underline{36.00}$ | $\underline{22.50}$ |
| 10 | 40.00 | 25.00 |
| $\frac{11}{12}$ | 44.00 | $\underline{27.50}$ |
| $\underline{12}$ | 48.00 | $\underline{30.00}$ |
| 13 | 52.00 | 30.00 |
| $\frac{14}{75}$ | 56.00 | $\frac{30.00}{30.00}$ |
| $\overline{15}$ | 60.00 | 30.00 |
| Each Addi |  |  |
| Hour | 4.00 | -0- |





 and-өther-speeiał-aetivities-andfer-serviees-whieh-may-be-pporided-for-students-]
[Refund-өf-student-serviee-fees-is-made-өn-the-same-basis-as-refund-өf-tuití $\theta$ - - ]

[^22]Degree Application Fee

An $\$ 8.00$ application fee is required of candidates for a degree. Application for a degree must be made at the Registrar's Office and the fee paid no later than the end of the add/drop period of the term (Fall, Spring, or Second Six-Week Summer Session) in which the student plans to graduate. This fee is not refundable and must be paid each time an application for a degree is filed. [and-is-net pefundable:] Cap and gown rental is not provided as part of the degree application fee.

Veterans attending The University under an exemption ${ }^{9}$ [as-mentiened-below] are not exempt from payment of this fee.

Late Registration Fee

A late registration fee of $\$ 5.00$ is [wiłt-be] charged for the first day of late registration, and an additional $\$ 2.50$ per day is assessed thereafter.[with] The maximum late registration fee [ameunt-being-\$76; $\theta \theta$ ] for any one term is $\$ 15.00$. [semester:] This fee may be waived only in extenuating circumstances by the President or his delegate. The late registration fee is not refundable.

## Library Fee for Limited Borrower's Card

Limited Borrowers are defined in the Appendix of this catalog. By paying $\$ 15.00$, a Texas resident may obtain a Limited Borrower's Card for borrowing unrestricted materials in person; this fee is also required of non-students who are auditing UT San Antonio courses. Persons holding a Limited Borrower's Card are charged a fee of $\$ 2.00$ (plus copying costs, if any) for each interlibrary loan request. Library Fines for Overdue Materials and for Lost or Damaged Items

Fines for overdue materials and for lost or damaged items are set forth in the Appendix of this catalog.

[^23]Challenging Undergraduate Courses by Examination Fee

A fee of $\$ 15.00$ per examination is [wił7-be] required of students who challenge UT San Antonio undergraduate courses. Procedures for challenging undergraduate courses by examination are set forth in the Credit by Examination section.

## Bad Check Charge

A charge of $\$ 5.00$ is [wił7-be] assessed for each returned check to offset the cost of handling dishonored checks. The University will not accept a check from a student who wittingly or unwittingly has previously given two bad checks.

Replacement of Student Identification Card Charge

A charge of $\$ 2.00$ is [wif7-be] assessed for the issuance of a duplicate student identification card. This charge must be paid at the time the application for the duplicate is made.

Transcript Charge

A charge of $\$ 1.00$ is [per- HF -San-Antenie-tpansepipt-wiff-be] made for each UT San Antonio transcript. This fee must be paid before a transcript will be [is] issued.

Laboratory Fee

In certain courses a laboratory fee, not to exceed the actual cost of materials and supplies and not less than $\$ 2.00$ nor more than $\$ 8.00$, may be charged. When a laboratory fee is charged, the schedule of classes indicates the associated fee. For each course which involves the use of computers in instruction, a laboratory fee of $\$ 8.00$ is charged.

Charges for Auditing Courses

All auditors of courses must submit an approved Request for Audit Form to the Registrar.

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Students registered at UT San Antonio may, with the approval of the instructor and
Dean of the College in which the course is offered, audit courses by paying an
auditing fee of $5.00 per course. The audit fee is not refundable.
Upon approval of a Request for Audit Form, a non-student auditor must pay an auditing
fee of $25.00 per course. The fee is not refundable. Non-students over 65 are
permitted to audit without paying a fee, provided space is available and a Request
for Audit Form is approved. [Al#-auditefs-0f-60ufses-must-submit-a-Request-fof
Audit-F0fm-te-the-Registrafr--Auditers-whe-afe-ret-fegistefed-UF-San-Anteni0-students
must-pay-an-auditing-fee-0f-$70v00-pef-G0ufse%--N0-additi0Ral-auditing-fees-will-be
\epsilonhafged-student-auditefs-registered-at-UF-San-ARtenior] Non-student auditors who
Wish library privileges may receive them by paying a non-student library deposit
(Limited Borrower's Deposit) of $15.00 at the John Peace Library.
Permission to audit may be obtained and fees paid only during the late registration
period.
Parking Fees
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Parking fees for students are as follows:
Class B $\quad \$ 12.00$ Student parking permit
8.00 if purchased during the spring semester
4.00 if purchased during summer session
Class D 6.00 Motorcycles, motor scooters, motor bicycles
4.00 if purchased during the spring semester
2.00 if purchased during surmer session
Class M $\quad 1.00$ Bicycles
.50 for less than twelve months
Student vehicles bearing valid State of Texas Disabled Veteran's license plates
are exempt from the payment of parking fees. A partial refund is made for any
remaining term(s) in which the student does not enroll. [Fees-fer-pafking
ө日-the-permanent-UF-San-Antөaio-campus-will-be-established-when-cłasses-afe-held


at-Fhe-甘मivefsity-өf-Fexas-Heałth-Science-Gentef-afe-fequifed-te-pay-the-student

at-the-temperafy-UF-San-Antenio-site-tocated-in-the-Kegef-Genter.]

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Field Trip Fee
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A supplementary fee is assessed students in certain courses to pay for the expenses of field trips.

Physical Instruction Laboratory Fee

A fee of $\$ 4.00$ for a semester or a summer term is required of every student registering for physical instruction. Lockers and towels are provided. Locks must be furnished by the student.

Students not registered for physical instruction who desire to use a locker and towel service may obtain it by paying a fee of two dollars for a semester or summer session or any part thereof. Locks are not provided.

Non-Student Gymnasium and Facilities Use Fees ${ }^{10}$
Non-student gymnasium and facilities use fees are required. Non-students (including guests) desiring the use of Gymnasium and Convocation Center facilities (with lockers and towels provided, but not locks) are charged fees according to the following schedule:

Category
A. UTSA Personnel and Other UT System Personnel

1) Faculty-staff member
2) Faculty-staff spouse
3) Faculty-staff children
4) Student spouse
5) Student children
B. Guest fee

Guest of UT San Antonio student,
faculty member, or staff member

These fees are non-refundable.
$10_{\text {Facilities may be used at specified hours only. }}$

Duplicate Fee Receipt

A service charge of $\$ 1.00$ is［wi7t－be］assessed for the issuance of a duplicate fee receipt．This charge must be paid at the time the application for a duplicate fee receipt is made．

General Property Deposit

Every student must make a general property deposit of $\$ 10.00$ at the time of initial registration to protect The University from losses，such as property loss，［ $\mathrm{\theta} \mathrm{f}$ ］ damage，or breakage，$[\theta \boldsymbol{e}]$ violation of rules in any University library or laboratory， failure to return keys furnished by The University，or［fer］damage to or loss of any other University property．Charges are billed directly to the student or are collected by the department upon reissue of supplies or property．Failure to pay the charges promptly results in denial of the student＇s readmission or re－enrollment， and in refusal to issue the student＇s transcript by The University．The property deposit records are［wiłł－be］reviewed periodically［frem－もime－єө－もiャme］and if charges have been made against the deposit，the student may be required to bring the deposit up to $\$ 10.00$ ．

## Career Planning and Placement Registration Fee

UT San Antonio students and alumni interested in developing a placement credential file are requested to register with the Career Planning and Placement Center． Currently enrolled students are permitted free registration．Alumni are assessed a $\$ 3.00$ annual registration fee．Registrants receive，as part of their registration， the preparation，duplication and maintenance of three credential sets．A fee of $\$ 1.00$ is assessed for each additional set requested by the registrant during his／her current year of registration．

## Teacher Placement Service Fee

Presently enrolled students of The University of Texas at San Antonio are permitted to register for teacher placement services on a no fee basis．UT San Antonio alumni are assessed a $\$ 3.00$ annual fee for the same services．Both students and alumni
receive, as part of their registration, the preparation, duplication and maintenance of three credential sets. A fee of $\$ 1.00$ is assessed for each additional set requested by the registrant during his/her current year of registration.

Professional Liability (Malpractice) Insurance
Prior to Official registration for courses that [wiff] place them in a clinical situation, allied health students are required under the Rules and Regulations of The University of Texas [甘F] System Board of Regents to show evidence of professional liability (malpractice) insurance coverage. The Director of the Division of Allied Health and Life Sciences may be consulted relative to [witt-advise-students on] obtaining such insurance.

Exemption from Tuition and Fees

The Statutes of the State of Texas prescribe certain cases in which students can be exempted from tuition and/or certain fees. The various types of exemptions are described below; however, in each case it is the student's responsibility to initiate the action of applying for an exemption through the Registrar's Office and providing satisfactory evidence that all conditions required for the exemption have been met. Until such time as the exemption is granted, a student will be required to pay all tuition and fees from his or her own funds. Students who might be eligible for an exemption should apply for the exemption at the Registrar's Office at least one month prior to registration for [or] the term in which they plan to utilize the exemption. Exemption of Texas ex-service personnel.[men] [A] Legal residents of Texas are [is] exempted from tuition and certain required fees when they [he] meet[s] all the following criteria prior to the end of the registration period for the term that the exemption is claimed:

1. They have [He-has] resided in Texas for a period of not less than twelve (12) months prior to the date of registration.
2. They [He] served in the armed forces or in certain auxiliary services in World War I, World War II, the Korean conflict, or the Cold War. If service was in the Cold War, they [he] must have served on active military duty (other than for training) for more than 180 days.
3. They were [He-was-a] bona fide legal residents of the state at the time of entering service.
4. They were [He-was] honorably discharged from service (those who served in World War II and who were discharged because of being over the age of thirty-eight or because of a personal request are not eligible for this exemption).
5. They are [He-is] not eligible for education benefits provided for veterans by the United States Government.

Exemption of children of certain disabled public employees. Children of certain firemen, peace officers, employees of the Texas Department of Corrections, and game wardens who have suffered injury resulting in death or disability sustained
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Student Use Fee. When the payment of this required fee causes undue hardship, a student may receive an exemption from payment of the fee by making application through the Office of Student Financial Aid. Exemptions are limited to 5\% of the total enrollment.

# Exemption of Certain High School Graduates. The highest ranking graduate of an accredited Texas High School, as certified by the Texas Education Agency, is exempt from the payment of tuition during the first four regular sessions immediately following graduation. 

Refund Policy and Adjustment of Fees for Students Withdrawing, Adding, or Dropping Courses

A student who officially withdraws from The University [wiłł] receives a full refund of tuition and refundable fees paid, only if he or she does so before the end of the last official day of registration (not including those days designated as late registration).

In a semester, [7eng-segsien;-upen-presentatien-te-the-Registrap-of-an-өffieiał fee-receipt-shewing-payment-өf-the-fee-and] upon surrender of the student identification card, $\underline{a}$ [any] student withdrawing officially a) after the last official day for registration but during the first week of classes of a semester [wifl] receives a refund of 70 percent of the applicable portion of the tuition and fees; b) during the second week, 60 percent; c) during the third week, 40 percent; d) during the fourth week, 20 percent; e) during the fifth week and thereafter, no refund. In a summer term [session], a student withdrawing officially a) after the last official day for registration, but during the first three class days, receives a refund of 70 percent of the applicable portion of the tuition and fees; b) on the fourth, fifth, or sixth day, 50 percent; c) after the sixth class day, no refund. 11

A student who enrolls in The University for a given term and who is subsequently required to withdraw because of academic dismissal the previous term, receives a full refund of all tuition and fees.

[^24]Refunds of tuition, applicable fees, student [boifding] use fees, and student service fees are [refunds-wiłt-be] made for courses dropped during the first twelve class days in the fall and spring or during the first four class days in a summer term if the student paid more than the minimum required and if the student has dropped below the total number of hours for which he or she originally was registered. Tuition and applicable fees for added courses are [will-be] billed to the student.

No refunds are [wiff-be] made until 15 days have elapsed from the time fees were paid unless the fees were paid in cash or by money order. Refund checks are [wilf be] mailed to the address indicated when the student withdraws from The University. Students entitled to refunds should allow ten working days after the fifteen-day clearing period for receipt of the refund.

The University reserves the right to deduct from the refund any outstanding financial obligations owed The University.

Debts Owed The University

In the event of non-payment of debts owed to The University (or failure to meet admission requirements), any of the following actions may be taken:

1. Denial of readmission of the student.
2. Denial of further registration.
3. Withholding of official transcripts.
4. Withholding a diploma to which the student would otherwise be entitled.

When a student has any of the above actions against his or her record, it is the student's responsibility to clear obligations with The University and see that the Registrar's Office is notified. No further [before-any-addiぁienał] services of The University will be provided until all obligations are cleared.

A student who pays tuition and fees with a check which is not subsequently honored by a bank and the fault is not that of [being-that] the bank and who does not make payment within five days will be withdrawn from The University by the Registrar for non-payment of tuition and fees. [have-registratien-for-the-term-eaneeł子ed-]

## ［モモェ］IV．INSTITUTIONAL POLICIES CONCERNING STUDENTS

Rules and Regulations of the Board of Regents


#### Abstract

All students of The University of Texas at San Antonio are subject to the rules and regulations governing student conduct and discipline as set out in the Rules and Regulations of the Board of Regents of The University of Texas System and the Student Handbook．


The Regents＇Rules and the Student Handbook have full force and effect as concern all UT San Antonio students．The［se］Regents＇Rules may be consulted in Eat］the offices of the President，the Vice Presidents，and Deans and in the John Peace


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The Student Handbook may be obtained in the Office of the Dean of Students． Student Health Services
 of Texas at San Antonio，includes an［he－reeeives－a－Physiea子－Examinaもien－Fepm and－an］Immunization Record Form．This［Fhese］form［s］must be completed by the student＇s family physician and returned to The University Student Health Center before the student can register．

## Counseling Center［and－Festing－Єenter］

The Counseling Center provides professional services which are designed to help meet the personal and developmental needs of UT San Antonio students． Individual or group sessions are available for students seeking personal， educational，or vocational counseling．Counseling and educational psycholo－ gists in the Center deal with a variety of student concerns and utilize counseling techniques，psychological assessment，and other aids to assist students in the need of specialized service．All counseling is free，confi－ dential，and on a voluntary basis．
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## Testing Center

The Testing Center provides a university－wide testing service．National tests
are given on national testing dates．For the student seeking a better self－ understanding，interest and personality inventories and achievement and intelligence tests may be scheduled by appointment in the Testing Center．
 are encouraged to satisfy [genepa子-edueatұen-and] degree requirements through credit by examination (covered in Section VIII [Yİ]). A brochure on Credit by Examination at UT San Antonio is available on the various tests which are accepted for credit by [at] The University. For additional information students should consult the Credit by Examination and Placement Examinations sections of the present catalog and the Credit by Examination brochure available from the Testing Center in the Office of the Dean of Students.



Prospective students are encouraged to consult counselors in the Career Planning and Placement Center and in the Admissions Office about degree programs offered by The University.

Advisement for undeclared majors is a function of the Office of the Dean of Students. This program is designed to provide basic information to students who are undecided about their educational goals. Academic advising for declared majors is carried on in the several Colleges, and information should be sought in the Deans' offices.

Advisement for all freshmen enrolled in the Provisional Admission Program is coordinated by the Office of the Dean of Students. A student who is admitted under the Provisional Admission Program and who declares an intention of majoring in a givenarea is advised by an academic advisor in the student's projected major area. If the student has no projected major, he/she is advised in the Dean of Students' Office by a faculty member designated to advise provisional admission students with undeclared majors.

Financial Aid[5]

Loans, scholarships and grants-in-aid are administered through the Office of Student Financial Aid[s]. Application forms are available at the Student Financial Aid Office.

In addition to providing [a-7tmited-number-ef] scholarships and loan funds, UT San Antonio participates in state and federal financial aid programs, such as the College Work-Study Program, the Hinson-Hazlewood Loan Program, the Federally Insured Student Loan Program, the Basic Educational Opportunity Grart Program, the Supplementary Educational Opportunity Grant Program, the Texas Public Educational Grants Program, [the-Staze-Funded-Sehełarshifo-Pregrams] the Work-Study and Internship Program, and the Law Enforcement Education [tean] Program. A limited number of scholarships is available to students with high academic credentials. Non-interest short-term emergency loans of up to $\$ 125$ are available to students. They are repayable during the semester in which they are borrowed.

Scholastic aptitude and financial need are important factors in determining eligibility for most programs.

All undergraduate students needing financial aid who began their college education after April 1, 1973 are strongly encouraged to apply for a Basic Educational Opportunity Grant. A separate application is required for this purpose. BEOG applications are available from the UT San Antonio Student Financial Aid Office or high school counseling offices.

Each financial aid applicant [is-required-te] must:

1. File a Parent's or Student's Financial Statement with the College Scholarship Service or American College Testing Program. [(Fhese ferms-may-be-өbtatned-fpem-yeup-high-seheel-eөunsełep-өp-yeu-may request-өne-frem-the- $\theta$ ffifee- $\theta f-S t u d e n t-F i n a n e q a 子-A t d s \neq 子$ Married or independent students should request forms designed for them.
2. Meet deadlines set by the Office of Student Financial Aid[s] .

Eligible veterans are also encouraged to inquire about [theip] benefits and additional financial aid for which they may be eligible. Veterans who are in attendance on at least a half-time basis, who are seeking a degree, and who are in need of, but have been unable to secure, a Guaranteed Student loan, may apply for a Veteran's Administration educational loan.

Information concerning the National Merit Scholarships, or other scholarships, is available by calling or writing the Office of Student Financial Aid[s].

## Career Planning and Placement Center [Plaeement-Serviees]

The career Planning and Placement Center offers a variety of services and educational programs in response to the career planning and employment placement needs of UT San Antonio students and alumni.

To assist students in making career choices the Center provides information relative to employment opportunities for which students may expect to qualify upon completion of a given degree. Such information includes, when available, a record of the employment of previously enrolled students, their average starting salaries, and the percentages of UT San Antonio graduates obtaining employment in those fields for which their previous courses of study were intended as preparation.

The Center provides the following employment placement services: part-time, summer and vacation employment opportunities; career placement for students and alumni after graduation; and assistance in the selection of graduate school or further training. Students and alumni may develop a placement file and may meet with representatives from business, industry, and government who conduct on-campus interviews for purposes of career employment.

Educational placement programs are also available at the Center and are designed
to assist individuals in the development of effective employment -- search skills, techniques and methods, e.g., correspondence methods, mailing campaigns, resume development, and interviewing skills training. Individuals are seen on a "drop-in" or appointment basis.

Students and alumni are encouraged to use the career, vocational, and educational counsel ing services and the career reference library. It is recommended that students take the aptitude and interest assessment tests and that they participate in the life planning workshops, value clarification labs, and career seminars.

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Teacher Placement Service

The Teacher Placement Service located in the Office of Teacher Certification and Placement assists students from all colleges and divisions within The University of Texas at San Antonio who seek employment in the field of education by facilitating contact and communication between students and employers.

The services of the Teacher Placement Service are available to all presently enrolled students, as well as to alumni of The University of Texas at San Antonio.

## Athletics

Initially [Upen-the-initiał-epentng-ef-UF-San-Anzenie] the athletic program at UT San Antonio consists of general recreational activities and intramural programs. [enty] These [Ałt] recreational and intramural programs depend upon the availability of facilities and staff. Eventually students will be able to participate in handball, track, tennis, basketball and volleyball. [Atse] Playing fields are planned for soccer, touch football, softball, and baseball. As interest among students develops, competitive [iнєpambał]programs will be offered.

## Living Accommodations

The University provides no on-campus housing. Students are responsible for providing their own housing facilities. A housing directory is available to assist students to find living accommodations in the San Antonio community.

## Identification Cards

Student identification cards are mandatory. The card [75-p7astie-eneased-and] is non-transferable. Replacement cost of $\$ 2.00$ is charged for lost or mutilated cards.

## Directory Information

All educational records of students at The University of Texas at San Antonio are maintained in accordance with State and Federal laws.

Pursuant to the Family Educational Rights and Privacy Act, Directory Information at UT San Antonio includes the following:

Student's Name
Current and Permanent Address
Telephone Listing
Date and Place of Birth
Major Field of Study, including concentration
Classification
Schedule of CTasses and Number of Hours Enrolled

Participation in Officially Recognized Activities and Sports
Weight and Height of Members of Athletic Teams
Dates of Attendance
Degrees and Awards Received
Most Recent Previous Educational Agency or Institution Attended
A student's consent is presumed to have been given that all Directory information
as it pertains to him or her is deemed public unless a written request to restrict
the information as confidential is made by the student to the Registrar's Office
on the prescribed form no earlier than the first day of registration and no
later than the l2th class day in a semester or on the 4th class day in a summer
term. This consent or restriction remains in effect for the duration of the
semester or summer term and must be refiled each subseguent semester or term
that the student wishes to restrict the information. In those cases where
a student files a request for restriction of information, such information is
treated as confidential, and, in response to public inquiries, The University
will verify only whether an individual is currently enrolled at The University.
For more specific information concerning confidentiality of student records
or release of information, consult the Student Handbook published by the Office
of the Dean of Students.

Orientation

An orientation program is available to acquaint new students with the purposes and programs of The University, [and] to advise them of [with-the] registration procedures, and to allow for interviews among students, parents, counselors, and faculty members.

## Lost and Found

All personal articles found at The University are [witl-be] placed in the Office of the Dean of Students. Items can be [wifl-be] claimed upon proper identification of ownership.
V.[£Y] ADMISSION REQUIREMENTS

Admission

Admission requirements for undergraduate study at UT San Antonio are designed so
that students admitted will have a high probability of success in undergraduate
academic work. The criteria for the various classifications of admission are set
forth in the following paragraphs.
Admission of First-Time Freshmen_[*]

| High School Rank <br> in Class | Minimum Total <br> SAT Score | Minimum Total <br> ACT Score |
| :--- | :--- | :--- |
| Top 10\% | Score must be sub- | Score must be sub- |
|  | mitted; no minimum <br> score is required | mitted; no minimum <br> score is required |
|  |  |  |
| Top 25\% |  |  |
| (but not top 10\%) | 700 | 15 |
| Second 25\% | 750 | 17 |
| Third 25\% | 800 | 19 |
| Fourth 25\% | 850 | 21 |
| GED Test2[**] | 850 | 21 |

In-state applicants for admission who have graduated from an accredited Texas high school five or more years prior to the date of first enrollment at UT San Antonio and who have never attended a college or university are eligible for admission regardless of high school rank in class and irrespective of SAT or ACT scores, although the submission of SAT or ACT scores is [wiłł-be] required for admission.

Out of state applicants for admission who have graduated from an accredited high school five or more years prior to the date of first enrollment at UT San Antonio and who have never attended a college or university are eligible for admission regardless of high school rank in class and irrespective of SAT or ACT scores, although the submission of SAT or ACT scores is [wiłł-be] required for admission.

[^25]Recommended preparation. High school students who anticipate applying to UT San Antonio are strongly encouraged to include in their preparation for university study work in courses involving language skills; courses in quantification skills; and courses in subjects contributing to a broad academic background, such as English and foreign languages, speech, social sciences, history, mathematics and sciences, and the fine arts. [ $^{[*]}$ The nature and number of high school units ${ }^{4[* *]}$ are suggested as follows:

Subject
English
Mathematics: algebra, geometry
trigonometry, and advanced mathematics

One foreign language 2 or more
Natural science 2 or more
Social science 2 or more

These specific units, although not required for admission, are recommended, since The University expects each applicant to be prepared for academic work at a higher level.
${ }^{3}$ Students enrolling in UT San Antonio courses in which they have prior knowledge are encouraged to earn credit toward graduation through the credit by Examination Program (See the Credit by Examination Section of this catalog.)
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$4\left[{ }^{* *}\right]_{\text {A }}$ unit represents a year of study in one subject at an accredited secondary school.

## Early Admission [Admission-prior-to-compłetion-ef-studies]

[Admiggien-ppiep-te-eempłetien-ef-gtudies:] Applicants for admission as firsttime freshmen, who are attending high school at the time of application for admission and who meet the rank-in-class and SAT or ACT score requirements at the end of their first semester - $^{[*]}$ of the senior year, are [may-be] admitted pending certification of high school graduation. Applicants not meeting these requirements prior to graduation are reconsidered for admission upon submission of final transcripts
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Admission as [Undergradtaze] Transfer Students ${ }^{[* *]}$

Applicants for admission who have earned less than 30 semester hours of acceptable credit from accredited colleges or universities must:

1) Meet the same rank-in-class and [ $t$ ] SAT or rank in class and ACT requirements as first-time freshmen;
2) Have at least a "C" average (2.0 grade-point average on a 4.0 scale) on all academic college or university hours attempted; and
3) Must be in good standing at the last institution attended.

Applicants for admission who have earned 30 or more semester hours of acceptable credit from accredited colleges or universities must:

1) Have at least a "C" average ( 2.0 grade-point average on a 4.0 scale) on all academic college or university hours attempted; and
2) Must be in good standing at the last institution attended.

Applicants for admission as transfer students who are enrolled at another accredited college or university at the time of application for admission and who have at least a "C" average on all attempted college-level work completed [threugh-the next-te-the-łast-term- $\theta$ f-attendanee] to date at other institutions may be admitted pending receipt of final transcripts verifying the cumulative "C" average and good

[^26]standing. For applicants not meeting these requirements determination of eligibility for admission is deferred until all final transcripts are received.

## Admission of International Freshmen Students

All applicants for admission as freshmen who are not citizens of the United States or whose previous education has been outside the United States must:

1. Have credits equivalent to those of students entering from an accredited secondary school in the United States, as determined by the Admissions [Registraris] Office;
2. Have superior grades on work done in secondary school, as determined by the Admissions [Registrarts] Office;
3. Submit scores from the Test of English as a Foreign Language (TOEFL), or successfully complete an intensive course in English from an accredited college or university in the United States. A minimum score of 550 on the TOEFL is required. Subsequent English tests and preparation may be required by a student's advisor if his or her performance in English is unsatisfactory. TOEFL scores are not required for international students from countries where the primary language of instruction is English; nor are TOEFL scores required for non-citizens of the United States graduating from United States high schools although a composite SAT or ACT test score appropriate to rank in class is required.
4. Submit a statement [7etter] guaranteeing the student's ability to pay all expenses while a student at The University, if attendance under the F-1 (student) visa is anticipated. The statement [7etzer] may be sent from a parent or guardian when endorsed by a bank or other reliable institution, or from a United States citizen who will accept responsibility for the student's financial needs.
[5:-Submit-proef-ef-adequate-hospitałizzatien-insuranee-prior-te-registrazien:]

## Admission of International Transfer Students

International students who have attended a college or university in a country other than the United States must:

1. Have qualifications equal to those required for transfer from a college or university in the United States;
2. Satisfy requirements 3 [ 5 ] and 4 [and-5] above for international freshmen students.

To be eligible for admission, international students who have attended another college or university in the United States must:

1. Have completed at least 30 semester hours of credit with a "C" average (2.0 [average] on a 4.0 scale) on all work attempted.
2. Satisfy requirements 3 [5] and 4 [and-5] above for international freshmen students.

Provisional Admission Program for Freshmen

Any Texas resident applying as a freshman who has not attended a college or university and who is a graduate of an accredited high school but who does not qualify for admission due to an inadequate SAT or ACT score or deficiencies in high school preparation may be admitted on a provisional basis in the spring semester or in the first summer term (for both summer sessions), during which time the student is [wiłf be] given an opportunity to demonstrate that he or she can perform college-level work and that he or she can reasonably be expected to make progress toward a degree. Such a student is [wiłł-be] required to take courses selected from English, mathematics, natural science, and language and may not take courses in other disciplines until the provisional status is removed. The student must demonstrate ability to perform college work by obtaining an overall "C" average (2.0 on a 4.0 scale) in 12 hours of work from these fields. Normally a student is [wifl-be] expected to complete these 12 hours of work in the [a] summer sessions [fboth-sumfrip-tepms)] or during the spring semester. Upon completion of 12 hours of work from these fields a student is [wifl-be] admitted as a regular university student in subsequent semesters. If a student enrolls for fewer than 12 hours and does not earn a 2.0 grade-point average, but earns at least a 1.5 grade-point average, the student may enroll for the next term. After 12 hours have been completed, the required cumulative grade-point average of 2.0 must have been reached, or the student is not allowed to continue in the following semester or summer term. [Students-whe


 meeting-these-requirements-wiłł-net-be-ałfowed-te-centintue-in-the-fөł子owing-semester өr-sumfiner-sessien:]

Admission as Special [Fransient] Students

An applicant who wishes to enroll in courses at the undergraduate level only without pursuing [A-gtudent-whe-fntends-te-registep-fer-ecurses-7A-өAe-term
 of Texas at San Antonio should apply for admission as a special [transient] student. A special student may register for any undergraduate course for which he or she has the prerequisites and in which space is avallable.

The reguirements for admission as a special student are the same as those for degree-seeking students (see requirements for admission as First-Time Freshmen and Transfer Students). To be admitted later as a regular student, the special
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 admittzed-as-a-regułar-student-the-tpanstent-student] must apply for regular degree-seeking [student] status through the Admissions Office. [and-meet-Fhe Universtもy!s-admissien-requirrementsc]

Admission of High School Students

Selected high school seniors may be admitted (as special students) in order to enroll in university courses while completing their high school studies. Such students must meet the admission requirements for first-time freshmen, except for high school graduation, must be recommended for the program of study by the high school counselor, and must be approved for enrollment by the Dean(s) of the College(s) in which they anticipate taking courses. High school students admitted as special students are eligible to register for any undergraduate course for which they have the prerequisites and in which space is available.

## Temporary Admission

Applicants whose previous preparation cannot be evaluated prior to registration may be granted temporary admission．Such admission may be granted by the Regis－ trar for one term only．If the student fails to be granted admission as a degree seeking or special student by the end of the term under the provisions set forth above，The University may disallow subsequent registration．Only in unusual circumstances is temporary admission granted for a first or second term．If granted for a second term，it requires approval of the Dean of the College in which the student anticipates taking courses．

Application Dates ${ }^{6}$［ ${ }^{*}$ ］
［Students－applying－fep－admissien－te－Fhe－甘nivepsity－өf－Ғexas－at－San－Ahteaie－may 2pply－fөp－admíssïөR－aee日pdign－te－the－fełtowing－sehedułet］
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| :---: | :---: | :---: |
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| Sppings－7976 | August－7－－7975 | Вес епвер－75－7975 |
| Sumater－İ－7976 | dаннару－75；－7976 | May－7s－7976 |
| Summer－İ5－7976 | dantapy－765－7976 | dune－7\％－7976］ |

Applications may be submitted as early as nine months before the beginning of the desired term of enrollment．Completed applications and all required supporting

[^27]
#### Abstract

documents must be on file in the Admissions Office at least 30 days before registration for the term in which studies are to begin. Failure to comply with the application dates may cause deferment of admission until a subsequent term.


## Admission Procedures

The procedures to be followed in applying for admission are explained on the Application for Admission form. Each applicant for admission is individually responsible for ensuring that all required support documents (e.g., application form, test results, and required transcripts [immunization-reeerd;-ete:] are on file in the Admissions Office, since admission is not granted until the applicant's file is complete.

Students who apply for admission to The University of Texas at San Antonio for any term and do not register, must re-apply for admission if they wish to enroll at a later date. A subsequent application for admission must be in accordance with current admission requirements. New transcripts, test scores, and all other supporting documents are required since files for admitted students who do not register are not retained.

Re-Admission Policies and Procedures

Students [;other-than-transient-students;] who have previously been admitted and registered at The University of Texas at San Antonio [as-resident-students] and who were enrolled within 12 months prior to the beginning of any semester or summer session and who are scholastically eligible to return may re-enroll without applying for re-admission. Former students who have not been enrolled within 12 months prior to the anticipated date of return must submit an application for re-admission to the Admissions Office. [and-fiłe-a-residenee-questionnaire:--Fhe applieatien-form-and-residenee-questiennaire-are-avaiłable-in-the-Admissions $\theta$ ffiee:]

All former students returning to UT San Antonio who have attended other institutions of higher education since they were last enrolled must submit an official transcript from each such institution. Eligibility for re-admission for any
former student [wilł] depends on the student's academic status at the conclusion of his/her [the-studentis] last UT San Antonio enrollment and on any subsequent college or university work attempted.

Admission to Teacher Certification Programs

The University of Texas at San Antonio has been approved [antieipates-apprevał] by the Texas Education Agency to recommend students for teacher certification in various baccalaureate degree areas. 7 [ $\mathrm{E}^{\mathrm{c}}$ ] Students who wish to prepare for teaching must apply for admission to The University through the Admissions Office and for admission to a certificate program through the Office of Teacher Certification and Placement. The application for admission to a certificate program should be submitted at the time the student attains upper-division standing.

## Vi. EZ-] GENERAL ACADEMIC REGULATIONS ${ }^{1}$

## Registration

All students who attend classes at The University of Texas at San Antonio must be registered officially or must be approved auditors. [日freetiens-fer-the] Registration Instructions are included in the Schedule of Classes [preeedures-are] issued each term. Questions regarding registration should be directed to the Registrar's Office.

The University does not guarantee the availability of particular courses or sections, [thepefores-stinee] and admission to classes is [wifl-be] permitted only until the maximum number of students allowable in any section has been reached. The University reserves the right to cancel any course or section in which the number of registrants does not warrant its continuation.

## Late Registration

Late registration permits students to register during the first week of classes in a regular semester or during the first two class days of a summer term. Students who register late are [will-be] charged an additional $\$ 5.00$ the first day of late registration and an additional $\$ 2.50$ per day thereafter to a maximum of $\$ 15.00$ for any one term. This fee is non-refundable. Instructions for late registration are available in the Registrar's Office. Students are [will] not [be] permitted to register after the close of late registration.
[Fhese] Students who register late are responsible for completing any work missed in the courses for which they enrolled during the time the course was in session prior to their being registered. It may be necessary for late registrants to select courses in which to enroll from a reduced schedule since many courses will have been closed at their capacity.

[^28]Adding [and-Bropping] Courses

After registration, but during the first week of classes in any semester, or the fiest two class days in any summer term, a student may add a course only with the approval of the course instructor and the student's Advisor. 2 After the first week of classes and through the twelfth class day of any semester, or on the third or fourth class day of any summer term, the additional approval of the Dean of the College in which the course is offered is required. ${ }^{3}$ After the twelfth class day of any semester or after the fourth class day of any summer term, students may not add a course except for extremely rare and extenuating circumstances as approved by the Vice President for Academic Affairs. The University Calendar indicates the deadline dates for adding courses.

## Dropping Courese

During the first four weeks [week] of classes in a regular semester or during the first eight calendar days in a summer session, a student may [add-er] drop courses without a grade penalty. [in-the-Registrapls- $\theta$ ffifee.] The student is responsible for obtaining the instructor's approval and filing the change with the Registrar's Office so that the action [wifl] becomes official. Courses dropped during this period do [wilł] not appear on the student's academic record. A grade of "F," however, is [wil7-be] entered on the student's academic record if he/she registers for a course and discontinues attendance without filing official notification with the Registrar.

If a student finds it necessary to drop a course after the first four weeks of classes in a regular semester or after the eighth [seeend] calendar day in a summer session, it is his/her responsibility to initiate and complete procedures

[^29]for obtaining an approved withdrawal from the course. The forms for this purpose are available in the Registrar's Office and require the approval of the instructor. In order for the action to be official, the student must file the approved form with the Registrar's Office. A student who officially drops a course after the first four weeks of classes in a regular semester or after the eighth [seeand] calendar day in a summer session is [wif7-be] assigned a grade of "W" if he/she is passing the course at the time of withdrawal or a grade of "F" if he/she is failing the course at the time of withdrawal. A student who drops a course without filing the required form with the Registrar's Office is [wifl-be] assigned a grade of "F" in the course. Students may not drop [withdpaw-fpem-a] courses later than four [three] weeks prior to the beginning of final examinations for the semester and not later than eight days [Ewe-weeks] prior to the beginning of final examinations for a summer term.

The University Calendar indicates the deadline dates for [adding-and] dropping courses each term.

Withdrawal Procedures

A student who finds it necessary to withdraw from The University (i.e., drop all courses for which he/she is enrolled) may obtain the form[s] for this purpose from the Registrar's Office. After completing the required form[s], the student must file it [the-Reeessary-materiał] with the Registrar's Office in order to withdraw officially. Students may not withdraw from The University [after] later than four weeks prior to the beginning of final examinations for the semester and not later than eight days prior to the beginning of final examinations for a summer term. [ $\ddagger \ddagger$ наł-exam\&natiens- $\ddagger \theta$-the-term-have-begun-] Students who officially withdraw after the first four weeks [week] of classes in a regular semester or after the eighth [seeend] calendar day of a summer session will receive a grade of "W" for each class they are passing at the time and a grade of "F" for each class in which they are not passing at the time of withdrawal. Students who withdraw from all classes are subject at the close of the term to academic probation and dismissal regulations. Students withdrawing
should refer to the regulations on refunds of tuition and fees.

## Auditing of Courses

UT San Antonio students and non-students who wish to audit a course may do so with the approval of the instructor and the Dean of the College in which the course is offered, providing there is space in the classroom after all registered students have been accommodated. A course must achieve its minimum size without auditors. Auditing entitles a student to listen and observe. Participation of an auditor in class is [w7l7-be] at the discretion of the instructor. No UT San Antonio credit is granted for courses that are audited.

All auditors must submit the Request for Audit Form to the Registrar. A UT San Antonio student pays an auditing fee of $\$ 5.00$ per course and auditors who are not registered UT San Antonio students must pay an auditing fee of $\$ 25.00$ [ $\$ 7 \theta-\theta \theta$ ] per course. Non-student auditors who wish library privileges may receive them by paying a non-student library deposit (Limited Borrower's Deposit) of $\$ 15.00$ at the
 eharged-te-students-Whe-are-registered-at-UF-San-Antenies] Persons over 65 are permitted to audit without paying an auditing fee, if space is available.

Permission to audit may be obtained and fees paid only during the late registration period. No official record is made [An-audizer-witl-have-ne-өfғfeq̆ał-peeөpd made] of [his] enrollment in classes on an audit basis.

Verification of Enrollment

Following the add/drop period of each semester or summer session, a verification report is sent to each student indicating the schedule of classes in which he/she is officially enrolled. Any discrepancies between the courses shown on the notice and the courses the student is attending should be resolved immediately by the student in person with the Registrar's Office. [immediateły]

Maintaining Registration

Degree candidates are expected to maintain registration until all degree requirements are satisfied. By failing to register for at least one term within a 12month period, a student breaks his/her registration and must be readmitted. $\underline{A}$ "re- admitted student" is required to satisfy the curriculum requirements existing at the time of re-enrollment. Student must be registered during any semester or summer term that they are taking courses or required examinations.

Change of Major or Degree
A student who wishes to change his/her major or degree objective must obtain the required forms at [钿] the Registrar's Office. The change is not official until the form has been completed and filed with the Registrar's Office.

## [Geprespendenee-and-Exもens;er-Geupses]




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 eөupses:--Exeeptiens-te-this-pułe-must-be-approved-by-the-student-s-Advisep-and



Student Classification System
Upper-division (junior and senior): A student who has earned 60 or more semester hours of credit.

Lower-division (freshman and sophomore): a student who has earned less than 60 semester hours of credit.

Special [Fpansteat]: A student who registers for undergraduate courses [in-the sumper-sessłen-enły-ep-duping-ene-semester-enły] and who is not seeking[wopking tewaplł a degree at UT San Antonio.

Definition of a Full-Time and A Part-Time Undergraduate Student

A full-time undergraduate student is one enrolled in twelve or more semester hours of courses during a regular semester or in six or more hours of courses during a summer term [sessien].

## Course Numbering System

All courses are designated by four-digit numbers following a two-or three-letter abbreviation of the subject field. The first digit [namber] indicates the level of the course. All courses with a first digit [number] of 1 or 2 are lowerdivision (freshman and sophomore) courses, and all courses with a first digit [abmber] of 3 or 4 are upper-division (junior or senior) courses. All course numbers starting with 5 or 6 are graduate courses.

The second and third numbers are used within the Colleges by each Division to distinguish individual courses.

The fourth digit [finał-number] indicates the semester hour value of the course.

## Grading System

Hours attempted. The number of hours attempted is the total number of hours for which a student has enrolled and received grades of "A," "B," "C," "D," or "F" (see below), except as provided for repeated courses.

Hours earned. The hours earned by a student are the number of semester hours of credit earned in which grades of "A," "B," "C," [ $\theta \mathrm{P}]$ " $D$, " or "CR" have been received (see below).

Grade-Point Average. The grade-point average (GPA) is determined by dividing the number of grade points earned at UT San Antonio by the number of semester hours attempted at UT San Antonio.

Credits and grades for work completed at other institutions or credits earned by
examinations [fother-than-by-ehalfengang-UF-San-Antenie-e日upsest] are not included in the UT San Antonio grade-point average.

Grade Symbols and grade points

| Symbols | Grade Points |
| :---: | :---: |
| A | 4 |
| B | 3 |
| C | 2 |
| D | 1 |
| F | 0 |
| CR | 0 |
| EP | 0 |
| IN | 0 |
| NR | 0 |
|  | 0 |

Explanation of Grade Symbols
"A" through "F." $A=$ Outstanding; $B=$ Above Average; $C=$ Average; $D=$ Below Average but passing; $F=$ Failure.
"CR" or "Credit." The symbol "CR" is used to indicate that satisfactory performance has been demonstrated by examination (See Credit by Examination section).
"EP" or "Postponement of Final Examination." The symbol "EP" is used to indicate that a student has been permitted to postpone a final examination. See "Postponement of Final Examination Provisions," in this catalog.
"IN" or "Incomplete." The grade of "Incomplete" ("IN"), subject to the regulations of this section, may be assigned a student at the discretion of the instructor. The purpose of the "Incomplete" grade is to allow a student to complete a course without repetition of the regular work of a course. It may not be assigned when a definite grade can be given for the work done. The "Incomplete" grade is [wiff-be] given to indicate that some part of the work of a student in the course has, for good reason, not been completed, while the rest has been satisfactorily completed. The student must have been in attendance at least threefourths of the term.

Incomplete work must be made up within one year [befere-the-eempletien] of the time [studentss-mext-resident-enre77ment-of] that the "Incomplete" grade is received and before the student's graduation. [Wh;ehevep-4s-eap7iep;-ppevided
 Peeetred-untif-the-wopk-4s-eompletedr] If the work is not completed within this time, the "Incomplete" remains [wifl-pemain] on the student's record, and credit may be earned only when the student re-enrolls in the course and completes the entire course satisfactorily. Whenever a grade of "Incomplete" is assigned, the instructor is required to file a "Requirements for Removal of Incomplete" report with the Registrar's Office. [Bean-өf-the-Geł子ege-in-whteh-the-eeurse-ts-effereds]
"NR" or "No Report." The grade "No Report" ("NR") may be assigned a student only by the Registrar. [and-enły-7n-eases-in-whteh-a-grade-kas-A日t-been-pepopted by-an-instrueterr] This symbol is assigned only when in unusual circumstances it is not possible to obtain the student's proper grade by the deadife necessary for processing grades at the close of the term and is [wity-be] replaced with the official grade as soon as possible.

## Reporting of Grades

Grades are reported by course instructors by term and are due in the Registrar's Office 48 hours following the final examination. Final grades cannot be withheld nor can reporting of them be deferred. (Absence from a final examination should be reported as "EP," if a postponed examination has been authorized in accordance with the "Postponement of Final Examination Procedures " set forth in this catalog.) Additional work performed by a student may not be used to raise a grade that has been reported to the Registrar's Office.

Grade Reports
The Registrar's Office mails final grades as soon as they are compiled after the close of each semester and the summer session. The grade report reflects the grade that appears on the instructor's final grade sheet; subsequent changes are not included. Grades are malled to the address on file in the Registrar's Office. Only one grade report is mailed; additional copies are not available.

Change of Grades
Grade changes from "Incomplete" (IN) to a letter grade must be made within the time 1 imit provisions explained under "Explanation of Grade Symbols" [Grades-ef Inemplete] in this catalog. A grade of "Incomplete" may be changed by the instructor within the time limits by completing a Removal of Incomplete form and filing it with the Registrar's Office.

Grade changes from "Postponement of Final Examination" ("EP") to a letter grade should be made as soon as possible after the student has taken the authorized postponed final examination. As explained under "Postponement of Final Examination Procedures" in this catalog, if a postponed final examination is not taken before the end of the fall or spring term following the one for which it was approved, the grade in the course is changed by the Registrar's Office to "F." Prior to that time the instructor may change the "EP" to another letter grade by completing a Change of Grade Form and filing it with the Registrar's Office.

Any other change of grade must be initiated by the instructor on the required form available in the Registrar's Office and in the offices of the College Deans. All requests for a change of grade should be accompanied by a statement explaining the requested change. [and-fiłed-with-the-Registrar.] It is the policy to change a grade (other than "Incomplete") only in the case of error. Additional work performed by a student may not be used to raise a grade that has been reported to the Registrar's Office. Requests for a change of grade require the approval of the Vice President for Academic Affairs before the Registrar will make the change on the student's record.

No change of grade will be considered after six months from the date the original grade was assigned nor will a grade change be made after a student's graduation.

Class Participation Policy
Regular attendance at and participation in all meetings of courses for which a student is registered is expected. It is the instructor's responsibility to
set and to communicate to students the participation requirements for each course. The degree to which classroom participation is required and whether or not work missed by a student during his/her absence may be made up is at the discretion of the instructor.

When, in the judgment of the instructor, a student has been absent excessively, the instructor may report the absences to the Dean of the College in which the course is offered and recommend that the student be dropped from the course with a grade of "F." If the Dean approves the recommendation, he advises the Registrar, who in turn advises the instructor and student of the action taken.

A student who enrolls for a course and then does not attend is considered absent from class until he/she officially drops the course or until he/she has accumulated an excessive number of absences and is dropped from the class with a grade of "F."

## Repeating Courses

Only those courses in the catalog in which the course description specifically indicates "may be repeated for credit" may be repeated with both the units and grade points earned being counted. An undergraduate student may, however, repeat a course in which he/she received a grade of "D" or "F" in order to improve his/her grade[feint-avepage] but cannot receive credit for the course more than once.

If a student re-enrolls in a course in which a "D" has been received, only the highest grade earned is used in calculating the grade-point average. If another "D" or a lower grade is received the second time, the repeated course grade is not used in computing the cumulative UT San Antonio grade-point average, and the course is marked as "Duplication" on the student's official records.





#### Abstract

 өfffeqał-pee

Re-enrollment in a course in which an "F" has been received [wiłf] concels the credit hours charged against the student's grades if a higher grade is earned. If a second "F" is received, it is [wił7-be] not [be] charged against the student's [ree日rd] cumulative UT San Antonio grade-point average and is marked as "Duplication" on the student's official record.


A student may not repeat a course by correspondence or extension study for the purpose of raising his/her grade-point average.

Only undergraduate students may repeat courses for the purpose of raising the grade-point average, as described above.

Postponement of Final Examination Procedures

A student who is compelled to be absent from a final examination because of illness or other imperative reason should, either in person or through a friend, petition his/her academic Dean for permission to postpone the examination. This request, which requires prior approval by the instructor, should be made to the Dean as soon as the student knows he/she will be compelled to be absent.

The instructor records the symbol "EP" on the final grade report for a student who has been permitted to postpone an examination.

The examination should be given as soon as possible (preferably during the same examination period), but not later than thirty days after the original examination period. If for good reason the student cannot take the examination within the thirty-day period, the examination may be scheduled at any time convenient to the instructor, except that in no case will it be given later than the end of the fall or spring term following the one for which the postponed examination was approved. If a postponed examination is not taken before the end of the next fall or spring term, the grade in the course will be changed to "F."

## [Mfd-Ferm-Reports


#### Abstract

At-mid-term-each-semester-fnot-sumer-termst-instpuezors-are-asked-to-report to-the-Bean-ef-the-6ołłege-4n-which-eoupses-are-effered-any-students-whe-at-that   Mot-satisfaeteryr--Students-reeetring-sueh-notiees-are-eneoupaged-te-diseuss-their pepformanee-wtth-the-4nstpuetors-\$n-the-respeetfve-ełassesr]


 puppese-өf-the-repert-4s-te-advise-the-student-ef-hts-status-at-that-timex]

Honor Roll and Dean's List
Undergraduate students who achieve scholastic distinction in a semester, as evidenced by a grade-point average of 3.50 or higher in at least 12 hours of credit, excluding grades of "CR," and receive no grades of "D," "F," "EP," or "IN" are included on the Honor Roll. Undergraduate students who complete at least 12 semester hours, excluding grades of "CR2" and receive no grades of "D," "F," "EP," or "IN" and who achieve a grade-point average of 3.75 or higher for any semester are included on the Dean's List. Neither the Honor Roll nor the Dean's List are prepared for the summer term. To determine eligibility for graduation with honors, see Graduation with Honors.

## [Min4man-Sehełastie-Requirements

 than-60-semester-heups-ef-eredit-earnedt-must-maintain-a-grade-peint-average
 attempted-at-Uf-San-Antenie:--An-upper-divisten-student-f60-өr-mere-semester



Academic Standing [Probation-and-Aeademte-Btsmissaz]
A student's academic standing is defined as: good standing, provisional status, academic probation, academic dismissal. Good standing is the absence of any of the other contingencies. Provisional status is the academic standing of a student admitted under the Provisional Admission Program until regular status is earned or the student is dismissed for scholastic deficiency.

Acadenic probation describes the standing of a student who falls in one of the following categories: 1) a student who earns a grade-point average of less than 1.50 in any term; 2) a lower-division student (less than 60 semester hours of credit earned) who is deficient from a " C " (2.0) average by 10 or more grade points in all work attempted at UT San Antonio; 3) an upper-division student (60 or more semester hours of credit earned) who fails to achieve and maintain a cumulative grade-point average of "C" (2.0) in all work attempted at UT San Antonio; 4) a student who has been reinstated following academic dismissal. Students on academic probation are encouraged to discuss their status with their academic advisors, with an admissions counselor, and/or with a member of the staff of The University's Counseling Center.

Academic dismissal occurs 1) when an undergraduate student enrolls for more than three semester hours of credit and earns a grade-point average of less than 1.00 for that term and 2) when an undergraduate student who is on academic probation at the beginning of the term has a cumulative grade-point average deficiency in UT San Antonio courses at the close of that term that would again place the student on probation, unless the term grade-point average is above 2.50.

Students admitted under the Provisional Admission Program must remain in good standing in order to continue into subsequent terms.
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$7_{r}$-A-student-fother-than-a-Prevtstenat-Admfssien-Pregram-studentł-who
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Students－adm4tzed－under－the－Provisiona7－Admissien－Program－must－meet－the－require－ ment－indieated－in－order－te－centinue－inte－subsequent－terms．子
Scholastic Dishonesty
The integrity of a university degree depends on the integrity of the work done for that degree by each student．The University expects that a student should maintain a high standard of individual honor in his／her scholastic work．
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"Scholastic dishonesty " includes, but is not limited to, cheating on a test or other class work, plagiarism (the appropriation of another's work and the unacknowledged incorporation of that work in one's own written work offered for credit), and collusion (the authorized collaboration with another person in preparing course work offered for credit.)

Should a student be accused of scholastic dishonesty, the Dean of the College in which the student is enrolled may initiate disciplinary proceedings.

Cancellation of Enrollment

Any student who fails to fulfill admission or registration requirements or who otherwise fails to adhere to academic regulations is subject to having
 for that term [being] cancelled. [Reapplieatien-fop-admissientfor re-admission to a subsequent term may be considered, provided the deficiency which resulted in the cancellation has been removed.

## Transcripts

Official transcripts of all course work taken at The University of Texas at San Antonio are available in the Registrar's Office. Requests for transcripts must be in writing and must bear the signature of the student whose record is requested. A fee of $\$ 1.00$ is [wiłf-be] charged for each copy of the transcripts and must be paid in advance. Transcripts from other institutions submitted to UT San Antonio [wifl] become the property of The University and are [wiff] not [be] reproduced and/or mailed to other institutions, agencies, or individuals. Upon request, work in progress, (i.e., a listing of classes in which the student is currently enrolled) is [wił子-be] included with the transcript without additional charge.

Transcript service is withheld from students who have a financial obligation or other commitment outstanding to The University [wił子-have-tpansepipt-sepriee witakełd] until the obligation is cleared [is-paid-in-fuł7].

UT San Antonio transcripts and other information from a student's academic records are released by the Registrar only upon written request from the student or other person authorized by law and when payment of the appropriate fee is made. Exceptions may be made in response to a subpoena or court order and as provided in the policy on releasing directory information set forth in this catalog.

All official certifications with regard to the academic performance of a student or former student of The University of Texas at San Antonio are made by the Registrar's Office.

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Z:-If-pespense-te-a-eeupt-өpder.
 ageney-нрөи-request:]

Change of Name [ $\theta$-Address]
A student's name on official records at UT San Antonio is the name under which the student applied for admission, unless a Change of Name Form has been processed through the Registrar's Office. Name changes are made only when appropriate legal documentation accompanies the request, except that upon marriage a student may declare the newly taken name.
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VII. [HF:] BACHELOR'S DEGREE REGULATIONS

Bachelor's Degree Requirements
In order to receive a bachelor's degree from UT San Antonio, a student must comply with the following minimum requirements:1

1. Complete a minimum of 120 semester hours of credit, of which at least 39 must be in upper-division work.
2. Complete the university-wide general education requirements. (See immedfately below.)
3. Complete the major and support requirements and the free elective requirements ${ }^{2}$ for the desired degree [a-major]. (See Section IX [ $[\ddagger \neq]$ of catalog.
4. Meet the residence requirements (See below.)
5. Achieve an overall 2.0 grade-point average in all work attempted at UT San Antonio and a 2.0 grade-point average in all work included in the major.
6. Be in good academic standing at UT San Antonio.

[^30][University-Wide] General Education Requirements[ t ]

All candidates for a bachelor's degree at The University of Texas at San Antonio must satisfy the following university-wide general education requirements. ${ }^{3}$ [Fhe speeific-degree-requirements-for-majors-as-established-by-the-individuat-Eolfeges and-Bivisions-are-set-out-under-the-degree-ptans-deseribed-in-Seetion- $\forall$-if-of-this eatatog:]

1. Complete a minimum of 35 semester hours as follows:
A. Nine semester hours in English and humanities (ENG 1013 and ENG 1023 are required of all students, with the three remaining hours to be selected from ENG 1033 or 1043). [or-7 853 ]
B. Six semester hours in American history or three hours each in Texas and American history. $\left.{ }^{4}{ }^{* \pm}\right]$ (See the Appendix for list of eligible courses.)
C. Six semester hours in U.S. and Texas government. $\left.]^{[ \pm \pm}\right]$(See the Appendix for list of eligible courses.)
D. Nine semester hours in a single foreign language. 6
E. Four semester hours in mathematics. [fthree-hours-of-whieh-must-be above-MAF-7877t-]
F. One semester hour of library study, LIB 1001. (Optional for students entering with 60 hours or more.)

3 For certain degrees offered at UT San Antonio, general education requirements are restricted. Students should be alert to this possibility and should consult the specific degree requirements established by the individual colleges and Divisions and set out under the degree plans described in Section IX of this catalog.
[太Because-in-7975-76-日F-San-Antonie-wifl-offer-on7y-upper-divisien-under graduate-programs;-the-generat-education-requirements-wit7-be-medified-as-neeessary-]

4[ $\pm \pm$ A maximum of three semester hours in history [and-three-semester-hours in-govepament-or-pełiticał-seience] can be earned by examination.

5 [t*]A maximum of three semester hours [in-higtery-and-three-semester-hours] in government or political science can be earned by examination.

6 Undergraduate students from non-English speaking countries are not required to complete the foreign language requirement for a baccalaureate degree at UT San Antonio. Students from such countries are required, instead, to complete an additional nine hours of free electives.
2. Complete an additional 15 semester hours of required electives as follows:
A. Students majoring in art and design, English, foreign language, humanities, or music [the-humanitites;-inefuding-English;-and-fopeign Fangtages;- $\boldsymbol{\theta}^{\mu}$-the-fine-apts] must select at least six hours from Group B, six hours from Group C, and three additional hours from either Group B or C below.
B. Students majoring in [seeqał-seienees-er] business, [ $\theta$ ] criminal justice, or any of the social sciences must select at least six hours from Group A (three of which should be in the fine arts), [ $\theta$ - music] six hours from Group B, and three additional hours from either Group $A$ or $B$ below.
C. Students majoring in the sciences, mathematics, or allied health professions must select at least six hours from Group A (three of which should be in the fine arts), [ep-musie] six hours from Group C, and three additional hours from Group $A$ or $C$ below.
D. Students majoring in Early Childhood and Elementary Education or in Health and Physical Education must select at least six hours from each of two groups ( $A, B$, or $C$, excluding education) and an additional three hours from any of Groups $A, B$, or $C$ (excluding education) below. Three hours should be in art or music.

| Group A | Group B | Group C |
| :---: | :---: | :---: |
| English | [Biełegieal-Seienees] | Social Sciences |
| Foreign Languages | Applied, Biological, Physical, | [InETudiag-Histepy] |
| [and-上inguisties] | and Earth Sciences | Business |
| Classics | (including Astronomy) | Education ${ }^{\text {[ }}$ [] |
| Communications | Mathematics, Computer Science | BiculturaT-Bilingual |
| Comparative Literature | and Systems Design | Studies |
| Humanities |  | English as a Second |
| Linguistics |  | Language |
| Philosophy |  | Environmental Manage- |
| Art |  | ment |
| Art History and Criticism |  | Criminal Justice |
| Music |  |  |

[ $\left.{ }^{*}\right]_{\text {Physical }}$ Activities courses do not apply to this requirement, nor may education electives be applied to this requirement. [taken.]

## Minimum Residence Requirements

The following minimum residence requirements at UT San Antonio are in accordance with requirements [afe] established for all institutions in The University of Texas System.

1. A minimum of 30 semester hours of credit in UT San Antonio courses must be completed [in-fesidenєe] before a degree can be conferred.
2. Twenty-four of the last thirty semester hours must be completed in residence, with the exception that among the UT System components, a student may, with the approval of the appropriate Dean, transfer additional course work to his/her program at the [his] degree-granting institution.
3. Of the 39 upper-division hours required in all degree programs at UT San Antonio, 18 of these must be earned in [taken-at] UT San Antonio courses.
4. At least six hours of upper-division course work in the major must be completed in residence. Additional hours in the major sequence may be required under [by] individual UT San Antonio degree plans, as set forth in Section IX of this catalog. [seheets-өf-e日łleges]

## Transfer of Credit

Undergraduate transfer of credit policies of The University of Texas at San Antonio are designed to reduce the difficulties of ten experienced by students seeking to transfer credit from one institution to another. To prevent unnecessary loss of time and credit, prospective transfer students are encouraged to inform themselves as early as possible of UT San Antonio's admission policies (see Section V) and degree requirements in their area of interest (see Section IX [ $\forall \mp \ddagger]$ ). Students attending community colleges should be guided as well by the Core Curricula designed and adopted by the Coordinating Board, Texas College and University System to simplify the transfer of credit, copies of which are available through most community college counselors. Questions regarding the transferability of courses should be addressed to the UT San Antonio Admissions Office.

The Coordinating Board, Texas College and University System has approved core curricula in the following areas: Arts and Sciences (including Mathematics and Natural Sciences), Business Administration, Engineering, Art, and Criminal Justice.

Although the courses taken in these core curricula at various institutions may not be precisely equivalent to courses in the UT San Antonio Undergraduate Catalog, students who have successfully completed these core curricula at other institutions are [włl7-be] given full credit toward the appropriate degree at UT San Antonio.

Undergraduate [students-whe-eemplete] college credits completed at other institutions are [witi-have-these-eredits] evaluated for transfer to UT San Antonio by the Director of Admissions and Registrar on the basis of UT San Antonio equivalency tables and according to the following guidelines:

1. All work transferred must be from a college or university accredited by a regional accrediting association (credits completed at foreign institutions are [wil7-be] evaluated on an individual basis).
2. Any academic course from an accredited college or university in which a passing grade has been earned is [will-be] accepted for transfer credit if it meets all other criteria of this section. Only those hours which apply toward a specific baccalaureate degree program [ $w \neq 7 \downarrow$ ] count toward minimum degree requirements [graduation].
3. The applicability of particular courses completed at other institutions toward specific course requirements for a baccalaureate degree at UT San Antonio depends upon equivalency of such courses to courses offered by UT San Antonio. Other academic courses are [w+77-be] transferred as electives; credit for these courses [whieh-wifl-be-reeopded-en-the-sta-dent's-tpanseript-wit7] count toward minimum degree requirements [graduation] only if they satisfy requirements of the student's degree program. Credit is not [wflt-net-be] given for duplication or repetition of courses.
4. When a course has been repeated for credit, the highest grade earned is [wifl-be] used in the acceptance of credit.
5. Credits for courses such as remedial courses, vocational-technical courses, $\underline{8}[\star]$ orientation, life experience, high school level courses, or mathematics.
6. Credit by Examination awarded at another accredited college or university is transferred as though the student had completed the course(s) or general subject area(s) at the other institution and is evaluated the same as any other course(s) at that institution. Such credit is subject to all other provisions of this section.
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7. Credit earned through accredited colleges and universities for college level academic courses by extension or correspondence (including USAFI courses) is [wifl-be] evaluated and accepted for transfer if equivalent to UT San Antonio courses, [and] if applicable to the student's degree program, and if all other transfer provisions of this section are met. However, the maximum credit accepted through a combination of extension and correspondence courses is 30 hours (18-hour maximum by correspondence, including USAFI). No more than 6 hours of correspondence credit may be applied to the major.
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8. [9-] Transfer credit for junior college work may not exceed 66 semester hours. Students who have completed more acceptable semester hours than are allowed for transfer may [with-the-apppova子-ef-the-studehtis-Advisef-and
[^31]Bean] apply completed, transferable courses to specific course requirements and thereby not have to repeat the course. The semester hours for those additional courses may not be applied toward the hour requirements for a baccalaureate degree.

No upper-division credit may be earned at a junior college. All course requirements at UT San Antonio which are designated as upper division may be transferred to UT San Antonio only from senior-level institutions. For credit to be transferred as upper-division course, the institution where credit was earned must be an accredited senior level institution and the course must be described in the institution's catalog as being of upper-division level.
9. [ $\ddagger \theta_{-}$JTransfer credit for military service training school courses is not [wf77-net-be] granted by UT San Antonio. A student having taken such courses may challenge by examination those UT San Antonio courses which appear equivalent to those already completed. (See the paragraph on UT San Antonio Challenge [4ng-ef-Geurses-by] Examinations in the Credit by Examination section of this catalog.) Credit for ROTC or military science, when awarded by another accredited college or university, will be accepted by UT San Antonio as free elective credit within the limitations of the student's degree program. 9 [See-the-R $\theta$ FE-broehupe-for

10. [7tr]Credits earned in partially accredited colleges and universities may [witi-be] be considered for transfer to UT San Antonio on an individual basis and as to applicability to the student's degree program. While The University reserves the right to refuse recognition of credit from a non-accredited institution, credit may be accepted in transfer if it is validated by 30 semester hours of course work in residence at UT San Antonio, with a grade-point average of 2.0 or higher in that work.
${ }^{9}$ See the section on Bachelor's Degree Requirements in part VII of the catalog.

An official Evaluation of Transfer Credit is [will-be] supplied to each new student as soon as possible following admission. This evaluation [wifl] shows the equivalency of courses completed elsewhere to courses at UT San Antonio and their applicability to the student's proposed baccalaureate degree at UT San Antonio.

Students who do not receive transfer credit for specific courses should review the policies for credit by examination.

## Correspondence and Extension Courses

The University of Texas at San Antonio does not offer correspondence or extension courses at this time. For UT San Antonio policies on transfer and credit limitations on such courses, see the section on Transfer of Credit. Also see the section on Residence Requirements.

While enrolled at UT San Antonio, students normally are not permitted to transfer to UT San Antonio credit earned through correspondence or extension courses. Exceptions to this rule must be approved by the student's Advisor and Dean, and such courses can be taken only in the event that the student about to graduate cannot obtain the course in residence.

## Credit by Examination

 A student at The University of Texas at San Antonio may normally satisfy general education and specific degree requirements through credit by examination. ${ }^{10}$ [ $\left.{ }^{[ }\right]$ Except for one type of examination, credit earned by this means is not counted as satisfying minimum residence requirements. The exception noted pertains to credits earned by challenging UT San Antonio undergraduate courses; these credits are counted toward the minimum residence requirements but are not [and-the-fetter grades-eapred-ape] included in the calculation of the student's UT San Antonio grade-point average, since only the symbol. "CR" (Credit) is awarded.[^32]Unsuccessful attempts to earn credit by examination do［wq77］not become part of the student＇s official academic record．

A brochure on Credit by Examination at UT San Antonio is available from the Office of the Dean of Students on the various tests which may be［ape］accepted for credit at The University．The booklet describes the tests available，when and where they are give，their costs，procedures for having test scores submitted for consideration for credit，the amount of credit that may be earned，and how to obtain additional information on each test．

## ［P子aeement－Examfnatiens－（Requiped）

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UT San Antonio Challenge Examinations［fer－Ghał子eafifa－Geupses］［fOptienał］ Students enrolled at［in］The University of Texas at San Antonio may＂challenge，＂ ［request］that is request an examination in，any UT San Antonio undergraduate course for which they have not already received credit．Not all courses，however， consist of materials whose comprehension［that］can be evaluated［tested］by means of examination，and the option of whether or not to grant the request rests with the instructor of the course．

To challenge a UT San Antonio undergraduate course by examination, the student must enroll in the course and within the first three weeks must request to complete it by examination[fst]. A charge of $\$ 15.00$ is [wift-be] made for each course challenged by examination. [sueh-examinatienfst.] If the student's performance on the examination is at the grade level of "C" or higher, a grade of "CR" is submitted at the end of the term by the instructor on the grade report for the course along with a credit by examination notation. [receives-a-grade-ef
 өA-the-gpade-pepert-fөp-the-eөurse-with-a-epedqt-by-examinatien-Aөtatien-] Unsuccessful attempts to earn credit by examination do not become part of the student's official academic record; the student may, however, elect to drop the course or complete the course on a regular basis following the evaluation of the examination(s) for the course(s) challenged.

Students admitted under the Provisional Admission Program may request to challenge by examination courses in those disciplines to which their enroliment is restricted.

Credits earned by challenging UT San Antonio undergraduate courses by examination apply to degree requirements as though the courses had been completed in the normal manner, except that since a grade of "CR" is awarded, such courses are not included in the UT San Antonio gradepoint average. These credits are also counted toward the minimum residence requirements. Students may challenge the same UT San Antonio course by examination only once.


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## Multiple Majors

A student completing a baccalaureate degree at The University of Texas at San Antonio is not restricted in the number of majors he or she may complete for the degree. However, if a student wishes to pursue more than one major, all requirements for a single degree major plus the additional requirements for the other major(s) must be completed. In such cases, only one degree is awarded. It is unlikely that a student fulfilling more than one major can complete all requirements within the same number of semester credit hours required for a single major.

Additional Baccalaureate Degrees

A student holding a baccalaureate degree from The University of Texas at San Antonio or from another accredited institution may receive an additional bachelor's degree from UT San Antonio. Such a student [wilł] continues to be classified as an undergraduate and must:

1. Complete a minimum of 30 semester hours of residence credit at UT San Antonio (of which at least 12 must be at the upper-division level in the major field) for each baccalaureate degree sought beyond the first.
2. Complete all requirements for the additional major(s), as set forth in this [the] catalog.
3. Complete all requirements for the additional degree(s), including support courses, elective courses, and upper-division courses, as set forth in this [the] catalog.

## Earning Graduate Credit While an Undergraduate

With approval of the course instructor, the Dean of the College in which the course is offered, and the Vice President for Academic Affairs, an exceptional undergraduate student may enroll in a graduate course and apply the credit earned to his/her undergraduate degree. An approval form is available at the Registrar's Office.

An undergraduate student lacking no more than 12 semester hours for graduation may [duping-his-finał-term-өf-enpelfment-as-an-undergraduate-student] earn graduate credit under the followign conditions:

1. All hours required for the degree must be completed in the term in which he/she is taking the additional courses for graduate credit.
2. Permission, on an approved form avallable at the Registrar's Office, must be obtained from the Student's Advisor and Dean of the College in which the courses to be awarded graduate credit are offered. The approved form must be filed with the Registrar's Office by the end of the add/drop period of the term in which the registration is being made.
3. In order to earn graduate credit, the student must graduate at the end of that term; otherwise, the courses are [witl-be] regarded as undergraduate credit. If graduate credit is earned, the units are not considered [a] part of the baccalaureate degree program.

Catalog of Graduation

Candidates for a baccalaureate degree may graduate upon the completion of the requirements as stated in the catalog in effect at the time of initial registration at UT San Antonio or in any subsequent catalog, except that no degree is [witl-be] granted on the basis of the requirements listed in a catalog issued more than seven years prior to the date of graduation. In the event certain required courses have been discontinued, substitutions may be authorized or required by the student's academic Dean.

Application for the Degree

All degree candidates must officially apply for the degree at the Registrar's Office no later than the end of the add/drop period of the term (Fall, Spring, or Second six-week Summer Session) in which they intend to graduate. Undergraduate students should apply for the degree during the term in which their current enrollment will yield 90 semester hours of earned credit. Upon application for the degree, an official degree check is prepared and issued to the student by the Office of Admissions and Registrar.

Graduation with Honors

Undergraduate students who complete degree requirements for baccalaureate degree and who have earned an overall grade-point average of 3.50 in all academic college work attempted and have earned a grade-point average of 3.50 in all units attempted at The University of Texas at San Antonio are [wiłf-be] eligible for graduation Magna Cum Laude. Those who have earned a grade-point average of 3.75 on an overall basis and at UT San Antonio are [wił7-be] eligible for graduation Summa Cum Laude.

Candidates who have completed some portion of the requirements for the baccalaureate degree at other collegiate institutions may be graduated with honors when they meet the requirements listed above in addition to completing a minimum of 45 semester hours of credit at The University of Texas at San Antonio, excluding courses challenged by examination in which only the symbol "CR" is recorded.

No degree candidate shall be eligible for graduation with honors if, at the time of graduation, he/she has disciplinary action on his/her official records in the Registrar's Office.

## Graduation Dates

Degrees are conferred at the end of each semester and at the end of the twelve-week [seeond] summer session. Formal public ceremonies are held only at the conclusion of the spring semester. Students who wish to participate on commencement ceremonies at the close of the spring semester and who have graduated during the previous summer or fall terms may do so. Information on the procedures to be followed is available in the Registrar's Office.
VIII.[Y¥£] SUMMARY OF UNDERGRADUATE DEGREE PROGRAMS AND SUPPORT AREAS FOR 1976-78 [7975-76]

The following undergraduate degree programs are available [at-the-upper-division feveł-enty] during 1976-78[7975-76].* Detailed requirements for each degree are found in Section IX[ $\forall \mp \mp \mp]$ of the present catalog.

Bachelor of Business Administration (BBA)
Accounting
Concentrations: (1) Accounting
(2) Business Data Systems

Economics
Finance
Management
Concentrations: (1) Business Management
(2) Industrial Management
(3) Marketing Management
(4) Office Management
(5) Personnel Management

Bachelor of Arts (BA)
Anthropology
Criminal Justice
Early Childhood and Elementary Education
Economics
English
French
German

[^33]
## History

Humanities
Polittcal Science
Psychology
Soctology
Spantsh

Bachelor of Fine Arts (BFA)
Art and Design
Concentrations: (1) Art
(2) Interior Design
(3) Architectural Design

Bachelor of Music Education (BME )

## Music

Bachelor of Science (BS)
Applied Science
Concentrations: (1) Applied Geology
(2) Applied Physics
(3) Food Technology
(4) Polymer Science

Biology
Chemistry
Health and Physical Education
Mathematics
Mathematics, Computer Science, and Systems Design
Medical Technology
Occupational Therapy
Physical Therapy

Additional undergraduate courses are available in the following support areas during 1976-78 [7975-76]. ${ }_{-}^{1}$ [ $]$

## [Apt]

Art History and Criticism
Astronomy
Bicultural-Bilingual Studies
Business Law
Classics
Communications
Comparative Literature
Educational Psychology (Special Education)
English as a Second Language
Environmental Management
[Fpeneh]
Geography
[Geman]
[Histery- $\theta$ f-Art-aAd-6pitieism]
Linguistics
[Musfie]
Philosophy
[Physies]
[Psyehełegy]
[Seeigłegy]
 єөupsest-wif7-be-өffeped-in-7975-76ヶ--Individuat-uppep-divisien] CourseE5] offerings in undergraduate degree programs may be postponed if [faeifities-ape thavaiłable-ep-if] enrollments or resource and space limitations do not warrant their implementation.
IX. [甘I¥I-] UNDERGRADUATE DEGREE PROGRAMS AND COURSE DESCRIPTIONS

COLLEGE OF BUSINESS

## BACHELOR OF BUSINESS ADMINISTRATION <br> DEGREE IN ACCOUNTING

The minimum number of semester hours required for this degree, including the 50 hours of General Education Requirements, $1[\mathrm{t}$ ] is 128.

All candidates for the degree must complete:
A. 24 semester hours in the major, 18 of which must be at the upperdivision level.

Required courses are: ACC 2013, 2023, 3013, 3023, 3033, 3043, 4013, plus three semester hours of approved accounting electives.
B. 36 semester hours of support work, 30 of which must be at the upperdivision level.

Required courses are: BLW 3013, 3023; ECO 2013, 2023, 3033; FIN 3013; MGT 3013, 3023, 3033, $3043^{2}[* *], 4093$; MKT 3013.
C. 3 semester hours of required electives in anthropology, sociology or psychology.
D. 15 semester hours of free electives, of which 9 must be at the upperdivision level.

COURSE DESCRIPTIONS<br>ACCOUNTING<br>(ACC)

3053 PROPERTY TRANSACTIONS AND PARTNERSHIP TAX
(3-0) 3 hours credit. Prerequisite: ACC 3043.
A study of property transactions, basis, gains and losses, depreciation recapture, and partnership taxation.

## [4063-ABYANGEB-FEBERAE-ING日ME-TAX


A-study-ef-the-Interał-Revenue-Gөde-eөneentpating-en-speeiatized-

4073 TAX RESEARCH METHODS
(3-0) 3 hours credit. Prerequisite: ACC [4863] 4153.
A study of tax research methods and materials and the history of the Internal Revenue Code, Collection and appeals procedures in the Internal Revenue Service.

4153 CORPORATE TAXATION
(3-0) 3 hours credit. Prerequisite: ACC 3053 or consent of instructor.
Taxation of corporate earnings, distributions, reorganizations, ligui-
dations, personal holding companies, collapsible corporations and
Subchapter S.
4163 FEDERAL TAX PROCEDURES
(3-0) 3 hours credit. Prerequisite: ACC 3043
Organization of the Internal Revenue Service, audit problems, district and appellate conferences, assessments, collections, refunds, civil penalties and tax crimes.

Introduction to the Federal Estate and Gift Tax Laws with an emphasis on the applicable code sections and regulations. accounting.
To provide students with knowledge gained through experiential activities in professional life. Joint cooperation with business and governmental institutions in structuring and monitoring work experience aimed at supplementing the classroom learning process.

> BACHELOR OF BUSINESS ADMINISTRATION
> DEGREE IN ACCOUNTING WITH A CONCENTRATION IN BUSINESS DATA SYSTEMS

The minimum number of semester hours required for this degree, including the 50 hours of General Education Requirements,* is 128.

Al1 candidates for the degree must complete:
A. 24 semester hours in the major, 12 of which must be at the upperdivision level.

Required courses are: ACC 2013, 2023, 3013; BDS 3043, 3053, 3063, plus six semester hours of approved business data systems or mathematics electives.
B. 36 semester hours of support work, 30 of which must be at the upperdivision level.

Required courses are: BLW 3013, 3023; ECO 2013, 2023, 3033; FIN 3013; MGT 3013, 3023, 3033, 3043,** 4903; MKT 3013.
C. 3 semester hours of required electives in anthropology, sociology, or psychology.
D. 15 semester hours of free electives, of which 9 must be at the upperdivision level.

> COURSE DESCRIPTIONS BUSINESS DATA SYSTEMS
> (BDS)

3013 ACCOUNTING INFORMATION SYSTEMS
(3-0) 3 hours credit. Prerequisites: ACC 2023 [ep-the-equivatent] and MAT 1043 or their equivalent.
An in-depth study of computer use in accounting systems. Payroll systems, accounts receivable, accounts payable, inventory accounting, tax, general ledger, financial statements, cost and budget analysis.

3023 COMPUTER APPLICATIONS IN MARKETING
(3-0) 3 hours credit. Prerequisites: MKT 3013 and MAT 1043 or their equivalent.
Projects utilizing the computer in collection, reduction, and analysis of marketing information.

3033 COMPUTER APPLICATIONS IN FINANCE
(3-0) 3 hours credit. Prerequisites: FIN 3013 and MAT 1043 or their equivalent.
Projects in computer applications to stock and bond market analysis, real estate analysis, financial statement analysis, and other forms of financial analysis.

The minimum number of semester hours required for this degree, including the 50 hours of General Education Requirements,* is 128.

All candidates for the degree must complete:
A. 27 semester hours in the major, 21 of which must be at the upperdivision level.

Required courses are: ECO 2013, 2023, 3033, 3053, 3113, plus twelve hours of approved economics electives.
B. 33 semester hours of support work, 24 of which must be at the upperdivision level.

Required courses are: ACC 2013, 2023, 3013; BLW 3013 or ECO 3213; FIN 3013; MGT 3013, 3043,** 4903; MKT 3013; plus three semester hours of College of Business electivesplus three semester hours of social science electives.
C. 3 semester hours of required electives in anthropology, sociology, or psychology.
D. 15 semester hours of free electives, of which 9 must be at the upperdivision level.

## BACHELOR OF ARTS DEGREE IN ECONOMICS

The minimum number of semester hours required for this degree, including the 50 hours of General Education Requirements,* is 125.**

All candidates for the degree must complete:
A. 27 semester hours in the major, 21 of which must be at the upperdivision level.

Required courses are ECO 2013, 2023, 3013, 3053, 3113, plus 12 semester hours of approved economics electives.
B. 18 semester hours of support work as follows: ACC 2013 plus 6 semester hours of electives in the College of Business plus 9 semester hours of social science electives.
C. 3 semester hours of required electives in anthropology, sociology, or psychology.
D. 27 semester hours of free electives, but no more than 9 semester hours of this group may be in additional economics courses.

COURSE DESCRIPTIONS
ECONOMICS
(ECO)

3013 THEORY OF PRICE
(3-0) 3 hours credit. Prerequisites: ECO 2013, [日p-the-equivałeht-and E60] 2023; MAT 1022, or their [the] equivalent.

Operation of individual markets; market structure; theory of the firm; theory of production; demand theory; general equilibrium and welfare economics.

3033 [MANAGERIAE] ECONOMICS OF THE FIRM
(3-0) 3 hours credit. Prerequisites: ECO 2013, [op-the-equivatent-and E60] 2023; MAT 1022, or their [the] equivalent.
Review and extension of micro and macroeconomic analysis with applications in the area of administration problems; analysis of market systems and firm behavior; introduction to linear programming and capital budgeting; examination of public and private decision making and economic issues.

3053 AGGREGATE ECONOMIC ANALYSIS
(3-0) 3 hours credit. Prerequisites: ECO 2013 [er-the-equivatent] and ECO 2023 or their [the] equivalent.
Analysis of the measurement, determination, and control of aggregate economic activity; the monetary system in relation to income and employment; short-term income fluctuations; long-term growth.

3113 INTRODUCTION TO MATHEMATICAL ECONOMICS
(3-0) 3 hours credit. Prerequisite: ECO 3013 [er-the-equivatent] or ECO 3033 or the equivalent.
Mathematical formulation of economic theory; mathematical treatment of optimizing behavior; applications to consumer and business firm theory; value, economic strategies, growth and stability; emphasis on understanding of analytical techniques.

3183 ECONOMIC DEVELOPMENT OF THE UNITED STATES
(3-0) 3 hours credit. Prerequisite: ECO 2013 or ECO 2023 or the equivalent.
The growth of the American economy from colonial times to the present; special emphasis on the market forces, institutional arrangements, and policies contributing to this process.

3193 THE INTERNATIONAL ECONOMY
(3-0) 3 hours credit. Prerequisite: ECO 2013 [ep-the-equivałent] or ECO 2023 or the equivalent, or consent of instructor.
Principles of international trade; significance of geographic, economic, social and political influences; current problems in international trade and payments; tariffs and commercial policy; role of international organizations.

3273 PUBLIC CHOICE AND THE PUBLIC FINANCES
(3-0) 3 hours credit. Prerequisite: ECO 3013 [or-the-equivalent] or ECO 3033 or the equivalent.
Analysis of administrative and legislative decisions applicable to public goods and services; government expenditure policy; sources of revenue; public credit; fiscal policy, principles and methods of taxation and financial administration.

3283 LABOR ECONOMICS AND COLLECTIVE BARGAINING
(3-0) 3 hours credit. Prerequisite: ECO 2013 [ep-the-equivałent] or ECO 2023 or the equivalent, or consent of instructor. Economic problems and issues of trade union organization and wage theory; job security, hours, working conditions; labor legislation, unemployment, and discrimination.

3403 ECONOMIC ASPECTS OF URBANIZATION
(3-0) 3 hours credit. Prerequisite: ECO 2013 or ECO 2023 or the equivalent.
Application of economic analysis to urban growth and the urbanregional environment; consideration of public services, transportation, ghetto problems, and urban organization; analysis of environmental protection probiems and policies.

4273 ENVIRONMENTAL ECONOMICS
（3－0） 3 hours credit．Prerequisite：ECO 3013 ［8p－the－equivałent］or ECO 3033 or the equivalent，or consent of instructor． Economic principles applied to environmental problems；relationship of market and nonmarket forces to environmental quality；development of tools for policy analysis．

4283 MANPOWER ECONOMICS：PROBLEMS AND PROGRAMS
（3－0） 3 hours credit．Prerequisite：ECO 3013 ［ep－the－equivalent］or ECO 3033 or the equivalent．
Economics of human resource development；examination of programs for training and upgrading of workers；barriers to skill development and job entry；formulation of public policies on human resources．

4293 ECONOMICS OF DISCRIMINATION AND POVERTY
（3－0） 3 hours credit．Prerequisite：ECO 3013 ［ep－the－equivałent］or ECO 3033 or the equivalent，or consent of instructor．
Economic and non－economic implications of discrimination on the basis of race and sex；discrimination in the labor and commodity markets； problems of educational training，unemployment，and personal income distribution．

4313 MONETARY THEORY AND POLICY
（3－0） 3 hours credit．Prerequisites：ECO 3053 ［日p－the－equivałent］ and ECO 3313 or their［ the ］equivalent．
Relationship of money and interest rate to economic stabilization； consideration of federal reserve system，money market，and factors determining money supply and demand；neo－Keynesian，Chicago，and radi－ cal policy views．

4463 MEDICAL AND HEALTH ECONOMICS
（3－0） 3 hours credit，Prerequisite：ECO 3013 ［日p－the－equivałent］or ECO 3033 or the equivalent．
Economic analysis of medical and health services．Physician and dentist pricing；hospital supply；markets in health－related profes－ sions；drug and equipment markets；medical and health insurance； national priorities and policy for health service delivery．

4493 ECONOMICS OF THE TRANSPORTATION INDUSTRY
（3－0） 3 hours credit．Prerequisite：ECO 3013 ［ep－the－equivatent］or ECO 3033 or the equivalent．
Economic analysis applied to specific problems of transport．Effects of location and transportation cost on firm behavior；public regulation and policy；capacity，rate structure，service areas；problems of urban mass transportation．

BACHELOR OF BUSINESS ADMINISTRATION DEGREE IN FINANCE

The minimum number of semester hours required for this degree，including the 50 hours of General Education Requirements，＊is 128.

All candidates for the degree must complete：
A． 18 semester hours in the major， 18 of which must be at the upper－ division level．

Required courses are：FIN 3013，3033，3313，［ptus－eithep－FIN－3423 and－4423；－өp－FIN－3423－and－4423；－өp－FIN－3473－and－4373；－日p－FIN－4773
and－4723；－＊p－FIN－4873－and－4823；］plus 9 E37 semester hours of approved finance electives．

B． 42 semester hours of support work， 30 of which must be at the upper－ division level．

Required courses are：ACC 2013，2023，3013；BLW 3013 or ECO 3213； ECO 2013，2023，3033；［FIN－3073t］MGT 3013，3023，3033，3043，＊＊4903； MKT［MRK］3013，plus 3 semester hours of College of Business electives．
C． 3 semester hours of required electives in anthropology，sociology，or psychology．

D． 15 semester hours of free electives，of which 9 must be at the upper－ division level．

COURSE DESCRIPTIONS<br>FINANCE<br>（FIN）

3013 THE FINANCE FUNCTION
（3－0） 3 hours credit．Prerequisites：ACC 2023 and MAT 1022 or their ［the］equivalent．
Introduction to analytical financial management with emphasis on the management of the short－term uses and sources of funds；capital invest－ ment and management of long－term fund sources．

CASES［PROBLEMS］IN FINANCIAL MANAGEMENT
（3－0） 3 hours credit．Prerequisite：FIN 3013 or the equivalent．


 financial cases based on actual business problems and the application of financial theory and technique are used to illustrate the process required to formulate financial decisions．

3413 MANAGEMENT OF FINANCIAL INSTITUTIONS
$(3-0) 3$ hours credit．Prerequisite：FIN 3313 or the equivalent．
 mapy－finaneqał－tntemmediariesy－ine子uding－e日mmereqał－banksy－łife－and eastałty－insuranee－enterprises， and－pensiөn－funds－as－they－interaet－in－the－marketst－emphasis－en－7ending funetiens．f Analysis of financial management principles，theories，and techniques as they apply to the peculiarities of the financial firm； emphasis on asset and liability management in a changing environment of regulation，competition，and financial intermediation．

PROSEMINAR IN FINANCIAL THEORY
（3－0） 3 hours credit．PrerequisiteFs］：FIN 3403 ［3073］or［the－equiva－ łent－and－MGF－3日33－өp－the－equivałent－］consent of instructor．


 virenmentał－eipeumstanees：］Examination of the recent theorical devel－ opments in the various areas of finance．Analysis will focus on the techniques and procedures by which new theoretical developments evotve． A seminar approach will be used to provide a high degree of student－ instructor interaction．

## FINANCIAL MARKETS

（3－0） 3 hours credit．Prerequisite：FIN 3413 or the equivalent． Theory and analysis of equilibrium in the financial markets and the changing structure of financial intermediation；capital asset pricing， efficient markets，portfolio theory，direct and indirect finance， disintermediation competition，structural reform．

# [4373--MANAGEMENF-OF-FHE-LEENBING-FUNGFIEN <br>  Betaiłed-anałysis-ef-łending-as-praetieed-by-finaneiał-intermediapiest   tuntztes:] <br> 4713 MORTGAGE BANKING AND REAL ESTATE FINANCE <br> (3-0) 3 hours credit. Prerequisites: FIN 3013 [ep-the-equivałent] and FIN 3313 or their [the] equivalent. <br> Planning, structure, and analysis of real estate financing from the viewpoints of both the users and suppliers of funds; examination of various techniques and legal instruments; institutional constraints and their effects on real estate lending activities. 

## COURSE DESCRIPTIONS BUSINESS LAW (BLW)

3023 [PROPERTY 3 -GONFRAGF\$] BUSINESS ORGANIZATIONS AND COMMERCIAL LAW (3-0) 3 hours credit. Prerequisite: BLW 3013 or the equivalent.

 Geder] Agency, partnership, corporations, sales, commercial paper, creditors rights and secured transactions under the Uniform Commercial Code.

The minimum number of semester hours required for this degree, including the 50 hours of General Education Requirements,* is 128.

All candidates for the degree must complete:
A. 21 semester hours in the major, all of which must be at the upperdivision level.

Required courses are: MGT 3013, 3023, 3033, 3043,** and 4903.
B. 39 semester hours of support work, 27 of which must be at the upperdivision level.

Required courses are: ACC 2013, 2023, 3013, 3023; BLW 3013 or ECO 3213; ECO 2013, 2023, 3033, 3053; FIN 3013; MKT [MRK] 3013; plus 3 semester hours each in finance and marketing electives.
C. 3 semester hours of required electives in anthropology, sociology, or psychology.
D. 15 semester hours of free electives, of which 9 must be at the upperdivision level.

BACHELOR OF BUSINESS ADMINISTRATION
degree in management with a
CONCENTRATION IN INDUSTRIAL MANAGEMENT

The minimum number of semester hours required for this degree, including the 50 hours of General Education Requirements,* is 128.
All candidates for the degree must complete:
A. 18 semester hours in the major, all of which must be at the upperdivision level.

Required courses are: MGT 3033, 3343 ( 6 hours); plus either MGT 3333, 3353, 4603 ( 9 hours), or 3313, 3323, 4593 ( 9 hours); and 3 semester hours of approved management electives.
B. 42 semester hours of support work, 30 of which must be at the upperdivision level.

Required courses are: ACC 2013, 2023, 3013; BLW 3013 or ECO 3213; ECO 2013, 2023, 3033; FIN 3013; MGT 3013, 3023, 3043,** 4903; MKT
3013; plus 3 additional semester hours of [suppert-werk] College of Business electives.
C. 3 semester hours of required electives in anthropology, sociology, or psychology.
D. 15 semester hours of free electives, of which 9 must be at the upperdivision level.

QUANTITATIVE DECISION ANALYSIS AND PRODUCTION
(3-0) 3 hours credit. Prerequisites: MAT 1022, 1031, 1043, 1062, or their equivalent.
Basic techniques of decision analysis applied to problems in business and economics with an emphasis on production problems. Techniques include modeling and optimization of deterministic and non-deterministic systems in the named application areas.

3123 ORGANIZATIONAL COMMUNICATIONS
(3-0) 3 hours credit. Prerequisites: MGT 3013 and MGT 3023 or their [the] equivalent[-s].
A course stressing the importance of and problems in effective communication within the organizational setting. Special emphasis will be given to problems of horizontal and vertical communication, communication blockages, informal communication channels, and the effects of organizational structure and leadership patterns on communication. The course will also stress the means of evaluating organizational communication effectiveness.

INTERPERSONAL COMMUNICATION
(3-0) 3 hours credit. Prerequisite: MGT 3043 or the equivalent. A course aimed at the dynamics of interpersonal communication. The course stresses the social context of communication and gives emphasis to the effects of status, rank, culture, group affiliation, attraction, etc., on the communicating parties. Both verbal and non-verbal interaction is explored in terms of consequences on the communication process.

3313 STATISTICAL APPLICATIONS IN BUSINESS
(3-0) 3 hours credit. Prerequisites: ECO 2023 and MGT 3033 or their [the] equivalent[ $f$ ].
Examples and procedures for experimental design, data collection and display, data interpretation, hypothesis testing, and forecasting in business and economics systems.

3323 SIMULATION APPLICATIONS IN BUSINESS
(3-0) 3 hours credit. Prerequisites: FIN 3013 and MGT 3033 or their
[the] equivalent[s].
Examples of computer simulation in financial, marketing, management, and economic systems. Techniques for modeling and for analyzing models within business environments.

3333 MANAGEMENT INFORMATION SYSTEMS
(3-0) 3 hours credit. Prerequisites: MGT 3013 and MGT 3033 or their [the] equivalent[s].
A study of the information needs of business and automated methods of acquiring, storing, updating, and retrieving useful information.

3343 PRODUCTION MANAGEMENT APPLICATIONS
(3-0) 3 hours credit. Prerequisites: MGT 3013 and MGT 3033 or their [the] equivalent[f].
Applications of modeling and optimization techniques in inventory, production, and quality control with related considerations of reliability, maintenance, and transportation.

4203 BUSINESS AND SOCIETY
(3-0) 3 hours credit. Prerequisite: Upper-division standing or [aAd] consent of instructor.
A study of the impact of societal influences on the managerial de-cision-making process. Special attention given to business-government relationships and the role of the organization in the community.

BACHELOR OF BUSINESS ADMINISTRATION
DEGREE IN MANAGEMENT WITH A
CONCENTRATION IN MARKETING MANAGEMENT

The minimum number of semester hours required for this degree, including the 50 hours of General Education Requirements,* is 128.

All candidates for the degree must complete:
A. 18 semester hours in the major, all of which must be at the upperdivision level.

Required courses are: MKT 3013, [3023] 3033, 3113 or 3123, 4083, 4893, plus 3 semester hours of approved marketing electives.
B. 42 semester hours of support work, 30 of which must be at the upperdivision level.

Required courses are: ACC 2013, 2023, 3013; BLW 3013 or ECO 3213; ECO 2013, 2023, 3033; FIN 3013; MGT 3013, 3023, 3033, 3043,** 4903; plus 3 additional semester hours of [suppert-wepk] College of Business electives.
C. 3 semester hours of required electives in anthropology, sociology, or psychology.
D. 15 semester hours of free electives, of which 9 must be at the upperdivision level.

## BACHELOR OF BUSINESS ADMINISTRATION DEGREE IN MANAGEMENT WITH A CONCENTRATION IN PERSONNEL MANAGEMENT

The minimum number of semester hours required for this degree, including the 50 hours of General Education Requirements,* is 128.

All candidates for the degree must complete:
A. 18 semester hours in the major, all of which must be at the upperdivision level.

Required courses are: MGT 3013, 3613, 3623, 3633, 4803, plus 3 semester hours of approved management electives.
B. 42 semester hours of support work, 30 of which must be at the upperdivision level.

Required courses are: ACC 2013, 2023, 3013; BLW 3013 or ECO 3213; ECO 2013, 2023, 3033; FIN 3013; MGT 3023, 3033, 3043,** 4903; MKT 3013, plus 3 semester hours of College of Business electives.
C. 3 semester hours of required electives in anthropology, sociology, or psychology.
D. 15 semester hours of free electives, of which 9 must be at the upperdivision level.

ADVANCED ORGANIZATION THEORY
(3-0) 3 hours credit. Prerequisites: MGT 3013 and MGT 3023 or their equivalent.
Advanced study of the structure and process of organizations. Emphasis
upon such topics as typologies of organizational complexity and formal-
ization, communication and dectsion-making processes, and organizational
development and change. Contingency views of organizations are stressed.
CAREER DEVELOPMENT
(3-0) 3 hours credit. Prerequisites: MGT 3013 and MGT 3023 or their equivalent.
Focus is on developmental processes of executive talent in organizations. Emphasis is placed on topics such as effects of stress, routes to the executive suite, socialization processes, managerial styles, the success ethic, career crises, and political realities in the organization.

4593 ADVANCED QUANTITATIVE DECISION ANALYSIS
(3-0) 3 hours credit. Prerequisites: MGT 3313, [MGF] 3323, [MGF] 3343, or their [the] equivalent[ -5 ].
Detailed study of applications of quantitative decision analysis to policy and planning systems. Designed to provide a comprehensive understanding of the state of the art in quantitative decision analysis techniques of use in developing effective and efficient management systems.

4603 ADVANCED LOGISTICS
(3-0) 3 hours credit. Prerequisites: MGT 3333, [MGF] 3343, [aAd-MGF] 3353, or their equivalent.
Detailed analysis of the management of logistics systems with specific focus on policy and planning considerations. Designed to provide a comprehensive understanding of the functional areas of logistics and the integration of these functions into an effective and efficient logistics system.

4633 [3633] LABOR RELATIONS
(3-0) 3 hours credit. Prerequisite[-5]: MGT 3613 [MGF-3623] or the equivalent[ -5 ].
A contemporary analysis of the union-management relationship in both business and non-business organizations. Topics include union organizing activities, collective bargaining, and agreement administration.

4643 [3643] LABOR LAW
(3-0) 3 hours credit. Prerequisite: MGT 3613 [3633] or the equivalent. An analysis of historical and contemporary labor law in the United States. Integration of the evolution of labor law with the social and economic forces shaping the current labor-management environment.

4803 HUMAN RESOURCES MANAGEMENT
(3-0) 3 hours credit. Prerequisites: MGT 3613, [MGF] 3623, [MGF-3633] 4633 or their [the] equivalent[ $\leqslant$ ].
Detailed analys is of the management of personnel systems with specific focus on policy and planning considerations. Designed to provide a comprehensive understanding of the functional areas of personnel and the integration of these functions into an effective and efficient personnel system.

4863 ETHICAL AND SOCIAL ISSUES IN MANAGEMENT
( $3-0$ ) 3 hours credit. Prerequisite: Upper-division standing or [and] consent of instructor.
Students challenged to order thought, values, and behavior in operational, directional, and constitutional contexts. Develops a moral frame of reference providing both individual and operational guidance contributing to social justice.

4883 SMALL BUSINESS MANAGEMENT [ $\theta$-ENFREPRENEURIAL-ENFERPRISE]
(3-0) 3 hours credit. Prerequisite: Upper-division standing [and] or consent of instructor.
Focuses on the operation of small businesses. Analysis of the accounting, finance, production, and marketing functions as they pertain to entrepreneurial endeavors. Develops overall managerial awareness.

4903 BUSINESS POLICIES AND MANAGEMENT
(3-0) 3 hours credit. Prerequisite: Upper-division standing [and] or consent of instructor.
Capstone integration of marketing, finance, accounting, production, procurement, personnel policies emphasized through case studies and business simulations.

## 4963 MANAGEMENT INTERNSHIP

4966 (0-3 or 6) 3 or 6 hours credit. Prerequisite: MGT 3013 [37ө3] or the equivalent.
Knowledge gained through the experiential activities of organizational life. Joint cooperation with business, government, and health science institutions in structuring and monitoring work experience aimed at supplementing the learning process. Opportunities developed in consultation with faculty Advisor and Division Director and require approval of both.

## COURSE DESCRIPTIONS

 MARKETING MANAGEMENT(MKT)

## [3023--IASFIFFUFIGAS- $\theta F-M A R K E \mp I H G$

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3043 MASS COMMUNICATIONS AND ADVERTISING
(3-0) 3 hours credit. Prerequisites: MKT 3013 and MKT 3033 or their [the] equivalent[s].
A specialized course covering the theory and practice of advertising. The course stresses planning advertising strategy, developing advertising messages, selecting advertising media, and testing advertising effectiveness. Also, the course explores the theory and history of advertising, the social and economic aspects of advertising, and the problems of ethics and truth in advertising.

3113 RETAILING
$(3-0) 3$ hours credit. Prerequisite: MKT 3013 or the equivalent. Analysis of store location, layout, promotion, buying, pricing, personnel management, credit, stock control. Particular emphasis on problems unique to retailing.

3123 WHOLESALING
(3-0) 3 hours credit. Prerequisite: MKT 3013 or the equivalent. Analysis of modern wholesale and industrial marketing, including types of wholesale marketing institutions and the competitive positions of each. Emphasis on selecting efficient channels for marketing management.

4103 [GONFEMPORARZ] CURRENT TOPICS IN MARKETING
(3-0) 3 hours credit. Prerequisite: MKT 3013 or the equivalent. Analysis of current trends in marketing problems and policies. Critical analysis of marketing, consideration of current developments in theory; activities of regulatory agencies; analysis of ethical, social, and public policy aspects of marketing changes.
(3-0) 3 hours credit. Prerequisites: MKT [3023] 3033, 3113 or 3123, 4083, or their [the] equivalent[ -5 ].
Detailed analysis of the management of marketing systems with specific focus on policy and planning considerations. Designed to provide a comprehensive understanding of the functional areas of marketing and the integration of these functions into an effective and efficient marketing system.

4963 INTERNSHIP IN MARKETING
4966 ( $0-3$ or 6) 3 or 6 hours credit. Prerequisite: MKT 3013 or the equivalent.
Knowledge gained through the experiential activities of organizational life. Joint cooperation with business, government, and health science institutions in structuring and monitoring work experience aimed at supplementing the learning process. Opportunities developed in consultation with faculty Advisor and Division Director and reguires approval of both.

## COLLEGE OF FINE AND APPLIED ARTS

The College of Fine and Applied Arts through its Divisions of Art and Design and Music provides [w7 77 -ppevide] the opportunity and preparation for students

1) to be proficient and creative in their respective fields in the fine and applied arts, 2) to carry out distinguished scholarship in the history of art and music, 3) to follow professional careers in architecture, [te-be-musie teachers-and] to be art and music teachers and [te-enter-inte-rełated-fiełds $\theta$-endeaver $\mathcal{1}$ 5) to enter into related fields of endeavor. These programs of study [w7l7] encourage creativity, professional preparation, and performance in art, architecture, and music as well as visual and aural awareness based on a study, analysis, and evaluation of works of art, architecture, and music.

Courses open to majors and non-majors are designed to acquaint students with the nature, function, process, and meaning of the visual and aural arts. This enables [wilf-enable] them to deal with the artistic as well as nonartistic aspects of their dally lives with intelligence and sensitivity.

The objectives of the Division of Art and Design are two-fold. First, the Division is responsible for educating students at the highest level in art and design. This entails imparting an awareness of the history of art and the pursuits of the scholar, the practice of art and the various shapes this can take, and instilling in the students a sense of the role of the arts and artists in a contemporary society. Second, the Division believes it should be an active force in the cultural life of the San Antonio community and that the University of Texas at San Antonio should be a center for the creative arts. All efforts [wi7l-be] are made to combine these two objectives within the University of Texas at San Antonio framework of endeavoring to reflect and serve the South Texas, Southwestern United States, and the Latin American areas.

## bachelor of fine arts degree in art and design with a concentration IN ART

The minimum number of semester hours required for the degree, including 50 hours of General Education Requirements, is 128.
All candidates for the degree must complete:
A. A total of sixty semester hours in studio art courses:

1) 18 semester hours of required courses are:

| ART 1003 | DESIGN: BASIC I |
| :--- | :--- |
| ART 1013 | DESIGN: BASIC II |
| ART 1023 | THE ARTS OF VISION AND SOUND |
| ART 1213 DRAWING: BASIC I <br> ART 1223 DRAWING: BASIC II <br> ART 4923 SPECIAL PROJECT IN ART |  |

2) 30 hours must be in upper-division elective ART courses.

12 semester hours must be completed in one of the following
specializations:
Drawing (ART 3213, 3223, 4233, 4243)
Painting (ART 3113, 3123, 4133, 4143)
Photography (ART 3513, 3523, 4533, 4543)
Sculpture (ART $3653,3663,4673,4683$ )
Ceramics (ART $3733,3743,4753,4763$ )
Printmaking (Four courses from the following areas:)
Lithography (ART 3313, 3323, 4333, 4343)
Intaglio (ART $3413,3423,4433,4443$ )
3) 12 additional semester hours of studio art courses.
B. Fifteen semester hours of support work in Art History and Criticism. three of which must be at the upper-division level.
C. Three semester hours of upper-division electives.
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A－－－stxty－semester－hoars－tn－the－major；－36－of－whtch－mast－be－at－the upper－division－7eve7：－－Required－coarses－are－ARF－7776；－ARF－7726， ARF－7736；－ARF－7746－f24－houpsł；－Plus－ene－ef－the－felfowing－speciafiza－ tiens－ffz－heurst：－

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ARF－3643－Printmaking－IV
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## COURSE DESCRIPTIONS

ART
（ART）

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1003 DESIGN: BASIC I
    (0-6) 3 hours credit.
    Investigation of two-dimensional visual formulation.
1013 DESIGN: BASIC II
    (0-6) 3 hours credit. Prerequisite: ART 1003 or consent of
    instructor.
    Expansion of Design: BASIC I, with emphasis on color and three-
    dimensional form.
1023 THE ARTS OF VISION AND SOUND
    (3-0) 3 hours credit.
    An introduction to the multiple facets of creativity as they
    apply to the visual and aural arts. The creative Process is
    examined from points of view of the historian, composer,
    artist, performer and architect.
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    teehmiques.]
[7776--ARF-I
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[7726--ARF-7士-
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[7736--ARF-ま午
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    printmaking;-phetegraphy-and-design.]
[7746--ARF-I4
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    Pertfe7ie-preparatien.]
[3703] PAINTING FOR [THE] NON-ART MAJORS
    (0-6) }3\mathrm{ hours credit.
    May not be applied to a major in art.
    An introduction to the fundementals of painting.
    [Feehniqute5-and-ide0łegie5-өf-\betaainting]
    May be repeated for credit.
[3203] DRAWING FOR NON-ART MAJORS
    (0-6) 3 hours credit.
    May not be applied to a major in art.
    An introduction to the fundamentals of drawing.
    [7eean;ques-and-fdee+eg7es-0f-draw7.fg.]
    May be repeated for credit.
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[3503] PHOTOGRAPHY FOR [FHE] NON-ART MAJORS
    (0-6) 3 Hours credit.
    May not be applied to a major in art.
    Techniques and basic methods [ideas] of creative photography.
    Students are expected to provide their own cameras.
1183 CERAMICS FOR NON-ART MAJORS
    (0-6) 3 hours credit.
    May not be applled to a major in art.
    An introduction to the techntques and concepts of ceramics.
    May be repeated for credit.
1192 THE MANUAL ARTS IN OCCUPATIONAL THERAPHY I
    (0-6) 2 hours credit.
    Use of tools, equipment, and other materlals commonly used in
    crafts. Designed for occupational therapy students.
1202 THE MANUAL ARTS IN OCCUPATIONAL THERAPY II
    (0-6) 2 hours credft.
    Methods, techniques, and use of tools, equipment, and materials
    commonly used in crafts. Designed for occupational therapy
    studeats.
1213 DRAWING: BASIC I
    (0-6) 3 hours credit.
    Fundamental training in graphic articulation.
1223 DRAWING: BASIC II
    (0-6) 3 hours credit. Prerequisite: ART 1003, ART 1213, or
    consent of instructor.
    A continuation of Drawing: Basic I, with emphasis on the human
    figure.
2113 PAINTING: BASIC I
    (0-6) 3 hours credit. Prerequisite: ART 1013, 1223, or consent
    of instructor.
    Instruction in composition, color theory and the materials and
    techniques of painting.
2123 PAINTING: BASIC II
    (0-6) 3 hours credit. Prerequisite: ART 2113 or consent of
    instructor.
    A continuation of Painting: Basic I
2233 DRAWING: BASIC III
    (0-6) 3 hours credit. Prerequisite: ART 1013, ART 1223, or
    consent of instructor.
    The investigation of drawing concepts, structure, and media.
2243 DRAWING: BASIC IV
    (0-6) 3 hours credit. Prerequisite: ART 2233 or consent of
    instructor.
    Continuation and refinement of Drawing: Basic III with emphasis
    on the development of individual imagery.
2513 PHOTOGRAPHY: BASIC I
    (0-6) 3 hours credit. Prerequisite: ART 1013, ART 1223, or
    consent of instructor.
    Introduction to the aesthetics of photographic vision and to
    darkroom techniques. Students are expected to provide their
    own cameras.
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| 2523 PHOTOGRAPHY: BASIC II |  |
| :---: | :---: |
|  | (0-6) 3 hours credit. Prerequisite: ART 2513 or consent of |
|  | instructor. |
|  | Continuation of Photography: Basic I. Students are expected |
|  | to provide the ir own cameras. |
| 2613 | SCULPTURE: BASIC I |
|  | (0-6) 3 hours credit. Prerequisite: ART 1013, ART 1223, or |
|  | consent of instructor. |
|  | Instruction in basic sculptural concepts and materials. |
| 2623 | SCULPTURE: BASIC II |
|  | (0-6) 3 hours credit. Prerequisite: ART 2613 or consent of |
|  | instructor. |
|  | Continuation of Sculpture: Basic I. |
| 2713 | CERAMICS: BASIC I |
|  | (0-6) 3 hours credit. Prerequisite: ART 1013, ART 1223, or |
|  | consent of instructor. |
|  | Instruction in basic ceramic concepts and techniques. |
| 2723 | CERAMICS: BASIC II |
|  | (0-6) 3 hours credit. Prerequisite: ART 2713 or consent |
|  | of instructor. |
|  | Continuation of Ceramics: Basic I. |
| 3113 | PAINTING: INTERMEDIATE I |
|  | (0-6) 3 hours credit. Prerequisite: ART 2123, ART 2233 or consent of instructor. |
|  | [ Hpper-divisisien-standing-and] $^{\text {a }}$ |
|  |  with an emphasis on the synthesis of idea and means. |
| 3123 | PAINTING: INTERMEDIATE II |
|  | (0-6) 3 hours credit. Prerequisite: ART 3113 or consent of |
|  | Continuation and refinement of Painting: Intermediate I |
| 3213 | DRAWING: INTERMEDIATE I |
|  | (0-6) 3 hours credit. Prerequisite: ART 2243 or consent of |
|  | instructor. |
|  | [Uрקer-divisisien-standing-and] <br> Concepts and methods of drawing with an emphasis on the |
|  | Concepts and methods of drawing with an emphasis on the |
|  | synthesis of idea and means. |
|  | [An-examination-өf-dpawing-as-a-veniełe-fer-devełeping-a-visuał |
|  |  itョse子f.] |
| 3223 | DRAWING: INTERMEDIATE II |
|  | (0-6) 3 hours credit. Prerequisite: ART 3213 or consent of instructor. |
|  | Continuation and refinement of Drawing: Intermediate I |
| 3313 | LITHOGRAPHY: BASIC |
|  | (0-6) 3 Hours credit. Prerequisite: ART 2243 or consent of |
|  | instructor. |
|  | Concepts and methods of lithography with emphas is on black |
|  | and white image formation. |

3323 LITHOGRAPHY：INTERMEDIATE
$(0-6) 3$ hours credit．Prerequisite：ART 3313 or consent of instructor．
Continuation of Lithography：Basic with additional emphasis on IIthographic plate methods and color processes．

3413 INTAGLIO：BASIC
$(0-6) 3$ hours credit．Prerequsitie：ART 2243 or consent of instructor．
Concepts and methods of intaglio and relief printmaking with emphasis on black and white image formation．

3423 INTAGLIO：INTERMEDIATE
（0－6） 3 hours credit．Prerequisite：ART 3413 or consent of instructor．
Continuation of Intaglio：Basic with additional investigation of color processes．

3513 PHOTOGRAPHY：INTERMEDIATE I
（0－6） 3 hours credit．Prerequisite：ART 2523 or consent of instructor．［甘pper－divisten－standing－and］
Concentration in the concepts and methods of photography．
 dapkpeom－teeमaiqques：］
Students are expected to provide their own cameras．
3523 PHOTOGRAPHY：INTERMEDIATE II
（0－6） 3 hours credit．Prerequisite：ART 3513 or consent of
instructor．Continuation and refinement of Photography：
Intermediate I．［Geneepts－and－metheds－8f－tpadftionat－and e日月末еmperapy－קhetegraphy：］
Students are expected to provide their own cameras．
［3673－－PRINFMAKING－I
 and－e日asent－$\theta$ f－instrueter：
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［3623－－PRINFMAKING－まま


［3633－－PRINFMAK $\ddagger$ NG－¥ま
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［3643－－PRINFMAKING－IY




3653 SCULPTURE：INTERMEDIATE I
$(0-6) 3$ hours credit．Prerequisite：ART 2233，ART 2623，or
consent of instructor．
Concentration in the methods，materials and concepts of sculpture．

| 3663 | SCULPTURE: INTERMEDIATE II |
| :---: | :---: |
|  | $(0-6) 3$ hours credit. Prerequisite: ART 3653 or consent of |
|  | instructor. |
|  | Continuation and refinement of Sculpture: Intermediate I. |
| 3733 | CERAMICS: INTERMEDIATE I |
|  | $(0-6) 3$ hours credit. Prerequisite: ART 2723 or consent of |
|  | instructor. |
|  | Concepts and methods of ceramics. |
| 3743 | CERAMICS: INTERMEDIATE II |
|  | (0-6) 3 hours credit. Prerequisite: ART 3733 or consent of |
|  | instructor. |
|  | Continuation and refinement of Ceramics: Intermediate I. |
| [3733] | PAINTING: ADVANCED I [ Im ]] |
|  | (0-6) 3 hours credit. Prerequisite: ART 3123 or consent of |
|  | instructor. |
|  | Continuation and refinement of Painting: Intermediate II with |
|  | emphasis on the development of individual imagery. |
| [3743] | PAINTING: ADVANCED II [ FY ] |
|  | (0-6) 3 hours credit. Prerequisite: ART 4133 or consent of instructor. [3733] |
|  | Continuation and refinement of Painting: [ま£f:--Fep-5tudents-eeneentrating-4n-painting-this-e日urse-wiff-eulminate-in-an |
|  | exhibition-and-wpitzen-thesis.] <br> Advanced I May be repeated for credit |
| [3233] | DRAWING: ADVANCED |
|  | (0-6) 3 hours credit. Prerequisite: ART 3223 or consent of |
|  | instructor. |
|  | Continuation and refinement of Drawing: Intermediate II with emphasis on the development of individual imagery. |
| [3243] | DRAWING: ADVANCED II [IV] |
|  | (0-6) 3 hours credit. Prerequisite: ART 4233 or consent of instructor. [3233] |
|  | Continuation and refinement of Drawing: Advanced I. [££ $\ddagger$ - -Fer |
|  |  in-an-exhibitien-and-writzen-the545:] |
|  | May be repeated for credit. |
| 4333 | LITHOGRAPHY: ADVANCED I |
|  | (0-6) 3 hours credit. Prerequisite: ART 3323 or consent of |
|  | instructor. |
|  | Continuation and refinement of ART 3323 with emphasis on |
|  | the development of individual imagery in terms of lithography |
| 4343 | LITHOGRAPHY: ADVANCED II |
|  | (0-6) 3 Hours credit. Prereguisite: ART 4333 or consent of |
|  | instructor. |
|  | Continuation and refinement of Lithography: Advanced I. May |
|  | be repeated for credit. |


| 4433 INTAGLIO: ADVANCED I |  |
| :---: | :---: |
|  | (0-6) 3 hours credit. Prerequisite: ART 3423 or consent of |
|  | instructor. |
|  | Continuation and refinement of ART 3423, with emphasis on the |
|  | development of individual imagery in terms unique to intaglio |
|  | or relief processes. |
| 4443 | INTAGLIO: ADVANCED II |
|  | (0-6) 3 hours credit. Prerequisite: ART 4433 or consent of |
|  | instructor. |
|  | Continuation and refinement of ART 4433. May be repeated for |
|  | credit. |
| [3533] | PHOTOGRAPHY: ADVANCED I [ $\ddagger \ddagger \ddagger$ ] |
|  | (0-6) 3 Hours credit. Prerequisite: ART 3523 or consent of instructor. |
|  | Continuation and refinement of Photography: Intermediate II, with emphasis on the development of individual imagery. |
| [3543] | PHOTOGRAPHY: ADVANCED II [İ] |
|  | (0-6) 3 hours credit. Prerequisite: ART 4533 or consent of instructor. [3533] |
|  | Continuation and refinement of Photography: Advanced I. |
|  |  |
|  | witł-eułminate-in-an-exhibitien-and-wpitten-thesis.] <br> Students are expected to provide their own cameras. May be |
|  | repeated for credit. |
| 4673 | SCULPTURE: ADVANCED I |
|  | (0-6) 3 hours credit. Prerequisite: ART 3663 or consent of |
|  | instructor. |
|  | Continuation and refinement of Sculpture: Intermediate II, with |
|  | emphasis on the development of individual imagery as related |
|  | to specific materials. |
| 4683 | SCULPTURE: ADVANCED II |
|  | $(0-6) 3$ hours credit. Prerequisite: ART 4673 or consent of |
|  | instructor. |
|  | Continuation and refinement of Sculpture: Advanced I. May be |
|  | repeated for credit. |
| 4753 | CERAMICS: ADVANCED I |
|  | (0-6) 3 hours credit. Prerequisite: ART 3743 or consent of |
|  | instructor. |
|  | Continuation and refinement of Ceramics: Intermediate II with |
|  | emphasis on the development of individual form. |
| 4763 | CERAMICS: ADVANCED II |
|  | $(0-6) 3$ hours credit. Prerequisite: ART 4753 or consent of |
|  | instructor. |
|  | Continuation and refinement of Ceramics: Advanced I. May be |
|  | repeated for credit. |

4913 INDEPENDENT STUDY
(0-6) 3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's Advisor,
and the Division Director and Dean of the College in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work. May be repeated for credit, but not more than 6 hours will apply to the Bachelor's degree.

4923 SPECIAL PROJECT IN ART
(0-6) 3 hours credit. Prerequisite: Must be taken the semester immediately prior to graduation, with consent of the Division Director.
An exhibition of selected work and a written thesis, both to be completed during the last year and submitted to a faculty committee for approval. The thesis places the work in an aesthetic and historical context.

4953 SPECIAL STUDIES
(0-6) 3 hours credit. Prerequisite: Consent of instructor. An organized course offering specialized study not normally or not often available as part of the regular course offerings. Special Studies Courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a Bachelor's degree.

1113 SURVEY OF ART I：ANCIENT TO MEDIEVAL （3－0） 3 hours credit．
A study of art and architecture of Egypt，the near East and Europe（Western Civilization）from prehistoric times to 1400 A．D．


1123 SURVEY OF ART II：RENAISSANCE TO MODERN
（3－0） 3 hours credit
A study of art and architecture in Europe and the U．S．from 1400 to the present．

1213 SURVEY OF ART OF THE AMERICAS I
（3－0） 3 hours credit．
A study of art and architecture in ancient America to European colonization with special emphasis on Mesoamerica．

1223 SURVEY OF ART OF THE AMERICAS II
（3－0） 3 hours credit．
A study of art and architecture of the Americas from 1500 to the present with special emphasis on Hispanic America．
［3913］INTRODUCTION TO THE FILM
（3－0） 3 hours credit．
A survey of the cinematic art．Creative and technical develop－
ment of the motion picture，aesthetics of the moving image，and major stylistic and thematic tendencies．［A－study－ef－the－majep tendene干е
［3073］ANCIENT ART
（3－0） 3 hours credit．［Prerequisite：－－Consent－of－instractor．］
A study of art and architecture in Persia，Mesopotamia， Egypt，Greece，Crete，and Roman Italy．
［3773］MEDIEVAL ART
（3－0） 3 hours credit．［Prerequisitet－Gensent－ef－instpueter］ A study of Early Christian，Byzantine，Romanesque and Gothic art and architecture in Europe．
［3473］EUROPEAN ART：SEVENTEENTH TO EIGHTEENTH CENTURIES
（3－0） 3 hours credit．［Prepequisitzet－Gensent－of－instpueter．］ A study of the Baroque and Rococo art of Europe in the seventeenth and eighteenth centuries． ［A－sもudy－өf－arも－and－arehíteeture－іА－Eupeper］

3123 NORTHERN EUROPEAN ART：FIFTEENTH AND SIXTEENTH CENTURIES （3－0） 3 hours credit．Prerequisite：Consent of instructor． A study of fifteenth and sixteenth century art of Northern Europe．Emphasls is placed on the development of the arts primartly in Flanders and Germany．

[3573--SPANISH-ARF:- $¥ I S I G \theta F H \mp 6-F \theta-B A R Q Q U E$

A-study-ef-art-and-arehiteeture-fa-Spain-]
[3533--SPANISH-ANB-SPANISH-AMERIEAN-ARF--SIXFEENFH-FO EIGHFEENFH-6ENFURIES

A-study-
3613 HISTORY OF MODERN ARCHITECTURE
(3-0) 3 hours credit. Prerequisite: Upper-division standing.
A study of modern architecture - its origins and its tech-
nological and philosophical evolution from the nineteenth
century to the present.
3623 HISTORY OF ANCIENT AND COLONIAL ARCHITECTURE IN MEXICO AND GUATEMALA
(3-0) 3 hours credit. Prerequisite: Upper-division standing.
A study of Pre-Columbian and Colonial Architecture in Mexico
and Guatemala from 1500 B.C. to 1800 A.D.
3813 HISTORY OF PHOTOGRAPHY
$(3-0) 3$ hours credit. Prerequisite: Consent of instructor.
The history of photography from its inception to the present.
3923 HISTORY AND ART OF FILM I
(3-0) 3 hours credit. Prerequisite: AHC 1913 [HA6-3793] or consent of instructor.
The history of film [the-meries] up to the era of sound.
3933 HISTORY AND ART OF FILM II
(3-0) 3 hours credit. Prerequisite: AHC 1913 [HAG-3973] or consent of instructor.
The history of film [the-mevies] from the beginning of the sound era to the present.

4113 CONTEMPORARY ART OF THE U.S.
(3-0) 3 hours credit. Prerequisite: Consent of instructor. A study of the major movements in the visual arts in the United States from 1940 to the present.

4133 MEXICAN AMERICAN ART
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
A study of contemporary Hispano, Mexican American and
Chicano Art.
4143 ART AND ARCHITECTURE OF THE SOUTHWEST
( $3-0$ ) 3 hours credit. Prerequisite: Consent of instructor. A study of the art and architecture in the American Southwest and northern Mexico with special emphasis on New Mexico: seventeenth to nineteenth centuries.
[4273--SPANISH-AMERIGAN-ARF?-HINEFEENFH-ANB-FWENFIEFH-GENFURIES

 and-Argentina.]

## [4373--MEXIGAN-MURAEISM




4413 CONTEMPORARY MEXICAN ART
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
A study of twentieth century art and architecture in Mexico, especially the Muralists.

4423 CONTEMPORARY ART OF LATIN AMERICA
(3-0) 3 hours credit. Prerequisite: Consent of instructor. A study of twentieth century art and architecture in Venezuela, Colombia, Peru, Chile, Argentina, Brazil, Bolivia and Uruguay.

4813 ART CRITICISM
(3-0) 3 hours credit. Prerequisite: Consent of instructor. An examination of the principles and methods of critical analysis of works of art, as well as the role and influence of the art critic. Assignments include readings of selected critical texts and exercises in critical writing.

## BACHELOR OF FINE ARTS DEGREE

## WITH A CONCENTRATION IN ARCHITECTURAL DESIGN

The Bachelor of Fine Arts Degree with a concentration in Architectural Design is a five year professional degree. The University of Texas at San Antonio offers the final three years of the five year program.

Students are admitted to the degree program after completing a minimum of 36 semester hours of lower-division courses at an institution other than the University of Texas at San Antonio, *distributed as follows:

8 semester hours of studio drawing or rendering
14 semester hours of architectural design and graphics studies
8 semester hours of construction, including both materials and statics
6 semester hours of the history of architecture
The following courses, which may be included in the University of Texas at
San Antonio's 50 hour General Education Requirements, are prerequisites for upperdivision Architectural Design courses:

MAT 1213 CALCULUS I
PHY 1903 TECHNICAL PHYSICS I
PHY 1911 TECHNICAL PHYSICS I LAB
PHY 1923 TECHNICAL PHYSICS II
PHY 1931 TECHNICAL PHYSICS II LAB
OR
MAT 1213 CALCULUS I
PHY 1803 PHYSICS FOR LIFE SCIENCES I
PHY 1811 PHYSICS FOR LIFE SCIENCES I LAB
PHY 1823 PHYSICS FOR LIFE SCIENCES II
PHY 1831 PHYSICS FOR LIFE SCIENCES II LAB
*Information on lower division courses available at other institutions which satisfy the requirements for this degree is available from the Division of Art and Design or from the University of Texas at San Antonio Admissions Office.

The minimum number of semester hours required for the B.F.A. degree with a concentration in Architectural Design is 162 , including the 36 semester hours to be completed at another institution and the 50 hours of General Education Requirements.

All candidates for the degree must complete:
A. One hundred semester hours in the major. Thirty-six semester hours must be at the lower-division level from an institution other than the University of Texas at San Antonio. The remaining sixty-four semester hours must be at the upper-division level, and must consist of the following courses:

ARC 3115 ARCHITECTURAL DESIGN STUDIO I
ARC 3125 ARCHITECTURAL DESIGN STUDIO II
ARC 3234 CONSTRUCTION III
ARC 3244 CONSTRUCTION IV
ARC 3313 ENVIRONMENTAL CONTROL SYSTEMS I
ARC 3323 ENVIRONMENTAL CONTROL SYSTEMS II
ARC 3413 ARCHITECTURAL DOCUMENTS I
ARC 3423 ARCHITECTURAL DOCUMENTS II
ARC 4135 ARCHITECTURAL DESIGN STUDIO III
ARC 4145 ARCHITECTURAL DESIGN STUDIO IV
ARC 4156 ARCHITECTURAL DESIGN STUDIO V
ARC 4166 ARCHITECTURAL DESIGN STUDIO VI
ARC 4513 ARCHITECTURAL PRACTICE
ARC 4613 CONSTRUCTION MANAGEMENT
and six additional semester hours of elective Architectural Design courses at the upper-division level chosen from the following:

ARC 4623 HISTORIC PRESERVATION
ARC 4633 SITE PLANNING AND LANDSCAPING
ARC 4643 INTERIOR DESIGN
ARC 4653 ARCHITECTURAL MARKETING AND MANAGEMENT
B. Twelve semester hours of support work including the following six semester hours in Art History and Criticism:

AHC 3613 HISTORY OF MODERN ARCHITECTURE
AHC 3623 HISTORY OF ANCIENT AND COLONIAL ARCHITECTURE IN MEXICO AND GUATEMALA
and six semester hours of electives in Environmental Studies.

## COURSE DESCRIPTIONS

## ARCHITECTURAL DESIGN <br> (ARC)

| 3115 | ARCHITECTURAL DESIGN STUDIO I |
| :---: | :---: |
|  | (0-10) 5 hours credit. Prerequisite: Required lower-division |
|  | Architectural Design courses. |
|  | The study of the process of researching, programming and |
|  | developing physical design solutions. |
| 3125 | ARCHITECTURAL DESIGN STUDIO II |
|  | (0-10) 5 hours credit. Prerequisite: ARC 3115. |
|  | Continuation of the study of the process of researching, |
|  | programming and developing physical design solutions. |
| 3234 | CONSTRUCTION III |
|  | (3-3) 4 hours credit. Prerequisite: MAT 1213, PHY 1903 or |
|  | PHY 1803 or concurrent registration, and required lower-division |
|  | Architectural Design courses or consent of instructor. |
|  | The study of the design and behavior of structural steel and |
|  | timber systems, including the application of building specifi- |
|  | cations. |
| 3244 | CONSTRUCTION IV |
|  | (3-3) 4 hours credit. Prerequisite: PHY 1923 or PHY 1823 or |
|  | concurrent registration and ARC 3234. |
|  | The study of the design and behavior of structural concrete |
|  | systems including the application of building specifications. |
| 3313 | ENVIRONMENTAL CONTROL SYSTEMS I |
|  | (3-0) 3 hours credit. Prerequisite: Required lower-division |
|  | Architectural Design courses or consent of instructor. |
|  | Qualitative and quantitative study of heating, ventilating, |
|  | cooling, plumbing and mechanical movement systems, and their |
|  | integration into a building system. |
| 3323 | ENVIRONMENTAL CONTROL SYSTEMS II |
|  | (3-0) 3 hours credit. Prerequisite: ARC 3313. |
|  | A qualitative and quantitative study of acoustical, electrical |
|  | and Illumination systems, and their integration into a building |
|  | system. |
| 3413 | ARCHITECTURAL DOCUMENTS I |
|  | (3-0) 3 hours credit. Prerequisite: Upper-division standing. |
|  | An introduction to the technical documents of building |
|  | construction, their preparation and use in communication |
|  | between the architect and other professional consultants. |
| 3423 | ARCHITECTURAL DOCUMENTS II |
|  | (3-0) 3 hours credit. Prerequisite: ARC 3413. |
|  | A continuation of the study of technical documents of building |
|  | construction, their preparation and use in communication between |
|  | the architect and other professional consultants, with emphasis |
|  | on working drawings, specifications and building codes. |


| 4135 | ARCHITECTURAL DESIGN STUDIO III |
| :---: | :---: |
|  | (0-10) 5 hours credit. Prerequisite: ARC 3125. |
|  | Further development of design problems integrating structural |
|  | and mechanical systems for complete destign solutions to |
|  | various building types. |
| 4145 | ARCHITECTURAL DESIGN STUDIO IV |
|  | (0-10) 5 hours credit. Prerequisite: ARC 4135. |
|  | Continuation of the development of design problems integrating |
|  | structural and mechanical systems for complete design solutions |
|  | to various building types. |
| 4156 | ARCHITECTURAL DESIGN STUDIO V |
|  | (1-10) 6 hours credit. Prerequisite: ARC 4145. |
|  | A comprehensive study of the planning and designing of large- |
|  | scale urban development projects in collaboration with other |
|  | disciplines and with emphasis on social, political and economic |
|  | systems that influence the physical environment. |
| 4166 | ARCHITECTURAL DESIGN STUDIO VI |
|  | (1-10) 6 hours credit. Prerequisite: ARC 4156. |
|  | A continuation of the study of the planning and designing of |
|  | large-scale urban development projects in collaboration with |
|  | other disciplines and with emphasis on social, political and |
|  | economic systems that influence the physical environment. |
| 4513 | ARCHITECTURAL PRACTICE |
|  | (3-0) 3 hours credit. Prerequisite: ARC 4135. |
|  | A study of the standards of architectural practice, professional |
|  | responsibilities, contracts, bonds and ordinances, architectural |
|  | partnerships, and other considerations of professional practice. |
| 4613 | CONSTRUCTION MANAGEMENT |
|  | ( $3-0$ ) 3 hours credit. Prerequisite: ARC 3244. |
|  | The study of the process of construction and its management. |
| 4623 | HISTORIC PRESERVATION |
|  | $(3-0) 3$ hours credit. Prerequisite: Upper-division standing. |
|  | A study of the preservation of old structures and their |
|  | adaptive re-use in terms of legal, technical and aesthetic |
|  | factors, with special emphasis on regional architecture. |
| 4633 | SITE PLANNING AND LANDSCAPING |
|  | (3-0) 3 hours credit. Prerequisite: ARC 3125. |
|  | A study of the form and organization of natural and constructed |
|  | sites with emphasis on landscaping and the placement of |
|  | buildings, and other site considerations. |
| 4643 | INTERIOR DESIGN |
|  | $(3-0) 3$ hours credit. Prerequisite: ARC 3125. |
|  | The theory and application of interior architectural programming |
|  | and design processes with emphasis on graphics, furnishings |
|  | and accessories, and methods of selection. |
| 4653 | ARCHITECTURAL MARKETING AND MANAGEMENT |
|  | (3-0) 3 hours credit. Prerequisite: ARC 3125. |
|  | A study of the business and economics of marketing and manage- |
|  | ment in architectural practice. |

## DIVISION OF MUSIC

## BACHELOR OF MUSIC EDUCATION DEGREE

The minimum number of semester hours required for this degree, including the 50 hours of General Education Requirements, is 132* for the choral emphasis and 135* for the instrumental emphasis. [737] Candidates for the Bachelor of Music Education degree with a choral emphasis must complete 58 semester hours in the major, and candidates for the Bachelor of Music Education degree with an instrumental emphasis must complete 61 semester hours in the major. [Alt-eandidates-fer-the degree-must-cemplete-63-semestep-heups-in-the-majer:] 30 hours must be at the upper-division level. Students may select [єemplete-the-63-keups-in] one of four [邨] emphases: Secondary Choral, [өp]All-level Choral, Secondary Instrumental or All-level Instrumental.
A. Secondary Choral Emphasis

1. Forty-two [sevea] semester hours in music are required:

2. Sixteen semester hours in [applied] music performance are required:
 ance-Secondary Instrument or
MUS 1522 [7737] Class Piano
MUS $\overline{1532}$ [2722] Music Performance-Private Instruction I [Applied

MUS 2542［4722］Music Performance－Private Instruction II［Appifed Musfe］
MUS 3532 Music Performance－Private Instruction III
These courses may be repeated for credit to fulfill the 16 －hour requirement．
［5：－－－－－Ane－semester－hour－of－efectives－in－music－is－required：］
5．［67］Special degree requirements．All students majoring in music are required（a）to make one recital appearance during the last semester of study on his principal instrument，（b）to perform in a university ensemble each term in residence including summer terms，（c）to meet music performance proficiency standards established for［applied］ principal［5］and secondary instruments．Students who do not meet these standards are required to repeat music performance courses． ［applied－ceursesr］

B．All－level Choral Emphasis：
1．Forty－two［six］semester hours in music are required：［fep－the
Ał子－łere子－6herał－Emphasis．］

| MUS 1101 | ［7277］Music Reading I |
| :---: | :---: |
| MUS $\overline{1713}$ | ［7日73］Basic Skills of Music I |
| MUS 1121 | ［7227］Music Reading II |
| MUS $\overline{1733}$ | ［7023］Basic Skills of Music II |
| MUS 2101 | ［7237］Music Reading III |
| ［MUS－2773－ |  |
| MUS 2121 | ［7247］Music Reading IV |
| ［MUS－2723－ | Basít－Skif7s－өf－Musite－£ł］ |
| ［MUS－22203－ |  |
| MUS 2314 | Theoretical Studies in Music Literature I |
| MUS 2325 | Theoretical Studies in Music Literature II |
| MUS 2402 | ［2742］Conducting I |
| MUS 2412 | ［2752］Conducting II |
| MUS 3112 | Analysis I |
| MUS 3122 | Analysis II |
| MUS 3213 | Music in Western Civilization I |
| MUS 3223 | Music in Western Civilization II |
| MUS 3413 | ［3573］Music in the Elementary School |
| MUS 3463 | ［3533］General Music in the Junior High School |
| ［MUS－35日2－ | Gererał－Musíє－Materiałs－for－Ełementary and－duniex－High－S $\epsilon$ heel］ |
| ［MUS－3752－ |  |
| ［MUS－3762－ |  |
| MUS 4423 | ［3523］Creative Music Experiences in the Elementary School |

2．Sixteen semester hours in［applied］music performance are required：
MUS 1511 Music Performance－Secondary Instrument or


MUS 1522 [773ł] Class Piano
MUS 1532 [2722 Applied Music] Music Performance-Private InstrucMUS 2542 Music Performance-Private $\bar{I} n s t r u c t i o n ~ I I ~[4722-A p p l i e d ~$ Musite]
MUS 3532 [3572] Music Performance-Private Instruction III
These courses may be repeated for credit to fulfill the 16 -hour requirement.

5. [6] Special degree requirements. All students majoring in music are required (a) to make one recital appearance during the last semester of study on his principal instrument, (b) to perform in a university ensemble each term in residence including summer terms, (c) to meet music performance proficiency standards established for [applied] principal [3] and secondary instruments. Students who do not meet these standards are required to repeat music performance courses. [appifed-eeurses]

## C. Secondary Instrumental Emphasis

1. Forty-five semester hours in music are required:

MUS 1101 Music Reading I
MUS 1113 Basic Skills of Music I
MUS 1121 Music Reading II
MUS 1133 Basic Skills of Music II
MUS 2101 Music Reading III
MUS 2121 Music Reading IV
MUS 2314 Theoretical Studies in Music Literature I
MUS 2325 Theoretical Studies in Music Literature II
MUS 2402 Conducting I
MUS 2412 Conducting II
MUS 3112 Analysis I
MUS 3122 Analysis II
MUS 3132 Orchestration or
MUS 3142 Band Arranging
MUS 3213 Music in Western Civilization I
MUS 3223 Music in Western Civilization II
MUS 3431 Class Instrument Techniques: ETementary School
(4 sections required)
MUS 3442 [4742T Intermediate Conducting and Rehearsal Techniques: Secondary Schoo 1
MUS 3452 [4752] Advanced Conducting and Rehearsal Techniques:
Secondary School
MUS 4452 Marching Band Techniques
2. Sixteen hours in music performance are required:

MUS 1511 Music Performance: Secondary Instrument or MUS 1522 CTass Piano

MUS 1532 Music Performance - Private Instruction I
MUS 2542 Music Performance - Private Instruction II MUS 3532 Music Performance - Private Instruction III

These courses may be repeated for credit to fulfill the 16 -hour requirements.
3. Twenty semester hours in professional education (including six hours of student teaching) are required.
4. Four additional semester hours of general education for certification (three hours of speech electives and EDU 2001) are required.
5. Special degree requirements. All students majoring in music are required (a) to make one recital appearance during the last semester of study on his principal instrument, (b) to perform in a university ensemble each term in residence including summer terms, (c) to meet music performance proficiency standards established for principal and secondary instruments. Students who do not meet these standards are required to repeat music performance courses.
D. All-level Instrumental Emphasis

1. Forty-five semester hours in music are required:

2. Sixteen hours in music performance are required.

MUS 1511 Music Performance: Secondary Instrument or MUS 1522 Class Piano
MUS 1532 Music Performance-Private Instruction I
MUS 2542 Music Performance-Private Instruction II
MUS 3532 Music Performance-Private Instruction III
These courses may be repeated for credit to fulfill the 16 -hour requirement.
3. Twenty semester hours in professional education (including six hours of student teaching) are required.
4. Four additional semester hours of general education for certification (three hours of speech electives and EDU 2001) are required.
5. Special degree requirements. All students majoring in music are required (a) to make one recital appearance during the last semester of study on his principal instrument, (b) to perform in a university ensemble each term in residence including summer terms, (c) to meet music performance proficiency standards established for principal and secondary instruments. Students who do not meet these standards are required to repeat music performance courses.

MUSIC
（MUS）

| 1101 ［727t］ | MUSIC READING I <br> （1－1） 1 hour credit Provides training in sight singing，aural skills ［调agery］，and keyboard application［development ef－basice－musicianshiar］Should be taken concurrently with MUS 1113 ［7日73］ |
| :---: | :---: |
| 1113 ［7073］ | BASIC SKILLS OF MUSIC I <br> （3－0［t］） 3 hours credit <br> A survey of basic fundamentals and concepts of music． Emphasis on rudiments and melody，with an introduction to harmony．Materials from a variety of style periods <br>  <br>  MUS－7277\％］Should be taken concurrently with MUS 1101. ［7277］ |
| 1121［722ł］ | MUSIC READING II <br> （1－1） 1 hour credit．Prerequisite：MUS 1101 ［727＋］ <br> or the equivalent． <br> Continued training in sight singing，aural skills ［imagery］and keyboard with emphasis on harmonic skills and twentieth century materials．Should be taken con－ <br>  <br>  <br>  MU8－7023ヶ］ |
| 1133 ［7923］ | BASIC SKILLS OF MUSIC II <br> （3－0［7］） 3 hours credit．Prerequisite：MUS 1113 ［7073］ or the equivalent． <br> Development of harmonic analytical and writing skills． Analytical techniques applied to music from a variety of style periods．［A－supvey－ef－fundamentałs－and－e日A－ <br>  eө日fesitien <br>  with－MUS－722t：］ |
| 1511［7727］ | MUSIC PERFORMANCE－SECONDARY INSTRUMENT <br> ［7727－APPEIEB－MUSI6－I］ <br> （1－0） 1 hour credit． <br> Private instruction for students desiring or required to study as secondary instruments［ $\beta$ qan日；－өpgans－өp－vөiee： May－be－repeated－fop－erediє－］the following：baritone， bassoon，clarinet，contrabass，cornet，flute，guitar， horn，oboe，organ，percussion，piano，saxophone，trombone， trumpet，tuba，viola，violin，violoncello，voice．May be repeated for credit． |
| $\underline{1522 ~[7737] ~}$ | CLASS PIANO （2－1） 2 ［7］hours credit．Prerequisite：Placement examination． <br> Keyboard skills and sight reading ability developed． May be repeated for credit． |

(1-0) 1 hour credit. Prerequisite: Placement examination. For students with no previous vocal training. Fundamentals of voice technique developed including in-class performances of suitable songs. May be repeated for credit.

1532 MUSIC PERFORMANCE-PRIVATE INSTRUCTION I
(T-0) 1 hour credit. Prerequisite: Placement by examination.
Private instruction for students desiring or required to study the following instruments: baritone, bassoon, clarinet, contrabass, cornet, flute, guitar, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, violoncello, voice. May be repeated for credit.

2101 [7237] MUSIC READING III
(1-1) 1 hour credit. Prerequisite: MUS 1121 [ $722 \ddagger$ ] or the equivalent.
Sight singing, aural skills and keyboard techniques applied to literature and theoretical skills drawn from MUS 2314. [Advaneed-training-in-sighat-singing

 Sheułd-be-zzken-e日aєuppent7y-with-MUS-z773.7
[2773---BASIE-SKIt
 еянivałent:


 MUS-7237-]

2121 [7244] MUSIC READING IV
(1-1) 1 hour credit. Prerequisites; MUS 2101 [ 7237 ] and MUS 2314 [2773] or the equivalents.
Application of skills to materials drawn from MUS 2325.

 mełedit-materiałr] Should be taken concurrently with MUS 2325. [2723]
[2+2Z BASIG-SKIEES- $\theta$ F-MHSIE-IY
 еянічаłентт





2141 COMPOSITION I
(1-0) I hour credit. Prerequisite: MUS 1101, 1113, and consent of instructor. Eundamentals of composition.

2151 COMPOSITION II
(1-0) 1 hour credit. Prerequisite: MUS 2141 and consent of instructor.
Fundamentals of composition in small forms.

 еqнivałent：
 researeh－teehniques－for－musie－majors：－A－stryey－ef－the－



2314 THEORETICAL STUDIES OF MUSIC LITERATURE I
（4－0） 4 hours credit．Prerequisite：MUS 1121， 1133. A team－taught course involving theoretical analysis of harmony，melody，and form；stylistic identity；per－ formance practice；historical perspective；and writing techniques of music．Organized by performance media．

2325 THEORETICAL STUDIES OF MUSIC LITERATURE II
$(5-0) 5$ hours of credit．Prerequisite：MUS 2314. As MUS 2314，but with more emphasis on theoretical aspects and skilis．
［2742］CONDUCTING I
（2－0［7］） 2 hours credit．Prerequisite：MUS 1113 ［2773］ or the equivalent．
Fundamentals of beat patterns，baton use，score reading， and practical experience．

2412 ［2752］CONDUCTING II
（2－0［7］）2 hours credit．Prerequisite：［MUS－2ł73－өャ］ MUS 2402 ［2742］or the equivalent．
Fundamentals of beat patterns，full score reading，choral and instrumental rehearsal techniques．

2542 MUSIC PERFORMANCE－PRIVATE INSTRUCTION II
E27EZ2－APPEFEB－MUSIE］
（1－0） 2 hours credit．Prerequisite：MUS 1532 or
placement by examination．
Private instruction for students desiring or required to study the following instruments：baritone，bassoon， clarinet，contrabass，saxophone，trombone，trumpet，tuba， viola，violin，violoncello，voice．May be repeated for
 these－are－their－ppineipat－instruments：－－May－be－repeated fer－epediぁも：］

2603 BEGINNING GUITAR
（3－0） 3 hours credit．
An introductory course primarily for the non－music major． Tuning，hand positions，chords，accompaniment patterns， Strumming，finger－picking and bar technique．
2613 INTERMEDIATE GUITAR
（3－0） 3 hours credit．Prerequisite：MUS 2603 or equiva－ lent．
Primarily for the non－music major，the course includes development of accompaniment style，scales，music reading， melody playing，and solo guitar techniques．

2633 MUSICAL STYLES AND MATERIALS FOR THE NON-MUSIC MAJOR (3-0) 3 hours credit. A non-techinical survey of musical styles and traditions, emphasizing listening skil1s and background information for the concert goer and the listener who wishes to bufld a library of fine recordings.

3112 ANALYSIS I
(2-0) 2 hours credit. Prerequisites: MUS 2121 Lł24ł] and MUS 2325 [2723] or the equivalents.
Analytical techniques applied to all parameters in selected works from a variety of style periods. Structural analysis of smalier musical forms. [Hapmenie-and-stpuetuf-


3122 ANALYSIS II
(2-0) 2 hours credit. Prerequisite: MUS 3112 or the equivalent.
Analysis of structures and other parameters applied to larger musical forms selected from a variety of style pertods. [Hapmente-and-stpueturat-anatysts-9f-7apgep


3132 ORCHESTRATION
(2-0) 2 hours credit. Prerequisite: MUS 2121, 2325.
Applied instrumentation, emphasizing idiomatic scoring for various orchestral combinations with an approach to writing for full orchestra.

3142 BAND ARRANGING
(2-0) 2 hours credit. Prerequisite: MUS 2121, 2325 or equivalent. A practical approach to planning and writing arrangements for band.
[3362] CHORAL ARRANGING
(2-0[7]) 2 hours credit. Prerequisite: MUS 2325 [2łz3] or the equivalent.
Practical studies in arranging for choral ensembles with emphasis on successful writing [suitabłe-matewłat] for secondary school choirs.

3161 COMPOSITION III
(1-0) 1 hour credit. Prerequisite: MUS 2121, 2151, 2325; and consent of instructor.
Individual study in applfed composition with emphasis on expansion of musical materials.

3171 COMPOSITION IV
(1-0) 1 hour credit. Prerequisite: MUS 3161; consent of instructor.
Individual study in applied composition with emphasis on expansion of musical materials leading to larger forms.

3213 MUSIC IN WESTERN CIVILIZATION I
(3-0[7]) 3 hours credit. Prerequisite: MUS 2325 [2203] or the equivalent.
A study of music in the Medieval, Renaissance, and Baroque, [and-etassite-musie] periods.

3223 MUSIC IN WESTERN CIVILIZATION II
(3-0[7]) 3 hours credit. Prerequisite: MUS 2325 [3273] or the equivalent.

thregigh-the] Romantic and Contemporary periods.
3253 SPECIAL STUDIES IN MUSIC LITERATURE
(3-0) 3 hours credit. Prerequisites: [MUS-32ł3;-MUS-3233
$\theta$ © ] Upper-division standing. [and-eөasent- $\theta$ f-instrueter]
Two or more sections may be taken concurrently.
Sections: 1. String Chamber music; 2. Wind Chamber music;
3. History of Song; 4. Orchestral Literature; 5. History
and literature of the guitar; 6. Choral literature from
1400 to 1825; 7. Choral literature from 1825 to present;
8. History and literature of the keyboard up to 1750; 9.

Literature of the Pianoforte; 10. Organ Literature;
11. The Operatic Tradition; 12. The Instrumental Concerto.
[3573] MUSIC IN THE ELEMENTARY SCHOOL
(3-1) 3 hours credit. Prerequisites: MUS 2325 [2723]
[MUS-2577] or the equivalent and upper-division standing in music.
Methods of instruction, organization, and presentations of appropriate content in music for the elementary school.

3431 CLASS INSTRUMENT TECHNIQUES: ELEMENTARY SCHOOL
(2-0) 1 hour credit. Prerequisite: MUS 1133 or equivalent.
A class to gain the knowledge necessary for instrumental
teachers in the public schools in the following areas:
Section 1. Strings; 2. Brass; 3. Woodwinds; 4. Percussion. Two or more sections may be taken concurrently.
[4742] INTERMEDIATE CONDUCTING AND REHEARSAL
TECHNIQUES: SECONDARY SCHOOL
(2-0[7]) 2 hours credit. Prerequisite: MUS 2412 [2752] or the equivalent.
Baton study, introduction of major works. Further study of regular and asymmetric meters, and polymeters. Section 1. Choral. Section 2. Instrumental.
[4762] ADVANCED CONDUCTING AND REHEARSAL TECHNIQUES: SECONDARY SCHOOL
(2-0[7]) 2 hours credit. Prerequisite; MUS 3442 [474z] or the equivalent.
Continuation of MUS 3442 [4742] with emphasis on expressive conducting, score interpretation and artistic ensemble performance. Section 1. Choral. Section 2. Instrumental.
[3533] GENERAL MUSIC IN THE JUNIOR HIGH SCHOOL
(3-0[7]) 3 hours credit. Prerequisite: Upper-division standing in music. The objectives, contents and methods in the teaching of general music in the middle or junior high school. Special attention is also given to problems related to the changing voice.
［35ӨZ－－GENERAL－MUSIE－MAFERIALS－F日R－EEEMENFARY－ANB－$\partial U N I \Theta R-H I G H$ S6HOOL

 Besigned－t $\theta-$ present－the－materiats－and－repepteire－necessapy for－teaehing－in－the－fipst－eight－grades：］
［3762］DICTION：ENGLISH AND FRENCH
（2－0） 2 hours credit．Prerequisite：Upper－division standing．
Study of French and English pronunciation for singers； the pronunciation of both languages as it applies to public performance．
［3762］DICTION：ITALIAN AND GERMAN
（2－0） 2 hours credit．Prerequisite：Upper－division standing．
Study of Italian and German pronunciation for singers； the pronunciation of both languages as it applies to public performance．
［3552 CHORAL－MAFERIALS－FOR－HIGH－SEHO日L－GHOIRS
（2－





［4722］MUSIC PERFORMANCE－PRIVATE INSTRUCTION III EAPPEIED－MUSIE－III］
（1－0） 2 hours credit．Prerequisite：MUS 2542［2722］or placement by examination．
Private instruction for students desiring or required to study the following instruments：baritone，bassoon， clarinet，contrabass，cornet，flute，guitar，horn，oboe， organ，percussion，piano，saxophone，trombone，trumpet， tuba，viola，violin，violoncello，voice．May be re－
 dents－fөrwhem－these－are－their－ppineipał－instpuments．
May－be－pepeated－fop－epeditz子
3554 MUSIC PERFORMANCE－PRIVATE INSTRUCTION
（4－0） 4 hours credit．Prerequisite：Upper division standing and consent of instructor．
Private instruction at an advanced level in baritone， bassoon，clarinet，contrabass，cornet，flute，guitar， horn，oboe，organ，percussion，piano，saxophone，trom－ bone，trumpet，tuba，viola，violin，violoncello，voice． May be repeated for credit．
［3233］MUSIC OF THE AMERICAS
（3－0） 3 hours credit．［Pperequisitiest－－MHS－2203－and－MHS
2723－өp－捉e－еquivałents－子
Study of the indigenous and borrowed traditions in the music of the Americas from the Colonial period to the present．

MASTERPIECES OF MUSIC
（3－0） 3 hours credit．
A study of individual works selected from and representa－ tive of the musical traditions of the Western world． Background information on social setting and function， historical importance，aesthetics，and composer＇s biog－ raphies．
[3493] MUSIC FOR THE CLASSROOM TEACHER
(3-1) 3 hours credit. [Prepequisitet-MUS-7日73-өp-the еquivatent-and-upper-divisten-standing-in-musie-op-edueatien.]
Development of the classroom music program in the elementary school, including techniques and materials.

3701 [3677] MADRIGAL SINGERS
(0-3) 1 hour credit. Prerequisite: Consent of instructor by audition.
An ensemble specializing in the performance of outstanding chamber choral music from the middle ages to the present. Previous musical experience and reading ability required. The ensemble performs on and off campus
and touring is required of all members.
 muste-majer $]$ May be repeated for credit.

3712 [3622] CONCERT CHOIR [GFSA-GHORALE]
$(0-5) 2$ hours credit. Prerequisite: Consent of instructor by audition.
An ensemble whose repertoire is chosen from both sacred and secular literature. Serious music is emphasized.
 musie-majop.] May be repeated for credit.

3721 UTSA CHORUS
$(0-2)$ Thour credit
This choral ensemble is open to all students.
UTSA Chorus sings light music including folk music and popular music. The ensemble performs for campus and civic activities. May be repeated for credit.

3731 WOMEN'S CONCERT CHOIR
$(0-3) 1$ hour credit. Open to all women by audition. Repertoire includes works from all periods of music including lighter and popular styles. May be repeated for credit.

3742 [3642] UTSA WIND ENSEMBLE
(0-5) 2 hours credit. Prerequisite: Consent of instructor. The wind ensemble studies, rehearses and performs the repertoire for various combinations of wind instruments. May be repeated for credit.

3751 SYMPHONIC BAND
(0-3) I hour credit. Open by audition. Ensemble performs traditional repertoire for the full symphonic band. May be repeated for credit.

3761
CHAMBER ORCHESTRA
$(0-3)$ Thour credit. Open to all students by audition. The Chamber Orchestra studies, rehearses and performs the repertoire from all periods for small orchestral combinations. May be repeated for credit.

| 3771 |  |
| :---: | :---: |
|  | (0-3) I hour credit. Open to all students by audition. |
|  | various streams of jazz and other music appropriate to |
|  | stage bands and jazz ensembles. May be repeated for credit. |
| [3623] | CREATIVE MUSIC EXPERIENCES IN THE ELEMENTARY SCHOOL (3-1) 3 hours credit. Prerequisite: MUS 3653 [3493] or MUS 3413 [3573-2Ad] <br>  <br> Study of music activities for the elementary schools: rhythm, singing, making and playing of simple instruments accompanying instruments, listening, and bodily movement. |
| 4452 | MARCHING BAND TECHNIQUES <br> (2-0) 2 hours credit. Prerequisite: MUS 2325 |
|  | fechniques for the development of a marching band are presented for prospective band directors. |
| 4512 | PIANO PEDAGOGY |
|  | (2-0) 2 hours credit. Prerequisite: Upper division |
|  | standing in music. Survey of techniques, practices, and |
|  | materials of teaching piano. Development of technique |
|  | and style. Review of materials for beginning, intermedi- |
|  | ate, and advanced students. |
| 4522 | VOICE PEDAGOGY |
|  | (2-0) 2 hours credit. Prerequisite: Upper division |
|  | standing in music. Survey of techniques, practices, and |
|  | materials of teaching voice. Review of materials for be- |
|  | ginning, intermediate, and advanced students. |
| 4532 | PEDAGOGY OF ORCHESTRAL INSTRUMENTS |
|  | $(2-0) 2$ hours credit. Prerequisite: Upper division stand- |
|  | ing in music. Survey of techniques, practices and mater- |
|  | ials of teaching the orchestral instruments. Review of |
|  | materials for beginning, intermediate, and advanced stu- |
|  | dents. Section 1. Strings; Section 2. Brass; Section 3. |
|  | Woodwinds; Section 4. Percussion. |
| 4542 | ORGAN PEDAGOGY |
|  | (2-0) 2 hours credit. Prerequisite: Upper division stand- |
|  | ing in music. Survey of techniques, practices, and mater- |
|  | ials of teaching organ. Development of technique and |
|  | style. Review of materials for beginning, intermediate, |
|  | and advanced students. |

4554 MUSIC PERFORMANCE-PRIVATE INSTRUCTION
(4-0) 4 hours credit. Prerequisite: MUS 3554 or equivalent and consent of instructor.
Private instruction at an advanced level in baritone, bassoon, clarinet, contrabass, cornet, flute, guitar, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, violoncello, voice. May be repeated for credit.

4561 SENIOR RECITAL
(1-0) 1 hour credit. Prerequisite: Consent of Instructor. A public performance presented as a culmination of the student's private instruction.

4581 [4781] CHAMBER MUSIC
(1-0) 1 hour credit. Prerequisite: Upper-division standing in music.
Designed to provide students with knowledge of chamber music literature and to perform this repertoire.


4983 HONORS SEMINAR
(3-0) 3 hours credit. Prerequisite: Overall university GPA of 3.0 and GPA of 3.5 in music courses, and consent of instructor.
An undergraduate seminar 1 imited to music majors in one of their last two semesters who quallfy to graduate with Divisional Honors in Music. Intensive analytical/ historical study of a topic to be designated by the instructor.

COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

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\begin{gathered}
\text { DIVISION OF ENGLISH, CLASSICS, } \\
\text { AND PHILOSOPHY }
\end{gathered}
$$

The aim of the Division of English, Classics, and Philosophy is to assist in providing the kind of liberal education which will allow each student to realize his or her full intellectual potential. To this end, the Division offers a variety of courses designed to introduce all students to our literary and philosophical heritage, to develop their abilities in both written and oral communication, and to prepare them for graduate study or entrance to professional programs or schools.
A. Thirty semester hours in English (in addition to the nine hours of English in the General Education Requirements) [t] of which 21 must be at the upper-division level.

## Included are the following required courses: [Requifed-є日uғses-afet]


ENG 2253 [ENG-3073]
ENG 4973 Seminar for English Majors or
ENG 4983 Honors Seminar
B. Twelve semester hours of upper-division support work, at least six hours of which must be at the upper-division level in a single field to be chosen from the following: 1) foreign languages, literature (including courses in translation), and culture and civilization; 2) linguistics (including linguistics courses designated ENG provided that they have not been counted toward the required thirty semester hours in English), and [speeeh-] communications; 3) history, anthropology, and political science; 4) classics, philosophy, and humanities; 5) history and theory of art and of music; 6) other subjects as may be individually justified by the student and approved by the undergraduate advisor and Division Director.
C. Students who select a support area other than number 4, above, may apply six hours of upper-division Humanities courses toward the English major.
D. Twenty-eight semester hours of free electives.

A student whose grade-point average in English prior to the beginning of his or her final [子ast] year at UT San Antonio is 3.5 or above may petition the Division for permission to work for honors in English. A student seeking honors in English must complete [eneełt-in] ENG 4983 [4723] during [in] his or her final [semestep-at-The-Haizepsity.] year. To graduate with honors in English, a student must have a final grade-point average of 3.5 or above in the major.

## COURSE DESCRIPTIONS

ENGLISH
(ENG)
1013 FRESHMAN [ENGEISH] COMPOSITION
(3-0) 3 hours credit. Intensive study of the fundamentals of expository English prose. Emphasis on syntax, paragraph development, and organization of themes. Frequent practice in writing expository themes. (This course or the equivalent is required of all undergraduates [undefgraduate-students] in partial fulfillment of General Education Requirements and must be taken during the first semester of their freshman year.

1023 INTRODUCTION TO THE HUMANITIES I
(3-0) 3 hours credit. Prerequisite: ENG 1013 or the equivalent. Close reading and discussion of selected texts in literature and philosophy. Texts selected thematically to provide subjects for analytical writing; continuing emphasis placed on developing writing skills. (This course or the equivalent is required of all undergraduates in fulfilling the General Education Requirements and should be taken as the continuation of ENG 1013.)
 undergraduate-students.t]
[7053 EIAE-ARTS---HUMANIFIES

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INTRODUCTION TO THE STUDY OF LITERATURE
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. A study of critical principles and literary concepts through an investigation of poetry, drama, and fiction. [Fhe-ceufse-sefves-as-an-intfoduction-te-the advanced-study-өf-łitefatufer--(Pfimafiły-fof-English-majefs.t]

MAJOR BRITISH WRITERS I
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. A study of representative works of at least six major writers from Chaucer to Johnson. [fPfimafily-fer-EAglish-majefs.t]

2233 MAJOR BRITISH WRITERS II
(3-0) 3 hours credit. Prerequisite: ENG 2223 or the equivalent. A study of representative works of at least six major writers from Blake to T. S. Eliot. [fPpimapify-fep-ERglish-majeps rf]
[2243--THE-AMERIGAN-NQVEL
 Reading-and-discussiөA-өf-ғepresentative-Amerisan-Rөvels-ffom-Hawtherne to-the-presehtr--(May-मөt-be-6өunted-teward-the-EAglish-majertl]

## 2253 [3073]

2273 TOPICS IN POPULAR LITERATURE
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
Critical readings in one of the following popular modes: Science fiction, Gothic Fiction, Western Fiction, and Detective Fiction. May be repeated for credit when topics vary.

2313 EXPOSITORY WRITING
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. Emphasis on the organization and logic of expository prose. The second half of the course will focus on the research, development, and writing of a term paper.

CREATIVE WRITING: PROSE
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. Intensive practice and development of techniques in the writing of creative prose.

2333 CREATIVE WRITING: POETRY
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. Intensive practice and development of techniques in the writing of poetry.

3043 BLACK LITERATURE IN AMERICA
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. A comprehensive survey of the works of Black writers in America from the eighteenth century to the present; [the-end- $\theta$ f-the-Haflem-Realifsance pefied; imaginative literature, slave narratives, biographical sketches, social commentary, and folk literature will be studied.

3113 STUDIES IN INDIVIDUAL AUTHORS
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. A comprehensive study of the works of an individual English or American author, or of several authors studied in relation to one another. The writers studied may be selected from the following: Spenser, Marlowe, Milton, Pope, Hardy, Joyce, and Faulkner. May be repeated for credit when authors vary.

## [3773--SFH日IES-IN-TWQ-AUFHORS


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3213 CHAUCER
(3-0) 3 hours credit. Prerequisite: ENG 2223 [ $7 \theta 23$ ] or the equivalent. Critical study of the Canterbury Tales and other poems read in Middle English.
[2243] THE AMERICAN NOVEL
(3-0) 3 hours credit. Prerequisite: ENG 1023 or 2013 or the equivalent. Reading and discussion of representative American novels from the begin-



2263--MODERN-EUROPEAN-MOVEE

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3333 STRUCTURE OF MODERN ENGLISH
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. Description of English syntax; the concept of Standard English; the variety (both regional and social) of modern English. Attention to the pedagogical and social questions raised concerning bidialectalism. [Arałysis-ef-the-strye--



343 INTRODUCTION TO ENGLISH LINGUISTICS
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. Introduction to linguistics and to the history of language study. Consideration of the differences between traditional grammar and current linguistic theory. Description of English phonology and semantics; discussion of such topics as language acquisition and the teaching of reading.

373 CHILDREN'S LITERATURE
$(3-0) 3$ hours credit. Prerequisite: ENG 1023 or the equivalent. A survey from a literary perspective of the kinds of reading available for children and young adolescents; poetry, drama, fairy tale, myth, biography, science fiction, mystery, fantasy, modern realism. Both the traditional "classics" and the current trends in children's literature will be considered.

103 THE RESTORATION AND EIGHTEENTH-CENTURY POETS
(3-0) 3 hours credit. Prerequisite: ENG 2213 or 2223 or the equivalent. An intensive study of the chief Restoration and eighteenth-century poets with emphasis on Dryden, Pope, Thomson, and Burns.

13 THE METAPHYSICAL POETS
(3-0) 3 hours credit. Prerequisite: ENG 2213 or 2223. [7023] or the equivalent. An intensive study of the chief metaphysical poets with emphasis on Donne, Herbert, Crashaw, Marvell, and Vaughan.

23 THE ROMANTIC POETS
(3-0) 3 hours credit. Prerequisite: ENG 2213 or 2223 [7023] or the equivalent. An intensive study of the chief British romantic poets with emphasis on Blake, Wordsworth, Coleridge, Byron, Keats, and Shelley.

- 4033 LITERARY GENRES
(3-0) 3 hours credit. Prerequisite: ENG 2213 or 2223 [7023] or the equivalent. An intensive study of a single genre such as comedy, tragedy, allegory, satire, or epic. May be repeated for credit when topics vary.

4043 THE VICTORIAN POETS
$(3-0) 3$ hours credit. Prerequisite: ENG 2213 or 2223 or the equivalent. An intensive study of the chief Victorian poets with emphasis on Tennyson, Browning, Arnold, and Hopkins.

4053 MODERN BRITISH AND AMERICAN POETRY
(3-0) 3 hours credit. Prerequisite: ENG 2213 or 2223 or the equivalent. An intensive study of the chief modern poets with emphasis on Yeats, Eliot, Pound, Auden, Stevens, Williams, and Lowell.

4913 INDEPENDENT STUDY
(3-0) 3 hours credit. Prerequisite: Permission in writing (form available of the instructor, the student's Advisor, and the Division Director and Dean of the College in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work. May be repeated for credit, but not more than 6 hours will apply to the Bachelor's degree.

SPECIAL STUDIES
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
An organized course offering specialized study not normally or not often available as part of the regular course offerings. Special Studies Courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a Bachelor's degree.

4973 SEMINAR FOR ENGLISH MAJORS
(3-0) 3 hours credit. Prerequisite: ENG 2223 or the equivalent. An undergraduate seminar limited to English majors in their final year. Intensive study of a genre, topic, or a period in English or American literature; content varies with each instructor. May not be repeated for credit.
[4723] HONORS SEMINAR
(3-0) 3 hours credit. Prerequisite: Acceptance into [in] English Honors program.
An undergraduate seminar limited to English majors in their final year
[7ast-two-semesters] who wish to graduate with honors in English. Intensive study of a genre, topic, or a period in English or American literature; content varies [witl-vafy] with each instructor. May not be repeated for credit.
A. Thirty-three [si*] semester hours in an interdisciplinary major, consisting of:

1) Nine hours of core courses:

CLA 2113 Greek and Roman Civilization
[PHI-3023--His tery-өf-Ideas]
HUM 2013 Theory of Literature
HUM 3013 History of Ideas
2) Twelve [Hine] hours of upper-division work in Humanities, [:] including the Seminar for Humanities Majors or Honors Seminar.
3) Twelve [Aine] hours of upper-division work, [in-a-lłiもefaもufe!
 any of the following: (a) classics, (b) philosophy, (c) a modern literature (Spanish, French, German, Russian, or English), including foreign language literature courses in translation and culture and civilization courses.
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Nine semester hours of support work in the form of an interdisciplinary course of studies, developed in conjunction with the Humanities advisor, and designed to aid the student's integration of his or her program in terms of central themes, focal problems, or areas of historical interest. (The student will normally construct his or her program from courses in: history, history and theory of art and music, a second modern literature, classics, and philosophy; however, courses in other subjects may be justified individually by the student, in terms of the coherence of his or her program, and approved by the Humanities advisor.
C. Twenty-eight [ $\ddagger w e$ ] semester hours of free electives. A student whose grade-point average in the Interdisciplinary Humanities major
 is 3.5 or above may petition the Humanities advisor for permission to work for honors. A student seeking honors must complete HUM 4983 during his or her final year. To graduate with honors in Humanities, a student must have a final gradepoint average of 3.5 or above in the major. [eare $\ddagger 7$-in-HHM-4723-in-the-secend


COURSE DESCRIPTIONS

## HUMANITIES

FINE ARTS - HUMANITIES
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. A study of art in terms of form, meaning, and function and a review of the literature on the arts by artists, aestheticians, art critics, and art historians to enable the student to write as well as speak about viewing, understanding, and evaluating works of art and architecture.

3013 HISTORY OF IDEAS
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
A survey of the development and influence of major philosophical, ethical, and aesthetic conceptions in Western civilization from ancient times to the present.

3053 THE ROMANTIC AGE
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. An interdisciplinary investigation of the development of ideas in literature, philosophy, art, political, and social thought at the end of the eighteenth and beginning of the nineteenth century. Such figures as Rosseau, Kant, Wordsworth, Goethe, and Goya will be considered.

3073 ORIENTAL LITERATURE
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. A study of classic literary works of the Near and Far East, with emphasis on China, India, and Japan. Readings will be supplemented by some study of corresponding representations in the fine arts.

MODERN EUROPEAN NOVEL
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. Critical study of selected Continental novelists of the last hundred years; emphasis on works which treat social or philosophical problems.

## 3423

INTERCULTURAL HUMANITIES PERSPECTIVES
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. Interdisciplinary study of differing visions of human nature and human values; emphasis upon questions of cultural diversity and cross-cultural influences as reflected in Far Eastern, Indic, African, Semitic, Pre-Columbian, and Western literary traditions. May be repeated for credit when topics vary.

3513 FICTION, DRAMA, AND FILM
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. Interdisciplinary study of thematic, stylistic, technical, and formal interactions and correlations in literary, dramatic, and cinematic art.

3523 INTERACTIONS IN THE ARTS
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. Interdisciplinary study of historical or thematic interactions and correlations in the literary, visual, and performing arts. May be repeated for credit when topics vary.

3623 NATIONAL CULTURES AND CIVILIZATIONS
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. The cultural life of the respective geographic regions and social strata of individual nations of Europe and America as reflected in, and interpreted by, its literary production. Individual sections include: France, Germany, Spain, Russia, the nations of Spanish-America. May be repeated for credit when topics vary.
$\frac{\text { INDEPENDENT STUDY }}{(3-0)} 3$ hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's Advisor, and the Division Director and Dean of the College in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work. May be repeated for credit, but not more than 6 hours will apply to the Bachelor's degree.

4953 SPECIAL STUDIES
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
An organized course offering specialized study not normally or not of ten available as part of the regular course offerings. Special Studies Courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a Bachelor's degree.

4973 SEMINAR FOR HUMANITIES MAJORS
(3-0) 3 hours credit. An undergraduate seminar limited to Humanities majors in their final year. Content varies with each instructor. May not be repeated for credit.

4983 [4+23] HONORS SEMINAR
(3-0) 3 hours credit. Prerequisite: Acceptance into [in] Humanities Honors program.
An undergraduate seminar limited to Humanities majors in their final year [łast-twe-semesters] who wish to graduate with honors in Humanities. Content varies [wifl-vafy]with each instructor. May not be repeated for credit.

## COMMUNICATIONS

## (COM)

2113 PUBLIC SPEAKING
(3-0) 3 hours credit. Prerequisite: ENG 1043 or the equivalent. Theory and practice of speaking in formal settings; preparation and adaption of materials for a variety of oral presentations.

2223 ORAL INTERPRETATION
(3-0) 3 hours credit. Prerequisite: ENG 1043 or the equivalent. Theory and practice of oral delivery of readings. Selection and organization of materials for various audiences, and the techniques used for presentation, particularly oriented to the classroom teacher.

3083 COMMUNICATION THEORY
(3-0) 3 hours credit. Prerequisite: ENG 1043 or the equivalent. Basic concepts for the study of the nature and process of human communication. Investigation of the theoretical literature ranging from intrapersonal factors in the individual to small group relationships and the public forms of communication.

3113 ARGUMENTATION AND DEBATE
(3-0) 3 hours credit. Prerequisite: ENG 1043 or the equivalent. Training in the preparation and delivery of evidence in oral presentation; analysis of argumentative and rhetorical works.

3873 SPEECH COMMUNICATION PEDAGOGY
(3-0) 3 hours credit. Prerequisite: COM 3083 or the equivalent. Fundamentals of communication, with emphasis on the effective presentation of speech communication concepts for classroom teachers. Objectives, materials, and procedures in directing class and co-curricular activities.

4013 COMMUNICATION RESEARCH
(3-0) 3 hours credit. Prerequisite: COM 3083 or the equivalent.
The role of theory and research; survey of major schools of criticism; evaluation of current rhetorical and communication studies.

## COURSE DESCRIPTIONS

PHILOSOPHY
(PHI)
3013 PHILOSOPHY OF RELIGION
(3-0) 3 hours credit. Prerequisite: ENG 1023 [ $8 \mathrm{f}-\mathrm{PHF} \mathrm{F}-2 \theta+3$ ] or the equivalent.
Examination of traditional religious beliefs and such concepts as faith and knowledge, mysticism and theology, existence and the nature of God, and the relation of religion to experience and social life.

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3033 PHILOSOPHY OF SCIENCE
（3－0） 3 hours credit．Prerequisite：［EAG－7023－8f］PHI 2013 or．PHI 2043 or the equivalent．
Examination of the major issues in the philosophical foundations of the natural and social sciences，including scientific explanation，laws and theories，probability and induction，and the relation of scientific inquiry to the Western philosophical tradition．

3053 PHILOSOPHY OF ART
（3－0） 3 hours credit．Prerequisite：ENG 1023 ［ $\theta \neq-\mathrm{PH} \ddagger-2 \theta \neq 3$ ］or the equivalent．
Examination of major philosophical theories of art，beauty，and aesthetic judgment with emphasis on such problems as form and structure， communication in art，and meaning in aesthetic judgment．

3063 WORLD RELIGIONS
（3－0） 3 hours credit．Prerequisite：ENG 1023 or the equivalent． An examination of the origins，teachings，and development of the world＇s chief religious movements，including Hinduism，Buddhism，Shinto， Confucianism，Taoism，Sikhism，Jainism，Islam，Zoroastrianism，Judaism， and Christianity．

3213 ETHICS
（3－0） 3 hours credit．Prerequisite：PHI 2013 or PHI 2043 or the equivalent．
Examination of ethical theory and of the nature and scope of ethical
discourse with emphasis upon the concepts of the good，human happiness， self－realization，virtue，duty，responsibility，and the means－ends relationship；reading of selected classical and contemporary texts．

3223 APPROACHES TO KNOWLEDGE AND REALITY
（3－0） 3 hours credit．Prerequisite：PHI 2013 or PHI 2043 or the equivalent．
Examination of the interrelations between theory of knowledge and theory of reality with emphasis on：The nature and scope of human knowledge， sensation and understanding，truth and error，change and causality，possi－ bility and actuality，meaning and existence；reading of selected classical and contemporary texts．

3313 CONTEMPORARY PHILOSOPHY
（3－0） 3 hours credit．Prerequisite：PHI 2013 or PHI 2043 or the equivalent．
An intensive study of one or more of the major branches of twentieth－ century thought：analytic philosophy，phenomenology，existentialism，and process philosophy．May be repeated for credit when topics vary．
［3373 EXISFENFI AEISM
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3323 STUDIES IN INDIVIDUAL PHILOSOPHERS
(3-0) 3 hours credit. Prerequisite: PHI 2013 or PHI 2043 or the equivalent.
Critical reading and comparison of the chief works of two or more major philosophers. The philosophers studied vary from semester to semester and may be selected from one or more of the following: Plato, Aristotle, Augustine, Aquinas, Descartes, Spinoza, Leibniz, Locke, Hume, Kant, Hegel, and Marx. May be repeated for credit when topics vary.

## DIVISION OF FOREIGN LANGUAGES

The Bachelor of Arts Degrees in Spanish, French, German and Russian offered by the Division of Foreign Languages have three main objectives:

1) to encourage mastery of a foreign language in its social, cultural, literary and linguistic dimensions; 2) to provide students a solid background in liberal education through flexibly combined courses; and 3) to prepare students in foreign language and related areas for effective and rewarding careers. Service to the community and academic excellence are the guiding measures of these objectives.

Courses in the foreign language areas of the Division normally are taught in the foreign language. However, the Division offers courses in foreign literatures in English translation which support areas of the humanities and which provide the student with a variety of possibilities with which to fulfill general electives. The Division of Foreign Languages also offers support courses in Linguistics and Russian. Courses which are comparative and multidisciplinary in nature are also provided by the Division under the general designation of Foreign Languages (FLS).

In French, German, and Russian two tracks are offered: 1) a four-skill track designed to develop abilities in understanding, speaking, reading, and writing; and 2) a reading track designed to concentrate on development of reading ability.

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BACHELOR OF ARTS DEGREE IN FRENCH
The minimum number of semester hours required for this degree, including the 50 hours of General Education Requirements, is 120.* All candidates for the degree must complete:
A. 30 semester hours in the major, all of which must be at the

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upper-division level, Required courses are:
LNG 3813 Introduction to Linguistics
FRN 3023 Advanced Composition
FRN 3313 Introduction to French Literary Studies
FRN 3413 French Literature and Culture, 1000-1700
FRN 3423 French Literature and Culture, 1700-Present
The remaining }15\mathrm{ semester hours are electives to be chosen from
the upper-division courses.
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B． 18 semester hours of support work， 9 of which must be at the upper－ division level，in a specific support area or in selected areas to be chosen in consultation with the academic advisor．
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COURSE DESCRIPTIONS French．Review of French grammar，and development of reading techniques． Additional exposure to French culture．Increased vocabulary，oral practice and readings in areas such as the humanities and social sciences，health， business，communication，education and the natural sciences．

2023 INTERMEDIATE／SEEQNB－¥EART FRENCH II
$(3-1)$｜$\left.{ }^{3}-\theta-\theta\right] 3$ hours credit．Prerequisite：FRN 2013 or the equivalent． Continued skill development in comprehension，speaking，reading and writing French．Review of French grammar，and development of reading techniques．
 Additional exposure to French culture．Increased vocabulary，oral practice and readings in areas such as the humanities and social sciences，health， business，communication，education and the natural sciences．A continuation of FRN 2013.

2113 INTERMEDIATE［SEEGNB－7EAR］FRENCH READING I
$(3-1)[3-\theta] 3$ hours credit．Prerequisite：FRN 1123 or the equivalent． Readings in various disciplines aimed at familiarity with different types of vocabulary and language structure．

2123 INTERMEDIATE［SEE日NB－ҰEAR］FRENCH READING II
（3－1） 3 hours credit．Prerequisite：FRN 2113 or the equivalent．
Readings in various disciplines aimed at familiarity with different types of vocabulary and language structure．Further study of lexical and syntactical matters aimed at increased speed and comprehension in reading．A continuation of FRN 2113.

## 3013 APPLIED FRENCH LINGUISTICS AND PHONETICS

［PHONEFIGS－AND－PRONGNGIAFIOA］
（3－1） 3 hours credit．Prerequisite：LNG 3813 ［FRN－2日23－9＊－FRN－27z3－］ Practical application of linguistic principles to the teaching of French． Attention given to problems involving the contrasting structures of French and English．Exercises in sound discrimination and phonetic transcription based on the articulatory description of standard French．［Intensive

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3033 FRENCH ORAL PRACTICE［ABVANEE日－EQNYERSAFION］
（3－0） 3 hours credit．Prerequisite：FRN 2023 or FRN 2123.
Conversation correlated with readings and reports，aimed at increasing oral fluency by vocabulary expansion and the active use of forming grammatical sentences．Attention given to the students＇pronunciation，word choice，and syntax．Topics range from［epał］everyday life［themes］to discussion of a variety of written texts．
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## ［37Z3－APPEIE日－FRENEH－LINGUISFITGS



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## 3313 INTRODUCTION TO FRENCH LITERARY STUDIES

（3－0） 3 hours credit．Prerequisite：FRN 2023 or FRN 2123.
An introduction to the concept and functions of literature through repre－ sentative masterpeices of epics，poetry，drama，and fiction written in French． Critical terminology，general literary principles and theory．Plot，design， pattern，character and type，image and archetype，metrics and prosody． Traditional literary genres and their structure．Emphasis on the traits， problems and solutions common to the disciple of literary studies．

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FRENCH LITERATURE AND CULTURE，1000－1700
（3－0） 3 hours credit．Prerequisite：FRN 2013 or 2113.
Selected masterpieces from the Middle Ages to 1700 are studied as examples of
central moments in French culture and literary history．The course presents
the shape of French civilization emphasizing the major periods，styles，
literary movements，generation，the political，social and philosophical
trends in each epoch and the major figures．
3423 FRENCH LITERATURE AND CULTURE， 1700 －PRESENT
（3－0） 3 hours credit．Prerequisite：FRN 2013 or FRN 2113.
Selected masterpieces from 1700 to the present are studied as examples of central moments in French culture and literary movements，generations，the political，social，and philosophical trends in each epoch and the major figures．

## ／ 3673 EONFEMPORARZ－FRANGE






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3513 ／ 43737 MEDIEVAL FRENCH LITERATURE
（3－0） 3 hours credit．Prerequisite：FRN 3313.
Poetic genres and poetic languages．The Song of Roland and epic poetry． Chretien de Troyes and the＂Roman Courtois．＂Origin and development of lyrical forms：from Provencal Provenea $\ddagger$ poetry to Villon．Romance of the Rose and the love romance．Aucassin and Nicolette and narrative prose． Origins and development of the theatre．

3523 ／43237 FRENCH RENAISSANCE AND BAROQUE
（3－0） 3 hours credit．Prerequisite：FRN 3313.
Definition of terms．Examination of the Renaissance ideal．The thinkers： Bude，Lefevre d＇Etaples，Rabelais，Montaigne，The poets：Marot，Ecole Lyonnaise，the Pleiade．The Religious Question．D＇Aubigne and the poets of the Baroque．The theater and the Baroque：from Garnier to Rotrou．The Mémoires：Brantome，de Retz．Dbefinition－and－pelemís－－67assifat－dectrines




3533 THE CLASSICAL MOMENT--THE GENERATION OF 1660
(3-0) 3 hours credit. Prerequisite: FRN 3313.
Definition of French classicism. Examination of its style and major themes. Study of major and minor genres. Role of the court and salon life. Major texts of: Moliére, Racine, La Fontaine, Bossuet, Pascal, La Bruyére, Fenelon, etc.

3543 [4333] THE FRENCH ENLIGHTENMENT
(3-0) 3 hours credit. Prerequisite: FRN 3313.
Literature and philosophy. The encyclopedists. The key figures and their major works: Montesquieu, Voltaire, Diderot, Rousseau.



3553【4343] FRENCH NINETEENTH CENTURY: ROMANTICISM, REALISM, NATURALISM
(3-0) 3 hours credit. Prerequisite: FRN 3313.
Definition of each literary and cultural movement. The history, intellectual positions, central themes, key figures. Analysis of the major representative works in all genres: Chateaubriand, Lamartine, Hugo, Balzac, Flaubert, Zola,





3563 THE BELLE EPOQUE: 1885-1914
(3-0) 3 hours credit. Prerequisite: FRN 3313.
The fin de siecle aesthetic and Art Nouveau. Cosmopolitanism versus nationdism. The Dreyfus Affair. The role of Paris. The inter-relations of the arts. The divergence between Right Bank and Left Bank literature. The sense of the modern era: renewal and nostalgia. Writers: Huysmans, Barres, Gide, Peguy, Valery, Segalen, St. John Perse, Apollinaire.

3573 THE FRANCOPHONIC WORLD
(3-0) 3 hours credit. Prerequisite: FRN 3313.
Negritude in Africa and the Caribbean, Haíti, Quebec and Louisiana. The study of major literary-cultural movements, the major writers and the masterpieces. Senghor, Cessaire, Damas, Quologuem, Roumain, Saint-Denys-Garneau, Anne Hebert.

4413 THE FRENCH NOVEL
(3-0) 3 hours credit. Prerequisite: FRN 3313.
The rise and growth of the chanson de geste and its passage from the novel in verse to the novel in prose. Narrative techniques, topoi, thematics, narrative strategies, point of view, character analysis, philosophical and social commentary.

4323 THE FRENCH LYRIC
(3-0) 3 hours credit. Prerequisite: FRN 3313.
Basic fixed forms in French verse: ballad, rondeau, sonnet, etc. The history, rise, flowering, fall and rebirth of these forms in French. Emphasis on French verse from Baudelaire to the present. Prosody, grammar and syntax, rhetorical usages and traditional myths and metaphors. The prose poem and vers libre.

4433 THE FRENCH THEATER
(3-0) 3 hours credit. Prerequisite: FRN 3313.
A critical examination of the various theories of tragedy and comedy. The different genres within French comedy and tragedy. History and growth of the French comic and tragic traditions from the Middle Ages to the present. Stagecraft. Production. Textual analysis from both literary and theatrical points of view.

4443 THE FRENCH SHORT NARRATIVE
(3-0) 3 hours credit. Prerequisite: FRN 3313.
A critical survey of the growth, transmutation and variety of short fiction in French: fabliaux, lais, contes and nouvelles. Investigation of the roles of orat tradition and humanistic tradition in nurturing the emergence of the modern short story with Merimee. The significance of the supernatural in the short story.

4513 CONTEMPORARY FRENCH CULTURE AND LITERATURE FROM 1945-PRESENT [4353-TWENFIEFH-GENTURZ-FREAEH-EIFERAFURE]
(3-0) 3 hours credit Prerequisite: FRN 3313.
From the existential novel of Camus to the New Novel of Butor and Robbe-Grillet, etc. to the New Novel of Sollers, Wittig, Etc. The prose poetry of Ponge, Char, St. John-Perse. The new poetic movements: poesie concrete, poesie lettriste. The theater of the Absurd and its aftermath (Ionesco, Genet, Beckett, Arrabal). The new critical wave from Barthes to Kristeva:


 Strauss;-R:-Barthes:--A-Gesaife-and--7iteratufe-өf-Negritude-]

4813 GREAT MASTERPIECES IN FRENCH LITERATURE
(3-0) 3 hours credit. Prerequisite: FRN 3313.
Only one supreme masterpiece is analyzed, studied and discussed per semester. Emphasis is placed on the use of various contemporary critical methodologies to examine and interpret the text. Examples: The Essais of Montaigne, the Roman de la Rose, The Grail Cycle, Rabelais, Les Tragiques of d'Aubigne, the Memoires of Saint-Simon, Les Fleurs Du Mal of Baudelaire, A la Recherche Du Temps Perdu of Proust. May be repeated for credit when topics vary.

4823 GREAT THEMES IN FRENCH LITERATURE
(3-0) 3 hours credit. Prerequisite: FRN 3313.
This course brings together important texts about some central theme.
Examples: Love, evil, utopias, the vision of society, the role of women, the spiritual quest, etc. May be repeated for credit when topics vary.

4913 INDEPENDENT STUDY
3 hours credit. Prerequisites: Permission in writing (form available)
of the instructor, the student's Advisor, and the Division Director and
Dean of the College in which the course is offered.
Independent reading, research, discussion and/or writing under the
direction of a faculty member. For students needing specialized work.
May be repeated for credit, but not more than 6 hours will apply to
the Bachelor's degree.
4953 SPECIAL STUDIES IN FRENCH
3 hours credit. Prerequisite: Consent of instructor.
An organized course offering specialized study not normally or not often available as part of the regular course offerings. Special
Studies Courses may be repeated for credit when the topics vary, but
not more than 6 hours within any one discipline will apply to a
Bachelor's degree.

## BACHELOR OF ARTS DEGREE IN GERMAN

The minimum number of semester hours required for this degree, including the 50 hours of General Education Requirements, is 120.* All candidates for the degree must complete:
A. 30 semester hours in the major, which must be at the upper-division level. Required courses are:

GER 3013 Phonetics and Pronunciation
GER 3023 Advanced Composition
GER 3113 Introduction to German Linguistics
GER 3123 Applied German Linguistics
GER 3313 Introduction to German Literary Studies
GER 3323 Introductory Readings in German Literature
GER 3613 German Culture and Civilization
GER 3623 Contemporary Germany
It is recommended that the remaining 9 semester hours be distributed in one of the following ways: 1) Titerature course and 2 language courses or 2) 2 literature courses and 1 language course.





B. 18 semester hours of support work, 9 of which must be at the upper-division level in a specific support area or in selected areas to be chosen in consultation with the academic advisor. IFhese- $\epsilon$ orfses-may-be-seleteed-ffem

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2013 INTERMEDIATE /SEG日NQ-YEART GERMAN I
(3-0) 3 hours credit. Prerequisite: GER 1123 or the equivalent.
Continued skill development in comprehension, speaking, reading and writing German. Review of German grammar, and development of reading techniques. Additional exposure to Germanic culture. Increased vocabulary, oral practice, readings in areas such as the humanities and social sciences, health, business, communication, education and the natural sciences. A continuation of GER 2013.


## 2023 INTERMEDIATE /SEE日AD-7EART GERMAN II

(3-0) 3 hours credit. Prerequisite: GER 2013 or the equivalent.
Continued skill development in comprehension, speaking, reading and writing German. Review of German grammar, and development of reading techniques. Additional exposure to Germanic culture. Increased vocabulary and oral practice and readings in areas such as the humanities and social sciences, health, business, communication, education and the natural sciences. A continuation
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[^35]| 2113 | INTERMEDIATE [SEGONQ-YEAR] GERMAN READING I <br> (3-0) 3 hours credit. Prerequisite: GER 1123 or the equivalent. Readings in various disciplines aimed at familiarity with different types of vocabulary and language structure. |
| :---: | :---: |
| 2123 | INTERMEDIATE [SEG日NQ-łEAR] GERMAN READING |
|  | (3-0) 3 hours credit. Prerequisite: GER 2113. |
|  | Readings in various disciplines aimed at familiarity with different types of |
|  | vocabulary and language structure. Further study of lexical and syntactical |
|  | matters aimed at increased speed and comprehension in reading. A continuation of GER 2113. |
| 3313 | INTRODUCTION TO GERMAN LITERARY STUDIES |
|  | (3-0) 3 hours credit. Prerequisite: GER 2023 or GER 2123. |
|  | The concept of literature. Function of literature. Literary genres and |
|  | their structure. Literary periodification and literary history. Literatu Stylistics. Linguistics. |
| 4113 | GERMAN DIALECTS [INFROBUGFIEN-FO-GERMAN-QIAEEGFS] |
|  | (3-0) 3 hours credit. Prerequisite: GER 3313. |
|  | Survey of the development and the salient characteristics of the dialects of |
|  | the German speaking world. [A-survey-өf-the-safient-eharaeteristies-ef-the |
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|  | but-mest-emphasis-en-substantive-faets-abeut-the-łanguage |
| 4343 | EARLY TWENTIETH [FWENIEFH] CENTURY CRISIS |
|  | (3-0) 3 hours credit. Prerequisite: Ger 3313. |
|  | Study of the emergence of modern literary Stimmung. Readings of Hauptman, George, Rilke, and a survey of Naturalism, Impressionism, and Symbolism. |
|  |  |
| 4383 | THE NOUVELLE [NQVE |
|  | ( 3-0) 3 hours credit. Prerequisite: GER 3313. |
|  | Structure, themes, authors. Its relations to the short story and the |
|  |  |
| 4913 INDEPENDENT STUDY |  |
| 3 3hours credit. Prerequisites: Permission in writing (form available) |  |
|  | of the instructor, the student's Advisor, and the Division Director and |
|  | Dean of the College in which the course is offered. |
|  | Independent reading, research, discussion, and/or writing under the |
|  | direction of a faculty member. For students needing specialized work. |
|  | May be repeated for credit, but not more than 6 hours will apply to |
|  | the Bachelor's degree. |
| 4953 | SPECIAL STUDIES IN GERMAN |
|  | 3 hours credit. Prerequisite: Consent of instructor. |
|  | An organized course offering specialized study not normally or not |
|  | often available as part of the regular course offerings. Special |
|  | Studies Courses may be repeated for credit when the topics vary, but |
|  | not more than 6 hours within any one discipline will apply to aBachelor's degree. |
|  |  |

The minimum number of semester hours required for this degree，including the 50 hours of General Education Requirements，is 120．All candidates for the degree must complete：

A． 30 semester hours in the major，which must be at the upper－division level． Required courses are：

RUS 3013 Phonetics and Pronunciation
RUS 3023 Advanced Composition
RUS 3113 Introduction to Russian Linguistics
RUS 3313 Introduction to Literary Studies
RUS 3323 Introductory Readings in Russian Literature
RUS 3613 Contemporary Russia
RUS 3623 Russia－－Culture and Civilizations
It is recommended that the remaining 9 semester hours be distributed in one of the following ways：1） 1 literature course and 2 language courses or 2） 2 literature and 1 language course．

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B． 18 semester hours of support work， 9 of which must be at the upper－division level in a specific support area or in selected areas to be chosen in con－ sultation with the academic advisor．／These－eeupses－may－be－sełeeted－frem

 guages－өther－than－Russian－$\overline{\text { I }}$

## COURSE DESCRIPTIONS

／F773－REABING－RUSSIAN－FOR－BEGFANERS－I
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／$\overline{7} 723-$ REABING－RUSS $\ddagger A N-F \theta R-B E G I N N E R S-\Psi \ddagger$
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$(3-1)$／f（3－0） 3 hours credit．Prerequisite：RUS 1023 or the equivalent， Continued skill development in comprehension，speaking，reading and writing Russian．Review of Russian grammar，and development of reading techniques． Additional exposure to Russian culture．Increased vocabulary，oral practice and readings in areas such as the humanities and social sciences，health， business，communication，education and the natural sciences．

2023 INTERMEDIATE／SEE日NB－YEART RUSSIAN II
（3－1）$[(3-\theta-\theta] 3$ hours credit．Prerequisite：RUS 2013 or the equivalent． Continued skill development in comprehension，speaking，reading and writing Russiar．Review of Russian grammar，and development of reading techniques．
 Additional exposure to Russian culture．Increased vocabulary and oral practice and readings in areas such as the humanities and social sciences，health，busi－ ness，communication，education and the natural sciences．A continuation of RUS 2013.

Lz773 SEEANB－YEAR－RUSSIAN－REABING－£

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SEEANB－YEAR－RUSSIAN－REABING－İ
（3－日t－3－hours－epedit：－－Prerequisitet－－RUS－2773：
Readings－in－vapieus－diseiplines－aimed－at－famitiapity－with－diffepent－types－ $\boldsymbol{\theta} \boldsymbol{f}$ vocabułapy－and－łanguage－stpueもure：－－Fupther－study－өf－łexieał－and－syataeєiєał－
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3013 PHONETICS AND PRONUNCIATION
（3－1） 3 hours credit．Prerequisite：RUS 2023 ／$\overline{\theta r}-$ RUS－2723－7
Intensive patterned pronunciation drills and exercises in sound discrimina－ tion and transcription，based on detailed articulatory description of various dialects of Russian．

3033 ADVANCED CONVERSATION
（3－0） 3 hours credit．Prerequisites：RUS 2023 ［ $\bar{\theta}$－RUS $-2723-7$
Conversation correlated with readings and reports aimed at increasing oral fluency by vocabulary expansion and the active use of forming grammatical sentences．Attention given to the students＇pronunciation，word choice，and syntax．Topics range from oral everyday life themes to discussion of a variety of written texts．
＿$\overline{3} 943$ RHEF $\theta$ RIG－ANE－P日EFIGS－
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3113 INTRODUCTION TO RUSSIAN LINGUISTICS
（3－0） 3 hours credit．Prerequisite：RUS 2023 ／ $\bar{\theta} p$－RUS－2723T．
Application to Russian of the basic principles of analysis and description of language structure．Attention given to structural regularities at the levels of sound，word formation，and syntax；also the relationship between some irregularities and historical change and to dialectal variation．

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3313 INTRODUCTION TO RUSSIAN LITERARY STUDIES
（3－0） 3 hours credit，Prerequisite；RUS 2023，［ $\bar{\theta} p-R U S-2723-\overline{]}$
The concept of literature．Function of literature．Literary genres and their structure．Literary periodification and literary history，Literature．
Stypistics．Linguistics．
3323 INTRODUCTORY READINGS IN RUSSIAN LITERATURE
（3－0） 3 hours credit．Prerequisite：RUS 2023．［OP－RUS－2723－T
An elementary sampling of a number of literary masterpieces through periods， genres and styles．

3613 CONTEMPORARY RUSSIA
（3－0） 3 hours credit．Prerequisite：RUS 2023．／ $\bar{\theta}$ r－RHS－złz3－T
Problems and conflicts determining the cultura $\overline{7}$ development of contemporary Russia．Ethnic，social，political，economic and cultural characteristics as seen mainly through the essay．Intellectual currents and the role of the intellectual leaders in forming the cultural expression of Russia．

3623 RUSSIA－－CULTURE AND CIVILIZATIONS
（3－0） 3 hours credit．Prerequisite：RUS 2023．／ $\bar{\theta}$－RHS－2ł23． $\bar{T}$
The cultural life of the respective geographic regions and social strata of Russia as reflected in and interpreted by its literary production，especially the novel．
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／4373－PROBLEMS－ANQ－METHOBOLӨGZ－F





## ／$\overline{4} 343-$ IIAEFEENTH－GENFURY－RUSSIAN－EIFERAFURE











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4913 INDEPENDENT STUDY
3 hours credit. Prerequisites: Permission in writing (form available)
of the instructor, the student's Advisor, and the Division Director and
Dean of the College in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work. May be repeated for credit, but not more than 6 hours will apply to the Bachelor's degree.

## 4953 SPECIAL STUDIES IN RUSSIAN

3 hours credit. Prerequisite: Consent of instructor.
An organized course offering specialized study not normally or not often available as part of the regular course offerings. Special
Studies Courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a Bachelor's degree.

The minimum number of semester hours required for this degree，including the 50 hours of General Education Requirements，is 120．＊All candidates for the degree must complete：

A． 30 semester hours in the major，all of which must be at the upper－division level．Required courses are：

LNG 3813 Introduction to Linguistics and
SPN 3113 Introduction to Spanish Linguistics
or
SPN 3013 Phonetics and Pronunciation and SPN 3123 Applied Spanish Linguistics

SPN 3023 Advanced Composition
SPN 3313 Introduction to Hispanic Studies
SPN 3323 Introductory Readings in Hispanic Literatures
SPN 3613 Spanish Culture and Civilization or
SPN 3623 Spanish－American Culture and Civilization
SPN 3653 Contemporary Spain or
SPN 3663 Contemporary Spanish America
It is recommended that the remaining 9 semester hours be distributed in at least two of the three areas of culture，language and literature．
／ $\bar{A}=-$－27－semester－hөups－in－the－majer；－ałt－өf－whieh－must－be－at－the－uppep－divisien łeveł：－－Required－eөtrses－ares－－SPN－3日73；－3日23；－3373；－3323；－3673－8p－3623； 3633－өp－3643：－－7he－remałィing－9－semester－heurs－must－be－distpibuted－as－fөł－
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B． 24 semester hours， 9 of which must be at the upper－division level，in a specific support area or in selected areas to be chosen in consultation with the academic advisor．
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C． $16 \mid \bar{Z} 2 T$ semester hours of free electives which may be chosen from through－ out The University＇s offerings．

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7723－REABING－SPANISH－F日R－BEGINNERS－$\ddagger \ddagger$
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1213 SPANISH FOR SPANISH SPEAKERS I
(3-1) 3 hours credit.
Development of the language proficiency of Spanish speakers building on existing /advaneed-naもive abilities through in-depth practice in speaking, reading and writing Spanish.

1223 SPANISH FOR SPANISH SPEAKERS II
(3-1) $/$ F $3-\theta \pm 7 / 3$ hours credit. Prerequisite: SPN 1213.
Development of the language proficiency of Spanish speakers building on existing /adraneed-naまive/ abilities through in-depth practice in speaking, reading and writing Spanish. A continuation of SPN 1213.

2013 INTERMEDIATE / SECOND YEART/ SPANISH I
$(3-1) \underline{(-3-\theta \pm)} 3$ hours credit. Prerequisite: SPN 1023 or the equivalent. Continued skill development in comprehension, speaking, reading and writing Spanish. Review of Spanish grammar, and development of reading techniques. Additional exposure to Hispanic cultures. Increased vocabulary, oral practice and readings in areas such as the humanities and social sciences, health, business, communication, education and the natural sciences.

2023 INTERMEDIATE / $\overline{5} E G \theta A B-\neq A R \bar{T}$ SPANISH II
$(3-1) \mid f(3-\theta+\mid 3$ hours credit. Prerequisite: SPN 2013 or the equivalent. Continued skill development in comprehension, speaking, reading and writing Spanish. Review of Spanish grammar, and development of reading techniques. Additional exposure to Hispanic cultures. Increased vocabulary and oral practice and readings in areas such as the humanities and social sciences, health, business, communication, education and the natural sciences. A continuation of
 SPN-2073:7
/ $\overline{2} 773-S E G \theta N B-7 E A R-S P A N I S H-R E A B I A G-I$




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## 2213 SPANISH FOR SPANISH SPEAKERS III

(3-1) 1 F3- $\theta \pm 73$ hours credit. Prerequisite: SPN 1223.
Development of the language proficiency of Spanish speakers building on existing
/advaneed-nativeT abilities through in-depth practice in speaking, reading and writing Spanish. Increased emphasis on language variation: Stylistic (i.e., formal vs. colloquial) and geographical (Southwest United States vs. other dialects, such as Mexico, the rest of Spanish America, and Spain). A continuation of SPN 1223.

3013 PHONETICS AND PRONUNCIATION
(3-1) 3 hours credit. Prerequisite: SPN 2023 —5-SPN-2ł23T or SPN 2213. Intensive patterned pronunciation drills and exercises in sound discrimination and transcription, based on detailed articulatory discription of various dialects of Spanish.

3023 ADVANCED COMPOSITION
(3-0) 3 hours credit. Prerequisite: SPN 2023 Is-SPA-2ł23T or SPN 2213. Selected grammar review. Theme writing and diagnosis of the grammatical problems of individual students.

## 3033 ADVANCED CONVERSATION

(3-0) 3 hours credit. Prerequisite: SPN 2023 /5-SPN-2723T or SPN 2213. Conversation correlated with readings and reports, aimed at increasing oral fluency by vocabulary expansion and the active use of forming grammatical sentences. Attention given to the students' pronunciation, word choice, and syntax. Topics range from oral everyday life themes to discussion of a variety of written texts.

3043 ELEMENTS OF SPANISH RHETORIC /RHEF $\because$ RIG-ANB-P日EFIGST
(3-0) 3 hours credit. Prerequisite: SPN 3033.
An / $\bar{A}$-brie $\ddagger \overline{/}$ introduction to the art of orderly and persuasive discourse. Description/s/ of figures of speech, topoi and general structure of the oration. Exercises in Spanish oratory. /Metep-and-mełedy-in-peetie-diєєien-T

## CREATIVE WRITING

(3-0) 3 hours credit. Prerequisites: Consent of Instructor and any one of the following: FRN 3023, SPN 3023, GER 3023, RUS 3023.
Basic fundamentals and extensive practice in creative writing in poetry and prose in Spanish. May be repeated for credit with approval of advisor.

3113 INTRODUCTION TO SPANISH LINGUISTICS
(3-0) 3 hours credit. Prerequisite: SPN 2023 Iэ-SPN-2723T or SPN 2213. Application to Spanish of the basic principles of analysis and description of language structure. Attention given to structural regularities at the levels of sound, word formation, and syntax; also to the relationship between some irregularities and historical change and to dialectal variation.

## 3123 APPLIED SPANISH LINGUISTICS

(3-0) 3 hours credit. Prerequisite: SPN 2023 $\overline{3}-S P N-2723 T$ or SPN 2213.
Practical application of linguistic principles to the teaching of Spanish. Attention given to problems involved with the contrast between the structures of Spanish and English.

## 3313 INTRODUCTION TO HISPANIC LITERARY STUDIES

(3-0) 3 hours credit. Prerequisite: SPN 2023 /--SPN-2ł23T or SPN 2213.
The concept and function of literature. SpeciaT emphasis given to periods, genres and metric forms which characterize literature in Spanish, as well as




3323 INTRODUCTORY READINGS IN HISPANIC LITERATURES
(3-0) 3 hours credit. Prerequisite: SPN $2023 / \overline{5}-S P N-2723 T$ or SPN 2213.
An introduction to the Hispanic Literary tradition through the reading and discussion of literary masterpieces through periods, genres and styles.
 genpes-and-styłes:/

3333 HISPANIC /SPANISHT LITERATURE IN ENGLISH TRANSLATION
(3-0) 3 hours credit.
May not be applied to a major in Spanish. Major works of Hispanic / §ुpanish $\bar{T}$ Literature, themes, genres, movements. May be repeated for credit when topics vary.

3613 SPANISH / $\bar{H}$ ISPANigT CULTURE AND CIVILIZATION
$(3-0) 3$ hours credit. Prerequisite: SPN 2023, SPN 2123 or SPN 2213.



 ture of cultural traditions, myths, values, and life view.

3623 SPANISH-AMERICAN CULTURE AND CIVILIZATION
(3-0) 3 hours credit. Prerequisite: SPN 2023 [ $\overline{5}-S P N-2723 /$ or SPN 2213.


The cultural life of the respective geographic regions and social stata of Spanish America from the Conquest to the present as reflected in and inter-


3653 CONTEMPORARY SPAIN
(3-0) 3 hours credit. Prerequisite: SPN 2023 I $-5 P N-27237$ or SPN 2213.


Problems and conflicts determining the cuTtural development of contemporary Spain. Social, political, economic and cultural characteristics as seen through intellectual currents and the role of intellectual leaders in forming




3663 CONTEMPORARY SPANISH AMERICA
(3-0) 3 hours credit. Prerequisite: SPN 2023 /5-SPA-2723T or SPN 2213.


Problems and conflicts determining the cultural development of contemporary Spanish America. Ethnic, social. political, economic and cultural characteristics /as-seen-mainly-tafetigh-the-essayュf Intellectual currents and the role of the intellectual leaders in forming the cultural expression of Spanish America.

4013 INTRODUCTION TO THE AZTEC LANGUAGE
(3-0) 3 hours credit.
Grammar, vocabulary, and word formation of Aztec. Reading of simple texts. Attention both to modern and classical language, as well as to the impact of Aztec on the Spanish vocabulary of Mexico.

(3-0) 3 hours credit. Prerequisite: SPN 3113.
Survey of the development and the salient characteristics of the dialects of Spain and Spanish America with emphasis on the Spanish of Mexico. /A-strvey




4123 THE SPANISH OF THE MEXICAN AMERICAN
(3-0) 3 hours credit. Prerequisite: SPN 3113.
A description of the Spanish language as used by Mexican Americans. Particu-
lar attention placed on its historical ties with other Hispanic dialects and
its own varieties within the United States. Special emphasis on the issues of
language maintenance and maintenance and its use as a standard language.
4133 ADVANCED SPANISH GRAMMAR
(3-0) 3 hours credit. Prerequisite: SPN 3023.
A study of selected syntactic characteristics of the language with special attention to grammatical categories, subordination and verb systems including verbal aspects.

4333 SPANISH RENAISSANCE AND BAROQUE LITERATURE
(3-0) 3 hours credit. Prerequisite: SPN 3313.
Medieval tradition and Italian innovations and their influence on Spanish poetry, drama and the narrative Farration. Special attention to the poetry of Garcilaso de la Vega and Gongora, to the drama of Lope de Vega, Tirso de Molina, and Calderon, and to the Lazarillo de Tormes and the narrative
[Aағfaもiөn].

4343 SPANISH LITERATURE OF THE NINETEENTH CENTURY
(3-0) 3 hours credit. Prerequisite; SPN 3313.
Major movements and authors. Themes, genres, relationships to other European literatures. Includes "costumbrismo," Romanticism, [and] Realism and Naturalism.

4433 SPANISH-AMERICAN LITERATURE OF THE 19TH CENTURY /R̈MMAAFIGISM/
(3-0) 3 hours credit. Prerequisite: SPN 3313.
Its roots in eighteenth century ideology and life. European influences and Spanish American responses in poetry, including "poesia gauchesca," drama, novel, and essay.

4913 INDEPENDENT STUDY
3 hours credit. Prerequisites: Permission in writing (form available)
of the instructor, the student's Advisor, and the Division Director and Dean of the College in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work. May be repeated for credit, but not more than 6 hours will apply to the Bachelor's degree.

4953 SPECIAL STUDIES IN SPANISH
3 hours credit. Prerequisite: Consent of instructor.
An organized course offering specialized study not normally or not
often available as part of the regular course offerings. Special
Studies Courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a
Bachelor's degree.

## COURSE DESCRIPTIONS

FOREIGN LANGUAGES
(FLS)
3013 AMERICA SEEN THROUGH EUROPEAN EYES
(3-0) 3 hours credit.
Credit may not be applied to a Foreign Language major when taken in English. A study of European impressions of North America (Canada; United States, particularly Louisiana, Texas and California) and South America from the early travels and explorations to the present. An examination of the central themes and concerns of selected European authors. May be repeated for credit when topics vary.

3333 LITERARY MASTERPIECES IN ENGLISH TRANSLATION
(3-0) 3 hours credit.
A study of World literary masterpieces in English translation. Focus on a national literature or a literary tradition, including but not limited to, Western, Far Eastern, Indic, African, Semitic and Pre-Columbian Literatures. May be repeated for credit when topics vary.

3343 MASTERPIECES OF ORAL TRADITION
(3-0) 3 hours credit.
An introduction to the literary masterpieces of the oral traditions in Africa, North and South American Indian Literatures. May be repeated for credit when topics vary.

3353 OPERA AS DRAMA
(3-0) 3 hours credit. Prerequisite: Upper-division standing.
An examination of the relationships between theatre manifested through or accompanied by music. Selections include the Hispanic zarzuelas, Viennese operettas, the French opera comique tradition and musical comedies from throughout the world. May be repeated for credit when topics vary.

| 4013 PRINCIPLES OF LITERARY THEORY |  |
| :---: | :---: |
|  | (3-0) 3 hours credit. Prerequisite; Completion of required courses in major. |
|  | Concept and functions of literature in the Western World through representa- |
|  | tive masterpieces of epics, poetry, drama and fiction. The necessary critical |
|  | language, principles and general theory. Plot, design, pattern, character and |
|  | type, image and archetype. Traditional literary genres and their structure. |
|  | Problems in literary history: periodization, generations, movements and styles. |
| 4213 THE CONTRIBUTION OF LINGUISTICS TO LITERARY STUDIES |  |
| (3-0) 3 hours credit. Prerequisites: Completion of all Major requirements. |  |
|  | Background and application of linguistics to literature. Definitions, |
|  |  |
|  | of phonology, semantics, stylistics and semiology, Readings from: Saussure, |
|  | Hjelmsleve, Chomsky, Jacobson, Greimas, Beneviste, Eco and others. |
| 4513 ICONOGRAPHY IN FOREIGN LITERATURES AND ARTS |  |
| (3-0) 3 hours credit. Prerequisite: Consent of Instructor. |  |
|  | A study of the relationships between French, German, Spanish, and Russian liter- |
|  | atures and arts through the reading of selected texts and the study of analo- |
|  | gous works in the plastic arts in the respective nations. Themes, motifs, |
|  | techniques. May be repeated for credit when topics vary. |
| 4523 THE FOREIGN FILM |  |
| (3-0) 3 hours credit. Prerequisite: FRN, GER, RUS or SPN 3313. |  |
| A critical study of the history of foreign filmic masterpieces. Emphasis on |  |
|  | the scenario in conjunction with the narrative function of the sequential |
|  | frames. The problems and solutions of adapting one medium to another: from |
|  | novel to film, from dramatic play to film. Films are shown for critical inter- |
|  | pretation. May be repeated for credit when topics vary. |

4923 IMAGES OF THE MEXICAN AMERICAN
(3-0) 3 hours credit.
(May not be applied to a major in Spanish.)
An examination of the images of the Mexican American as projected in literature, art and folkTore through various historical periods. The projection of images through film, advertising and other media.

LINGUISTICS
(LNG)

3843 PSYCHOLOGY OF LANGUAGE
(3-0) 3 hours credit. Prerequisite: LNG 3813 or the consent of Instructor. The psychological aspect of language, including language acquisition, language disorders, and the relationship between language and the mind. /A-study-ef
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## 3853 THE LANGUAGES OF THE MEXICAN AMERICAN

(3-0) 3 hours credit. Prerequisites: LNG 3813.
A linguistic description of English and Spanish as spoken by bilingual Mexican Americans. Special emphasis on code-switching, linguistic domains, registers, as well as on the importance of language dominance in educational planning.

## 4143 LANGUAGE DEVELOPMENT

(3-0) 3 hours credit. Prerequisite: PSY 2503 or LNG 3813.
Developmental changes in use of language, processes of learning a language, particularly syntax. Topics include psychological evaluation of Chomsky s theory, the role of imitation and parental shaping of language and learning a second language.

## DIVISION OF SOCIAL SCIENCES

The object of the social sciences is to investigate human social behavior，past and present，in all its forms．Anthropology，geography， history，political science，psychology and sociology are parts of that endeavor．The Division of Social Sciences offers bachelor of arts degrees in each of these fields．［exeept－psyekełogy．］Students are encouraged to enrich their knowledge of one discipline by including course work from the others．

A major in the social sciences can be an end in itself or a prelude to a professional career．Many students view the major as an opportunity to explore one of the social sciences in depth within an organized program of instruction and advising．Others intend the major as the beginning of career training，for instance，in law，medicine，the allied health professions，education，social services，and the professional social sciences．The program is designed to be productive for students with either intention．［өf－either－perstasien：］

At least 30 credit hours of course work are required to fulfill a social science major．［Fhese－e日upses－must－be－ehesen－fpem－ameng－the－eeupses

 mbst－e日fsist－$\theta$ f－e日urses－Aumbered－3 $3 \theta \theta$－and－abever］The 30 －hour total is considered a minimum，and students are encouraged to deepen and broaden their control of their field through careful allocation of some of their elective credit hours．

Interdisciplinary Studies．The Division also offers，as a voluntary option，the opportunity to study one of several problem areas using the resources of various social sciences．The student electing this option
takes 21 hours of course work within the discipline of his major, and 18 hours of course work in the Interdisciplinary Problem Area for a total of 39 hours. In the final term before graduation, the student enrolls in the Social Science Conference Course.

In choosing this option, the student establishes a foundation in one of the social science disciplines, and also takes advanced studies in [ $\theta \neq$ ] one of the Interdisciplinary Problem Areas. The student graduates with a major in a
 A listing of the available Interdisciplinary Problem Areas and the courses which comprise them appears below.

Honors. The Division of Social Sciences designates certain of its outstanding students as honors students and provides the opportunity for advanced study under close faculty supervision. A few weeks before the beginning of the final semester, the student may elect to take a comprehensive examination administered by the Division. Distinguished performance on the examination will lead to the designation as an honors student for the final semester. The honors student enrolls in Honors Seminar in lieu of the Social Science Conference Course. In addition, honors students enroll in Honors Thesis, a faculty tutorial, the end product of which is a thesis based on research

Interdisciplinary Problem Areas

Social Science majors may select one of the following optional Interdisciplinary Problem Areas (IPAs) in conjunction with the major. Each problem area is composed of a set of specially designed upper-division [7eveł] courses examining a given problem or area of scholarship using the tools of several disciplines. Students enrolled in a problem area finish the major with the Social Science Conference Course (SSC 4543), designed to integrate the contributions of the
social sciences involved. Rules and procedures governing the problem areas are set out above and in the information given for each social science major.



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2. The Developing Third World

This area covers the nature, history, and current problems of the non-industrialized world. The "Third World" so defined is frequently considered in terms of its potential role as a third force in international relations, a role that in turn is thought to be based upon common problems, historical experiences, and outlooks among the world's "underdeveloped" nations. The particular concern of this problem area is not the international political aspect of the Third World, but rather the domestic factors that may be common among the Third World nations, theory and reality behind attempts at economic development, societal problems confronting nations in the process of modernization, and the internal politics of developing countries. Students select the Social Science Conference Course (SSC 4543) [ $(5 S 6-4573)]$ and five of the six courses listed below.
3. Ethnic Studies of the American Southwest

This area focuses upon an examination of Southwestern ethnicity from several vantage points. The dynamics of ethnic interaction are the major focus, with attention to the structure of social pluralism,
its cultural backgrounds, historical evolution, political movements, literary expression and cultural geography. The basic content of the program derives from sociology, history, anthropology, political science, and Spanish. Students select the Social Science Conference Course (SSC 4543) [ $(556-4573 \ddagger]$ and five of the remaining six courses.

## BACHELOR OF ARTS DEGREE IN <br> ANTHROPOLOGY

Anthropology is the study of man's cultural behavior -- that body of customs and ideas which continues from generation to generation, serves the same function that instinctual patterns do in lower animals, and varies markedly from one human population to another. Among the subfields of anthropology are archaeology, the reconstruction and explanation of man's cultural past; cultural anthropology, the study of cultural and linguistic variation among contemporary peoples; and physical anthropology, the study of fossil man and the physiological bases of cultural behavior.

All candidates for the degree must complete:
A. 30 semester hours in the major, 21 of which must be at the upperdivision level.

Required courses are:

$$
\text { ANT } 1013 \text { Man in Adaptation }
$$



SSC 4543 Social Science Conference Course

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The remaining credit hours will be chosen in consultation with the
student's Advisor and should include at least one each in cultural
anthropology, physical anthropology, and archaeology.
Nine semester hours may be applied to the major from:
    HIS 3113 The United States and the American Indian
    LNG 3883 Sociology of Language
    MAT }3013\mathrm{ Statistical Methods in the Life and Social Sciences II
    PSY 3053 Cross-Cultural Psychology
    PSY 3633 Aggression
    SOC 3013 Social Stratification
    SOC 3133 Sociology of Pluralism in the Southwest
    SSC 3003 Social Research Methods
    SSC 3103 Major Theories of the Social Sciences
[Sj亠x-semestep-keurs-may-be-applied-te-the-majop-frem&--HIS-3773;-tNG
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Interdisciplinary Problem Area

Candidates for the degree who elect an Interdisciplinary Problem Area must complete 39 semester hours for the combined major and the Interdisciplinary Problem Area.
A. 21 hours of Anthropology in addition to [eжєfusive- $\begin{aligned} & f \\ & ]\end{aligned}$ those in the Problem Area are required including:

ANT 1013 Man in Adaptation

ANT 2013 Anthropological Inquiry: Archaeology and Physical
Anthropology or
ANT 2023 Anthropological Inquiry: Cultural Anthropology and Linguistics

One course each of cultural anthropology, physical anthropology, and archaeology.

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\begin{aligned}
& \text { [ANF-7 } \theta 73 ;- \text { ANF-2日 }
\end{aligned}
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## COURSE DESCRIPTIONS

 ANTHROPOLOGY(ANT)

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3223 CULTURAL ECOLOGY
    (3-0) 3 hours credit. Prerequisite: ANT 1013 recommended.
    Man's adaptation to environment and his interaction with it, comparing
    simple and complex societies in various environmental contexts. [Fhis
    eөurse-may-be-taken-as-GRG-3223-]
3513 HUMAN POPULATIONS
    (3-0) 3 hours credit. Prerequisite: ANT 2013.
    The physical anthropology of human populations including human genetics,
    functional anatomy, evolution, demography, phenotypic diversity applied
    to both prehistoric and contemporary populations.
3613 CROSS-CULTURAL STUDIES OF SOCIALIZATION
    (3-0) 3 hours credit. Prerequisite: ANT 1013.
    Examination and evaluation of anthropological and psychological compara-
    tive studies of child-rearing and enculturation in selected [sełeetive]
    cultures.
[3633 AGGRESSION
    Fh\mp@code{c-e0urse-is-0ffered-as-PSZ-3633-and-is-deseribed-with-the-Psyehełegy}
    exurse-7istings:]
3663 HUNTERS AND GATHERERS
    (3-0) 3 hours credit. Prerequisite: ANT 1013.
    A study of the lifeways of hunting and gathering peoples around the
    world. Emphasis is placed on prehistoric hunters and gatherers, leading
    to an examination of archaeological data, and problems in interpretation.
    Contemporary hunting and gathering populations are also studied.
[4753 EFHNOGEOGRAPHY-
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4163 THE CITY AS ARTIFACT
    (3-0) 3 hours credit. Prerequisite: SSC 3213 or consent of instructor.
    The physical and material aspects of the city are examined as responses
    to, and influences upon, individual and group behavior in urban centers.
    Attention given to deliberate attempts to shape the urban environment to
    effect change in urban society.
LABORATORY ANALYSIS IN ANTHROPOLOGY
(2-4) 3 hours credit. Prerequisite: Consent of instructor.
Supervised analysis of field data; methods of analysis; research techniques;
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preparation of reports, Students enrolled in ANT 3404 may enroll in course and participate in analysis of data from summer archaeological field course.

4913 INDEPENDENT STUDY
3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's Advisor, and the Division Director and Dean of the College in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work. May be repeated for credit, but not more than 6 hours will apply to the Bachelor's degree.

4953 SPECIAL STUDIES
3 hours credit. Prerequisite: Consent of instructor.
An organized course offering specialized study not normally or not often available as part of the regular course offerings. Special
Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a Bachelor's degree.

4983 HONORS SEMINAR
[4553] (3-0) 3 hours credit. Prerequisite: Enrollment limited to candidates for honors in Anthropology during their last two semesters. A supervised, intensive examination of topical areas of Anthropology.

4993 HONORS THESIS
[4563] (3-0) 3 hours credit. Prerequisite: Enrollment limited to candidates for honors in Anthropology during their last two semesters. To be taken concurrently with ANT 4983 [4553]. Supervised research and preparation of an honors thests.

At the core of Geography are the systems that link man to environment．Some systems are physical；for example，the carrying capacity of regions for the support of human populations，the environmental consequences of pollution，and man＇s proclivity to distribute his activities according to features of the natural landscape．Some systems are cultural；for example，the spatial layout of cities，cultural attitudes toward time，space and environment，and the role of environment in the founding of civilizations．The primary variable for geography is space；techniques for measuring its range from cartography to attitude surveys to stochastic models and locational theory．The major examines ［intreduees］the field of Geography and its implications for the use［applizatiens te－the－gevepraneeł of physical and social space．

All candidates for the degree must complete：
A． 30 semester hours in the major， 21 of which must be at the upper－ division level．

Required courses are：
GRG 1013 Man and the Physical World
ENV 2013 Introduction to Environmental Systems
SSC 4543 Social Science Conference Course
One course from GRG 2503－GRG 2593.
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The remaining credit hours will be chosen in consultation with the student＇s Advisor．

## Nine semester hours may be applied to the major from： <br> ANT 3223 Cultural Ecology

## SSC 3003 Social Research Methods

SSC 3103 Major Theories of the Social Sciences
［Fhe－remaining－eredit student－s－Adviser－－Six－semester－heurs－may－be－applied－te－the－major fremt－－ANF－3223з－E $6 \theta-34 \theta 3_{3}-$ аня－MAF－3日ł3．］

## INTERDISCIPLINARY PROBLEM AREA

A． 21 hours of Geography exclusive of those in the problem area are required．The 21 hours must contain：two courses numbered GRG 2503－ 2593 and at least three courses at the upper－division level．

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COURSE DESCRIPTIONS
GEOGRAPHY
（GRG）

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4103 ETHNOGEOGRAPHY
（3－0） 3 hours credit．Prerequisite：ANT 1013 or GRG 1013.
The perception of physical space and environment compared cross－culturally in Western and non－Western societies．［Fhis－e日urse－may－be－zaken－as－ANF 4753．］

4913 INDEPENDENT STUDY
3 hours credit．Prerequisites：Permission in writing（form available）
of the instructor，the student＇s Advisor，and the Division Director and

## 3005

Dean of the College in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work. May be repeated for credit, but not more than 6 hours will apply to the Bachelor's degree.

SPECIAL STUDIES
3 hours credit. Prerequisite: Consent of instructor.
An organized course offering specialized study not normally or not
often available as part of the regular course offerings. Specia
Studies Courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a
Bachelor's degree.
4983 HONORS SEMINAR
[4553] (3-0) 3 hours credit. Prerequisite: Enrollment limited to candidates for honors in Geography during their last two semesters. A supervised, intensive examination of topical areas of Geography.

4993 HONORS THESIS
[4563] (3-0) 3 hours credit. Prerequisite: Enrollment limited to candidates for honors in Geography during their last two semesters. To be taken concurrently with GRG 4983 [4553]. Supervised research and preparation of an honors thesis.

All candidates for the degree must complete：

A． 30 semester hours in the major， 21 of which must be at the upper－ division level．

Required courses are：at least two courses from offerings numbered HIS 2503 ［2500］to HIS 2593 ［2599］covering different continental areas；six courses in history at the upper－division level［3000－7evel and－abeve］；Social Science Conference Course（SSC 4543）［4573］．The remaining three credit hours will be chosen in consultation with the student＇s Advisor．

Six semester hours may［may］be applied to the major from：
ANT 3673 Origins of Civilization
ECO 3183 Economic Development of the United States
POL 3323 Constitutional Law
SSC 3003 Social Research Methods
SSC 3103 Major Theories of the Social Sciences
［AAF－3673；－E6日－3783；－P日t－3723：］

Interdisciplinary Problem Area

A． 21 hours of History exclusive of those in the problem area are required． The 21 hours must contain：two courses numbered HIS 2503－2593［2508－ 2599］and at least 3 courses at the upper－division level［aumbered 30日标－and－abeve］．

COURSE DESCRIPTIONS
HISTORY

1013 UNITED STATES POLITICAL HISTORY, 1775-1865: THE DEVELOPMENT OF AMERICAN POLITICAL INSTITUTIONS AND THE ERA OF CONSTITUTIONAL CRISIS (3-0) 3 hours credit.
American Political history from the Revolution through the Civil War, with emphasis on the emergence of new political structures and ideas and on the growth of fundamental constitutional conflicts within the American polity. Applies to [Fułfiz7s] the legislative requirement for United States history.

1023 UNITED STATES POLITICAL HISTORY, 1865-1918: THE READJUSTMENT OF THE AMERICAN POLITICAL SYSTEM
(3-0) 3 hours credit.
Reconstruction and the adjustment of American political institutions to the problems of late nineteenth-century America; the dominance of the legislative branch and the age of reform. Applies to [Fu7fif7s] the legislative requirement for United States history.

1033 UNITED STATES POLITICAL HISTORY, 1918 TO THE PRESENT: POLITICS IN AN ERA OF CRISIS AND WORLD POWER
(3-0) 3 hours credit.
Changes in the function and structure of the United States political system as it confronted new problems of social change and world power. Applies to [Fu7fif7s] the legislative requirement for United States history.

2013 COLONIAL AMERICA AND THE FORMATION OF AMERICAN SOCIETY
(3-0) 3 hours credit.
An examination of the elements of colonial society that most strongly influenced the development of the United States. Special emphasis on a comparison between the colonies of eastern North America and those of Spanish America. Applies to [Fu7fiffs] the legislative requirement for United States history.

2033 ECONOMIC DEVELOPMENT AND SOCIAL CHANGE IN THE UNITED STATES SINCE 1850 (3-0) 3 hours credit.
American industrialization and the development of modern American society. Special attention is [wifl-be] paid to the economic background of industrialization, attendant social problems, immigration, race relations, and the emergence of a mass-consumption economy. Applies to [Fu7fiffs] the legislative requirement for United States history.

2043 THE INTERNATIONAL RELATIONS OF THE UNITED STATES, 1783-1950 (3-0) 3 hours credit.
The diplomatic history of the United States, with particular attention to the emergence of the United States as a world power, the consequences of world power for foreign policy, and the internal roots of foreign policy. Applies to [Fblfif7s] the legislative requirement for United States history.

2053 HISTORY OF TEXAS SINCE 1836
(3-0) 3 hours credit.
A consideration of the regional history of the Southwest, with particular attention to the history of Texas during the period of independence and afterward, the annexation of the Southwest by the United States, and the political and economic development of the region in the late nineteenth and twentieth centuries. Applies to [FG7fi775] the legislative requirement for history.
(3-0) 3 hours credit.
An intensive survey of American intellectual history from the seventeenth century to the present. Applies to [Fulfills] the legislative requirement for United States history.

3023 AMERICAN INDEPENDENCE AND NATIONAL UNITY, 1760-1820
(3-0) 3 hours credit. Prerequisite: HIS 1013 or HIS 2013, or consent of instructor.
Origins of the American Revolution, the Revolutionary War, the struggle for unity, and the early years of nationhood. Applies to [FG7fi775] the legislative requirement for United States history.
3043 POPULISM AND PROGRESSIVISM
(3-0) 3 hours credit. Prerequisite: HIS 1023 or HIS 2033, or consent of instructor.
Political reform movements in the late nineteenth and early twentieth centuries, with particular attention to the social conditions within which
 United States history.

3053 JACKSONIAN DEMOCRACY AND NATIONAL EXPANSION, 1820-1860
(3-0) 3 hours credit. Prerequisite: HIS 1013, or consent of instructor. Jacksonian democracy, the rise of the two-party system, major reform movements, and the origins of the Civil War. Applies to [Fu7fitfs] the legislative requirement for United States history.

3093 UNITED STATES CONSTITUTIONAL AND LEGAL HISTORY (3-0) 3 hours credit.
Constitutional and legal developments from the formation of the state and federal constitutions to Watergate. Particular attention is paid to the context of judicial decision-making and its impact on American society and life. Complements POL 3323, Constitutional Law. Applies to the legislative requirement in U. S. history.

3123 HISTORY OF TEXAS: THE COLONIAL AND MEXICAN PERIODS AND THE WAR OF INDEPENDENCE
(3-0) 3 hours credit.
Texas history from the seventeenth century through the War of Independence in 1836, emphasizing the Spanish and Mexican backgrounds of Texas and the changes which preceded Texas' independence. Applies to [Fu7filfs] the legislative requirement for history.

3143 WOMEN IN AMERICAN LIFE
(3-0) 3 hours credit.
The changing role of women from colonial times to the present, with particular attention to women's influence on the family, the labor force, economic decision-making, and political action.
3153 THE CITY IN THE MAKING OF AMERICA
(3-0) 3 hours credit.
A study of urban growth since 1625. The course examines the social, economic, and political life of three phases in United States urbanization: the colonial city, the industrial city, and the modern metropolis.
The effects of urban changes on the lives of city dwellers and on the ways in which cities have influenced national development.

3163 THE STRANGER IN AMERICA
(3-0) 3 hours credit.
An examination of immigrants and their reception in American society from the 18 th century to the present, including the immigrants' motives for moving to the United States, the problems they encountered in adjusting
to their new surroundings, and the contributions they made to the nation's deyelopment.

3203 BRITAIN SINCE 1660 [7485]
(3-0) 3 hours credit.
A survey of modern British history, emphasizing political, social and intellectual factors in Britain's past.

4173 HISTORY AND EVOLUTION OF THE CITY
(3-0) 3 hours credit. Prerequisite: SSC 3213 or consent of instructor. An examination of the origins of the city, the development and variation of the urban settlement in response to the agricultural, commercial and industrial revolutions, and the city viewed cross-culturally to illustrate its common and diverse functions.
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4203 HISTORY OF SCIENCE
(3-0) 3 hours credit.
The emergence of science among alternative explanatory systems from its roots in classical times to the present. Science as an intellectual activity, a social product and a force for change, parallels and divergences in the development of social and physical sciences.

4303 HISTORY OF URBAN CRIME IN AMERICA
(3-0) 3 hours credit.
This course explores the changing nature of the criminal underworld as it has responded to broad socioeconomic processes in American urban society since 1800. Topics include a consideration of street crime, juvenile delinquency, and professional thieves; an examination of changing perceptions of narcotics use; and an extensive analysis of the origins and development of organized crime.

4913 INDEPENDENT STUDY
3 hours credit. Prereguisites: Permission in writing (form available) of the instructor, the student's Advisor, and the Division Director and Dean of the college in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work. May be repeated for credit, but not more than 6 hours will apply to the Bachelor's degree.

4953 SPECIAL STUDIES
3 hours credit. Prerequisite: Consent of instructor.
An organized course offering specialized study not normally or not often available as part of the regular course offerings. Special Studies Courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a Bachelor's degree.

4983 HONORS SEMINAR
[4553] (3-0) 3 hours credit. Prerequisite: Enrollment limited to candidates for honors in History during their last two semesters. A supervised, intensive examination of topical areas of History.

4993 HONORS THESIS
[4663] (3-0) 3 hours credit. Prerequisite: Enrollment limited to candidates for honors in History during their last two semesters. To be taken concurrently with HIS 4983 [4553], Supervised research and preparation of an honors thesis.

All candidates for the degree must complete:
A. 30 semester hours in the major, 21 of which must be at the upperdivision level.

Required courses are: two from the series numbered POL 2503 through 2693; Social Science Conference Course (SSC 4543); 21 semester hours political science and eligible offerings from other disciplines, 18 of which must be at the upper-division level. [Requiped-eeurses-apet
 series-пиниеред-POt-2503-threugh-2693t-5S6-4573.]

Nine semester hours may be applied to the major from:
ANT 3183 Peasant Societies and Modernization
ECO 3273 Public Choice and the Public Finances
HIS 3093 United States Constitutional and Legal History
HIS 3533 Inter-American Relations
HIS 3573 Revolutions in Latin America: Mexico, Bolivia, Cuba, Brazil, and Chile

HIS 4193 Colonialism: A Comparative Approach
PSY 3283 Political Socialization
SOC 3103 Corporate Structures
SSC 3003 Social Research Methods
SSC 3103 Major Theories of the Social Sciences




Since the 1000 - and 2000 - level courses satisfying the state requirement in U. S. and Texas government also provide an introduction to political science, it is recommended that where possible the student complete at least one such course before going on to major courses numbered 2503 and above.

## COURSE DESCRIPTIONS

## POLITICAL SCIENCE

(POL)

1013 INTRODUCTION TO AMERICAN POLITICS
(3-0) 3 hours credit.
Constitutional theory and political practice in the United States.
Political behavior, parties and pressure groups, the Presidency and Congress, the judiciary, contemporary public policy issues. Fulfills the legislative requirement in U. S. government [rełative-te-the-Нnited States-Gerstitutier].

1023 THE POLITICS OF THE AMERICAN ECONOMY (3-0) 3 hours credit. The Constitution, the courts and government economic intervention. The new industrial state. Corporations, unions, and government. Consumer politics. Fiscal and monetary policy. The budget. Fulfills the legislative requirement in U. S. government [rełative-te-the-United-States Gerstizutior].

1033 AMERICAN STATE POLITICS (3-0) 3 hours credit. A comparative examination of state constitutions, governmental structures, and politics, with special emphasis on Texas. Fulfills the legislative


1043 INTRODUCTION TO TEXAS POLITICS
(3-0) 3 hours credit.
Constitutional theory and political practice in Texas. Constitutional development, the Governor and the Legislature, the judiciary, parties, pressure groups, county, city, and town government. Fulfills the legislative requirement in Texas government [pełative-te-the-fexas-6enstitutien].

2013 THE POLITICAL SYSTEMS OF THE UNITED STATES AND MEXICO (3-0) 3 hours credit.
A comparative examination of the constitutional frameworks, political institutions, and political practice of the United States and Mexico. The two revolutions, the role of the constitution, the power of the executive, PRI, Republicans and Democrats, the question of political opposition, federal-state relations, the politics of economic development, etc. Fulfills the legislative requirement in U. S. government [pełative te-the-United-States-6enstitutien].

## 2023 CIVIL LIBERTIES IN AMERICAN LAW AND PRACTICE

(3-0) 3 hours credit.
An examination of the Bill of Rights and its contemporary application in the United States. The theory and history of civil liberties in America. Freedom of expression; privacy; religious freedom; legal due process; etc. Fulfills the legislative requirement in U. S. government [to-the-Haited


2033 THE ORIGINS OF THE AMERICAN CONSTITUTIONAL SYSTEM （3－0） 3 hours credit．
The political theory of the Declaration of Independence and the Constitu－ tion．The Constitutional Convention．The debate over ratification．The economic theory of the Constitution．Fulfills the legislative requirement in U．S．government［rełative－te－the－$\forall$ нited－States－6enstitutien］．

## 2043 CONTEMPORARY PUBLIC POLICY IN TEXAS

（3－0） 3 hours credit．
The relationship between the constitutional and legal framework and con－ temporary policy issues．The power of the state executive office， executive－legislative relations，environmental and energy policy，state－ local relations，etc．Fulfills the legislative requirement in Texas government［rełative－te－the－Ғexas－Gөastitution］．

2053 FEDERALISM IN THE UNITED STATES AND MEXICO
（3－0） 3 hours credit．
A comparative course on federal－state relations．Special emphasis is ［wif7－be］placed upon Texas and its relationship to the American national government，as compared to the state－center relationships in Mexico． Both constitutional stipulations and contemporary practice are［witt－be］ considered．Fulfills the legislative requirement in Texas government ［ヶеłative－t日－the－Ғexas－State－Gensもitutiөn］．

2513 PUBLIC ADMINISTRATION
（3－0） 3 hours credit．
The role of bureaucratic agencies in the formulation and implementation of public policy．Organization theory and administration in the public sector．While the approach of the course is comparative，special emphasis is placed on bureaucracy in the United States．
2623 LAW AND SOCIETY
（3－0） 3 hours credit．
The role of law in society．The idea of natural law．Constitutional， statutory，and administrative law．The judiciary．The police and the penal system．The legal profession．While the approach of the course is［wit7－be］comparative，special emphasis is［witi－be］placed on law in the United States．［Fułfiłfs－the－łegisłative－pequirement－rełative－te the－Hait ted－States－Genstitutien．］

3113 AMERICAN POLITICAL THEORY
（3－0） 3 hours credit．［Ppepequisiteт－－P日t－25日3－өp－є日Asent－өf－instput The political theory of the Constitution；the Federalist Papers；Adams； Jefferson；Paine；Calhoun；Thoreau；Social Darwinism；Pragmatism；twentieth century political thought．

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3133 POLITICAL PHILOSOPHY：ANCIENT AND MEDIEVAL
（3－0） 3 hours credit．
The major works of Western political philosophy from ancient times to the Renaissance．Writers examined may include Plato，Aristotle，Thucydides， Augustine，Machiavelli．

3143 POLITICAL PHILOSOPHY：MODERN
（3－0） 3 hours credit．
The major works of political philosophy from the Renaissance to the 19th century．Writers examined may include Hobbes，Locke，Rousseau，Hegel， Marx，Mill．

3313 AMERICAN COMMUNITY POLITICS
（3－0） 3 hours credit．
City，county，town，and other units of local government and politics in the United States．The framework of state authority；political aspects of revenue sources and allocation；the sources of community influence．

3223 JUDICIAL POLITICS
（3－0） 3 hours credit．
Political behavior of the major participants in the judicial process：
judges，attorneys，juries，defendants；the political and administrative context of the judicial process；judicial－executive and judicial－legis－ lative relations；the impact of court decisions．

3233 POLITICAL COMPAIGNS AND ELECTIONS
（3－0） 3 hours credit．
A study of the ways in which public officials are recruited and elected in the United States and other democracies．Campaign strategy and tactics； nominations and primaries；the legal framework of elections；the problem of constituency；voting studies；campaign finance．

3243 AMERICAN POLITICAL CULTURE
（3－0） 3 hours credit．
The enduring patterns of American political behavior examined in light of historical and contemporary politics．The sources of these patterns and the significance of distinct political subcultures．

3293 ETHMIC POLITICS IN THE SOUTHWEST
（3－0） 3 hours credit．
The role of Mexican－American，Indian，and Black minorities in the politics of the Southwest；the responsiveness of existing political structures to［fer］ethnic problems：ethnic political organizations and influence．

## 3303 EXECUTIVE－LEGISLATIVE RELATIONS IN THE UNITED STATES

（3－0） 3 hours credit．
The constitution framework and historical development of presidential and congressional powers．Legislation．Foreign policy and war－making power．Executive privilege．Impoundment．Impeachment．Fulfills the legisiative requirement in U．S．government．［retative－te－the－Haited－ §もates－Gensもキもせもキө日］．

## 3313 THE AMERICAN FEDERAL SYSTEM

（3－0） 3 hours credit．
The political theory of federalism，the constitutional provisions；inter－
state coordination of policies；local－state－federal relations；the
political role of private and public interests within the federal framework． Special emphasis on Texas．Fulfills the legislative requirement in Texas government．
［3373 IAFERGOYERAMENFAL－RELAFIGNS－IN－FHE－AMERIGAN－FEPERAL－SZSFEM－






3323 CONSTITUTIONAL LAW
（3－0） 3 hours credit．Prerequisite：POL 2623，or HIS 3093，or consent of instructor．
An examination of major constitutional issues，past and present， through the intensive study of leading cases．Recommended for pre－law students．Fulfills the legislative requirement in U．S．government．


POLITICAL PARTICIPATION
（3－0） 3 hours credit．
The levels and modes of political participation in the United States and other societies．The impact of socioeconomic status，ethnicity，context， psychological attributes，rational calculation，regime type，and other influences upon participation．
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3363 POLITICAL PARTIES
（3－0） 3 hours credit．［Prepequisitest－－Ret－25日3－er－eensent－ef－instrueter．］ The American political party system is［will－be］analyzed and compared with those of Great Britain and other democracies as well as with single－party systems in the Communist states and the Third World．

3383 COMPARATIVE COMMUNIST POLITICS
（3－0） 3 hours credit．
A comparative examination of government and politics in the Soviet Union， China，Cuba，Yugoslavia，and other Cummunist societies．Ideology．The cultural and economic setting of politics［ideelegy］．The international relations of Communist states．

3413 THE POLITICS OF URBANIZING SOCIETIES
（3－0） 3 hours credit．
A comparative examination of Western and non－Western urban governments and politics，and of their capacity［ef－upban－gevernmeats］to respond to urban issues and problems．［interest－greups．］Topics［to－be］examined include housing，transportation，and urban planning；crime and urban violence；political participation；the politics of finance and inter－ governmental relations．

3433 LEADERSHIP AND MODERNIZATION IN THE THIRD WORLD
（3－0） 3 hours credit．［Prerequisitet－－R日に－25933－R日t－3353－recemmened：］ An examination of political elites and leadership in the modernization process．Topics examined［witl］include charisma，military rule，nationalist and revolutionary leadership，and bureaucracy in Asia，Africa，and Latin America．

3523 FORCE IN INTERNATIONAL POLITICS
（3－0） 3 hours credit．
An examination of war and other forms of political violence in international relations．Topics considered may include Western thought on war，causes of and justifications for war，foreign military intervention，how wars end，approaches to the reduction of international violence．

3603
PUBLIC POLICY ANALYSIS
（3－0） 3 hours credit．
The analysis of public policy formation and implementation．Case studies are drawn from a specific subject area，varying from year to year：
e．g．，the environment，welfare policies，media regulation．While emphasis is placed on the United States，comparative materials are also introduced．

3613 PUBLIC BUDGETING AND TAXATION
（3－0） 3 hours credit．
An examination of the process and politics of public budgeting and
taxation，and of the bureaucratic behavior accompanying it．

4113 MODELS OF DEMOCRACY
(3-0) 3 hours credit.
The study of important democratic theorists provides a foundation for the critical and comparative analysis of several types of political systems which view themselves as democratic: e.g., U.S. constitutional liberaTism, Swiss cantonal federalism, Spanish anarcho-syndicalism, Soviet and Chinese Communism, industrial democracy.

4353 POLITICAL LEADERSHIP AND ELITES
[3353] (3-0) 3 hours credit.
A survey of the major theoretical and empirical approaches to the study of political elites and leadership. [Emphasis-eA-the-Haited-States.] Sociological, psychological, and historical perspectives are [wiłf-be] examined along with those of [if] political science.

4913 INDEPENDENT STUDY
3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's Advisor, and the Division Director and Dean of the College in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work. May be repeated for credit, but not more than 6 hours will apply to the Bachelor's degree.

SPECIAL STUDIES
3 hours credit. Prerequisite: Consent of instructor.
An organized course offering specialized study not normally or not often available as part of the regular course offerings. Special Studies Courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a Bachelor's degree.

4983 HONORS SEMINAR
[4553] (3-0) 3 hours credit. Prerequisite: Enrollment limited to candidates for honors in Political Science during their last two semesters. A supervised, intensive examination of topical areas of Political Science.

4993 HONORS THESIS
[4563] (3-0) 3 hours credit. Prerequisite: Enrollment limited to candidates for honors in Political Science during their last two semesters. To be taken concurrently with POL 4983 [4553]. Supervised research and preparation of an honors thesis.

## BACHELOR OF ARTS DEGREE IN PSYCHOLOGY

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Psychology is the study of animal, and particularly human, behavior and of
cognitive processes and thought. Modern psychology includes a wide variety of
subspecialties such as perception, memory, learning, physiological processes,
thinking, motivation, emotion, social behavior, personality, child development,
and psychopathology. It is important that the psychology student be exposed to
the varying theoretical and methodological approaches used by psychologists, and
that the student learn the facts and concepts of several different approaches.
Students should therefore consult with their advisors about the selection of
courses to ensure breadth of exposure and competence in psychology.
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The minimum number of semester hours required for this degree, including the fifty hours of General Education Requirements, is 120.*

All candidates for the degree must complete:
A. 30 semester hours in the major, 21 of which must be at the upper-division level.

Required courses are: PSY 2013 (Fundamentals of Psychology); at least two courses numbered 2503 through 2593; SSC 4543 (Social Science Conference Course).

The remaining courses totaling at least 18 semester hours will be chosen from among the offerings in psychology and those of other disciplines designated eligible for the psychology major.

[^36]Any of the following courses may be counted toward the psychology major:
SOC 3253 Theories of the Individual and Society
SOC 3293 Sex Roles
SSC 3003 Social Research Methods

In addition, up to six semester hours may be applied to the major from:
ANT 3613 Cross-Cultural Studies of Socialization
ANT 3623 Primate Behavior
BBL 3043 Psychological Considerations in a Bicultural Environment BIO 3463 Human Physiology

BIO 3471 Human Physiology Lab
COM 3083 Communication Theory
ECE 3123 Development and Learning in Early Childhood
EDP 3613 Characteristics of the Child with Learning Disabilities
GRG 4103 Ethnogeoqraphy
LNG 3843 Psychology of Language
LNG 4143 Language Development
MAT 3013 Statistical Methods in the Life and Social Sciences II
MGT 3253 Interpersonal Communication
PHI 3033 Philosophy of Science
SOC 3053 Deviance and Conformity
SOC 3063 Collective Behavior
SSC 3103 Major Theories of the Social Sciences
B. The student may select 40 semester hours of free electives.

Students majoring in psychology are strongly urged to fulfill part of their general degree requirements in mathematics by taking MAT 1051 (Probability and Finite Math) and MAT 1062 (Statistics). MAT 2013 (Statistical Methods in the Life and Social Sciences I) is also recommended for psychology majors.

Candidates for the degree who elect an interdisciplinary problem area must
complete 39 semester credit hours for the combined major and the interdisciplinary problem area.
A. 21 hours of psychology in addition to those in the problem area are
required, including PSY 2013 (Fundamentals of Psychology), three
courses numbered PSY 2503 through PSY 2593, and three courses at the
upper-division level.
B. 18 semester hours in the problem area.
C. 31 semester hours of free electives.

COURSE DESCRIPTIONS
PSYCHOLOGY
(PSY)

2503 DEVELOPMENTAL PSYCHOLOGY
$(3-0) 3$ hours credit. Prerequisite: PSY 2013 or consent of instructor. Problems, methods and results in the study of the psychological development of the individual from birth to old age.

2513 ABNORMAL PSYCHOLOGY
(3-0) 3 hours credit. Prerequisite: PSY 2013 or consent of instructor. Dynamics of abnormal behavior, with attention to neurotic personality, neurotic symptom formation and psychosomatic disorders. Further topics include the effects of brain injuries and the major psychoses.

2523 PERSONALITY
(3-0) 3 hours credit. Prerequisite: PSY 2013 or consent of instructor. Development and maintenance of typical modes of behavior and dynamics of adjustment as conceptualized by the principal theorists.

2533 SOCIAL PSYCHOLOGY
(3-0) 3 hours credit. Prerequisite: SOC 1013 or PSY 2013 or consent of instructor.
The impact of interaction and communication on personality development and interpersonal influence: self-identity, values and attitudes, role behavior and social perception.

2543 THEORIES OF LEARNING
(3-0) 3 hours credit. Prerequisite: PSY 2013 or consent of instructor. Alternative theories of the acquisition, elimination and maintenance of behavior and the effects of previous experience on responses to new situations.

PERCEPTION
(3-0) 3 hours credit. Prerequisite: PSY 2013 or consent of instructor. Consideration of the innate basis and role of experience in sensation and perception, with emphasis on human vision. Topics include psychophysics, color vision, perceptual organization, and the role of social and cultural factors in perception.

PHYSIOLOGICAL PSYCHOLOGY
(3-0) 3 hours credit. Prerequisite: PSY 2013 or consent of instructor. The biological, particularly neurophysiological, bases of human behavior and cognition, the structure and organization of the nervous system, and the effect of the latter on perception, memory, learning, motivation and emotion.

3013 PSYCHOLOGICAL MEASUREMENT
(3-0) 3 hours credit. Prerequisite: PSY 2013 and MAT 2013 or consent of instructor.
The application of quantitative and qualitative measures to psychological data, interpretational strategies, and assessments of validity and reliability.

3023 [FHE] SOCIAL PSYCHOLOGY OF SMALL GROUPS
(3-0) 3 hours credit. Prerequisite: PSY 2533 or ENG 1043 or consent of instructor.
Theory and modern research in the social psychology of diads, triads, and small groups. Group dynamics, balance theory, non-verbal communication
 tion.

3043 COMPARATIVE PSYCHOLOGY
(3-0) 3 hours credit. Prerequisite: PSY 2013 or consent of instructor. Comparative study of the social behavior of various species of animals, including man, from a phylogenetic perspective.

3053 CROSS-CULTURAL PSYCHOLOGY
(3-0) 3 hours credit. Prerequisite: 1 course each in Psychology and Anthropology or consent of instructor.
Perception, learning, cognition and thinking, personality and social behavior from a cross-cultural perspective.

3103 COGNITION
(3-0) 3 hours credit. Prerequisite: 2 Psychology courses or consent of instructor.
The integration of perceptual experience, attention, memory, and the role of language in thought. Emphasis on the structure of consciousness and the processes of thinking.

## 3113 MOTIVATION

(3-0) 3 hours credit. Prerequisite: 2 Psychology courses or consent of instructor.
Examination of causal and purposive accounts of human behavior, and of the biological and learned foundations of motivation. Particular emphasis is given to the causes of volitional behavior.

3123 ATTITUDES
(3-0) 3 hours credit. Prerequisite: PSY 2533 or consent of instructor. Consistency and learning models of attitude acquisition and change.
Theories and research on the relationships between attitudes and behavior with attention to various techniques of attitude measurement.

3133 THINKING AND CREATIVITY
(3-0) 3 hours credit. Prerequisite: 2 courses in Psychology or consent of instructor.
The processes of reasoning, problem-solving, and creativity. The role of logic in thinking, heuristic and algorithmic methods of problemsolving, and convergent and divergent thinking.
3203 INDUSTRIAL PSYCHOLOGY
(3-0) 3 hours credit. Prerequisite: 2 Psychology courses or consent of instructor.
Applications of psychological knowledge to industrial problems such as personnel selection, employee motivation and satisfaction, and the influence of organizations on behavior. The role of psychology in industry.
3283 POLITICAL SOCIALIZATION
(3-0) 3 hours credit.
The acquisition of political attitudes in childhood, adolescence, and adulthood. The impact of the family, school, informal group, job, media. Elite socialization. The sources of political dissent and opposition. Both American and comparative studies are examined.
3353 SOCIALIZATION
(3-0) 3 hours credit. Prerequisite: PSY 2503 or PSY 2533 or consent of instructor.
The study of how people learn to behave appropriately and to internalize the values of groups. Particular emphasis is given to moral development and to the relationships between children and parents and the outcomes of these relationships for socialization.

3513 PSYCHOPATHOLOGY AND CHILDHOOD
(3-0) 3 hours credit. Prerequisite: PSY 2513 or consent of instructor. Clinical and experimental research on the effects of maternal deprivation, autistic children, childhood neuroses and schizophrenia, and the psychological bases of therapeutic techniques.

3523 PSYCHOLOGICAL PROBLEMS OF THE AGED
(3-0) 3 hours credit. Prerequisite: PSY 2503 or consent of instructor. Traditional and modern approaches to the social, institutional, neurological, and physical bases of aging.

3533 BEHAVIOR CHANGE AND PSYCHOTHERAPY
$(3-0) 3$ hours credit. Prerequisite: PSY 2513 or consent of instructor. Classic and modern theories and related research on the process of behavior and value change, particularly in the contexts of rehabilitation and psychotherapy. Comparison of various models and their empirical support, the definition of progress and cure, and the linkage of attitude and value change to behavior change.

3633 AGGRESSION
(3-0) 3 hours credit. Prerequisite: ANT 1013 or PSY 2013 or consent of instructor.
Survey of social and psychological data, findings and theory on aggression, both human and non-human. [7his-eөupse-may-be-taken-as-ANF-3633-]

4003 HISTORY OF PSYCHOLOGY
(3-0) 3 hours credit.
The development of major theoretical positions and research strategies in psychology from the ancient Greeks to the present with emphasis on the development of scientific psychology since the late nineteenth century.

PREJUDICE
(3-0) 3 hours credit. Prerequisite: PSY 2533 or consent of instructor. Consideration of social psychological and personality factors in prejudice and stereotyping, and their interaction with cultural factors in producing racism and other prejudices.

4113 COGNITIVE DEVELOPMENT
(3-0) 3 hours credit. Prerequisite: PSY 2503 or consent of instructor. The development of perception, memory, and thinking in children, with attention to the roles of experience and maturation in development of thought, and to the validity of the concept of cognitive stages, particularly Piagetian models.

4123 PERSONALITY DEVELOPMENT
(3-0) 3 hours credit. Prerequisite: PSY 2503 or consent of instructor. The development of stable individual differences and personality structures throughout the life span.

4143 MEMORY
(3-0) 3 hours credit. Prerequisite: PSY 3103 or consent of instructor. Models for the coding, storage, and retrieval of information in memory. Organization and structure of short-term memory, long-term memory, semantic memory and the role of verbalization and images in memory.

## 4153 ATTENTION

(3-0) 3 hours credit. Prerequisite: PSY 3103 or consent of instructor. The role of stimulus characteristics and of motivation and physiological status in visual and auditory attention.

4203 PROSOCIAL BEHAVIOR
(3-0) 3 hours credit. Prerequisite: PSY 2533 or consent of instructor. Cooperation, altruism, interpersonal attraction, and the development of relationships, including such underlying mechanisms as empathy, selfpresentation and self-disclosure, norms, and trust.

## 4213 PERSON PERCEPTION

(3-0) 3 hours credit. Prerequisite: PSY 2533 or consent of instructor. The study of how people perceive and construe social events, social situations, and the behavior of other people. Some emphasis is also placed on how social and cultural forces affect person perception processes.

4223 ENVIRONMENTAL PSYCHOLOGY
(3-0) 3 hours credit. Prerequisite: PSY 2533 or consent of instructor. How environments are perceived and construed and the effects of such construal on behavior. The role of environmental factors such as noise and behavior in urban settings.

4233 FREUDIAN PSYCHOLOGY
(3-0) 3 hours credit.
Study of the development of Freud's thought through a chronological survey of some major works and through consideration of Freud's background and life. The influence of Freud on such neo-Greudian schools as Adler, Horney, and Fromm and the impact of Freudian and neo-Freudian ideas on the social sciences.

4913 INDEPENDENT STUDY
3 hours credit. Prerequisites: Permission in writing (form available)
of the instructor, the student's Advisor, and the Division Director and
Dean of the College in which the course is offered.
Independent reading, research, discussion, and/or writing under the
direction of a faculty member. For students needing specialized work. May be repeated for credit, but not more than 6 hours will apply to
the Bachelor's degree.

4953 SPECIAL STUDIES
3 hours credit. Prerequisite: Consent of instructor.
An organized course offering specialized study not normally or not often available as part of the regular course offerings. Special studies courses may be repeated for eredit when the topics vary, but not more than 6 hours within any one discipline will apply to a Bachelor's degree.

4983 HONORS SEMINAR
(3-0) 3 hours credit. Prerequisite: Enrollment limited to candidates for honors in Psychology during their last two semesters. A supervised, intensive examination of topical areas of Psychology.

4993
HONORS THESIS
(3-0) 3 hours credit. Prerequisite: Enrollment limited to candidates for honors in Psychology during their last two semesters. To be taken concurrently with PSY 4983. Supervised research and preparation of an honors thesis.

Sociology is the study of human social relationships and the products of these relationships. Sociologists investigate the organization and structure of societies, communities, and smaller groups and the manner in which these social units function, change, and affect individuals and groups. Specialized areas of sociological research include social psychology, child-rearing, race relations, criminology, deviance, aging and urban and medical sociology.

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All candidates for the degree must complete:
A. 30 semester hours in the major, 21 of which must be at the upperdivision level.

Required courses are:
SOC 1013 Social Structure
SOC 4103 Survey Research Methods
or
SSC 3003 Social Research Methods
SSC 4963 Social Science Conference Course
Six (6) semester hours from courses numbered SOC 2013 through SOC 2093
Three (3) semester hours from:
SOC 3083 Theories of Social Change
SOC 3253 Theories of the Individual and Society
SOC 4163 Contemporary Sociological Theory

SSC 3103 Major Theories of the Social Sciences
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The remaining 12 credit hours［e日upses］will be chosen from among the offerings in sociology and those of other disciplines designated eligible for the sociology major．A maximum of nine［six］semester hours may be applied to the major from：

ANT 3223 Cultural Ecology
ECO 4293 Economics of Discrimination and Poverty
MAT 3013 Statistical Methods in the Life and Social Sciences II
MGT 3023 Organizational Behavior
LNG 3833 Sociology of Language
PSY 2533 Social Psychology
PSY 3023 The Social Psychology of Small Groups
PSY 3353 Socialization
SSC 3003 Social Research Methods
SSC 3103 Major Theories of the Social Sciences
［SOG－3043t－E60－4293t－MAF－3073t－MGF－3023t－MGF－3703t－P日E－3293ヶ］

## INTERDISCIPLINARY PROBLEM AREA

A． 21 hours of sociology，exclusive of courses in the problem area，［and extpadiseiplifapy－e日urses］are required．The 21 hours must include： SOC 1013 Social Structure；at least two courses from the subfield series，SOC 2013 through SOC 2053；and at least two courses at the upper－division level．［numbered－3 $0 \theta \theta-$ and－abover］

COURSE DESCRIPTIONS
SOCIOLOGY

1013 SOCIAL STRUCTURE
(3-0) 3 hours credit.
An introduction to concepts used to analyze the structure of human groups, the relationships of individuals to those groups, and processes of social change.
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2033 POPULATION DYNAMICS
[2063] (3-0) 3 hours credit. Prerequisite: SOC 1013.
The demographic analysis of world population trends and their projected consequences. Trends in selected countries are considered, together with associated population policies and options.

2043 RACE AND ETHNIC RELATIONS
[2503] (3-0) 3 hours credit. Prerequisite: SOC 1013 recommended.
Dominant-subordinant relations in world societies, with major emphasis on the United States. Models of plural and class society, and uses and consequences of power are examined.

3013 SOCIAL STRATIFICATION
(3-0) 3 hours credit. Prerequisite: SOC 1013.
Theory and research pertaining to inequalities of power, prestige, and
economic privilege. Major emphasis upon inequality and social mobility in the United States.



3063 COLLECTIVE BEHAVIOR [SOGIAL-MQYEMENF§]
(3-0) 3 hours credit. Prerequisite: SOC 1013; SOC 2043 [2503] recommended. Case studies and associated theory dealing with various forms of collective behavior and social movements, including mobs, revolutions, cults and panics.

3083 THEORIES OF SOCIAL CHANGE
[2043] (3-0) 3 hours credit. Prerequisite: SOC 1013. Principal models and theories of social transformation applied to examples of societal change.

3093 RELIGION AND SOCIETY [REEIGIOUS-BEHAYI $\theta$ ]
(3-0) 3 hours credit. Prerequisite: SOC 1013 [peєemmended].
Religious institutions and movements in the United States with comparative data from other countries. The relationship of religious institutions [behavier] to social stratification, economic institutions, [faधters;] and political and social change.

3113
CRIMINOLOGY
(3-0) 3 hours credit. Prerequisite: SOC 1013.
Extent, types, and causes of crime. The production of crime statistics. Social reactions to crime: police, courts, and correctional institutions.

3163 THE MASS MEDIA, GOVERNMENT, AND PUBLIC OPINION
(3-0) 3 hours credit.
An examination of the relationships between the press and electronic media and government, and of the role of the media in shaping public opinion. Topics to be covered may include: investigative reporting; news management; government regulation of the media; shield laws; the concentration of media ownership and control.

3173 ECONOMY AND SOCIETY
(3-0) 3 hours credit. Prerequisite: SOC 1013.
The relationship of the economic system to the social system as a whole in selected societies. The varieties of capitalist and socialist economic organizations, and their social implications.

3193 THE SOCIOLOGY OF WORK AND OCCUPATIONS
(3-0) 3 hours credit. Prerequisite: SOC 1013.
Occupational structures in selected societies. The relationship between occupations and economic rewards, life styles, and world view. Determinants of work satisfaction.

3203 GERONTOLOGY
$(3-0) \quad 3$ hours credit. Prerequisite: SOC 1013.
An examination of the role of older persons in selected societies and the distinctive problems which they confront. The social organization of death and dying.

3213 MEDICAL SOCIOLOGY
(3-0) 3 hours credjt. Prerequisite: SOC 1013.
The identification of social factors in the distribution and cause of disease; relationships between patients and medical professionals; the contribution of lay beliefs to health, illness, treatment and recovery; health institutions; the distribution of medical resources and organization of health care delivery systems.

3253 THEORIES OF THE INDIVIDUAL AND SOCIETY
(3-0) 3 hours credit. Prerequisite: SOC 1013.
An examination of major theories dealing with the effects of culture and social structure on the development and functioning of the personality and the self. Symbolic interaction, exchange theory, conditioning and stimulus response theory, imitation and modeling, role theory, and socialization theories.

3283 POVERTY
(3-0) 3 hours credit. Prerequisite: SOC 1013.
The causes and consequences of poverty in the United States and selected other societies. An examination of social programs designed to combat poverty.

3293 SEX ROLES
(3-0) 3 hours credit. Prerequisite: 2 courses in Psychology or Sociology or consent of instructor.
The nature of sex roles in our own and other societies. Consideration of how people learn sex roles and the outcomes of this learning for individuals, families, and societies. Alternatives to conventional sex roles.

3303 WOMEN AT WORK
(3-0) 3 hours credit. Prerequisite: SOC 1013 or MGT 3013. Consideration of problems faced by men and women working together in management. Investigation of patterns of female labor force participation, with special emphasis upon entry of women into management positions and their functioning in these positions.

3333 UTOPIAS
$(3-0) 3$ hours credit. Prerequisite: SOC 1013.
A critical examination of utopian social experiments and the conditions
under which they have succeeded or failed.
3343 LIFE STYLES
(3-0) 3 hours credit. Prerequisite: SOC 1013.
An analysis of alternative patterns of consumption in contemporary societies, along lines suggested by Max Weber. The relationship between life style and economic resources, region, race and ethnicity, occupation, and world view. Political and other social constraints upon deviant life styles.
3363 THE SOCIOLOGY OF KNOWLEDGE(3-0) 3 hours credit. Prerequisite: SOC 1013.The relationship between social structures and modes of thought: theology,ideology, science, and other belief systems. The impact of society onscience and of science on society. Invention, discovery, and the knowledgeexplosion.
4103 SURVEY RESEARCH METHODS
$(3-0) 3$ hours credit. Prerequisite: SOC 1013.
An advanced course in sociological research, including research design,questionnaire construction, sampling, interviewing, control procedures.data processing, statistical analysis and interpretation of results.
4113 SOCIAL INDICATORS AND SOCIAL PLANNING(3-0) 3 hours credit. Prerequisites: SOC 1013 and MAT 2013.Techniques for anticipating future trends. Construction and use of socialindicators and evaluation of projective techniques.
4163 CONTEMPORARY SOCIOLOGICAL THEORY(3-0) 3 hours credit. Prerequisite: SOC 1013.An examination of current trends in sociological theory: contemporaryfunctionalism, evolutionism, exchange theory, radical criticism, phenom-enology and symbolic interactionism, and formal theory construction.
4173 COMPARATIVE FAMILY STRUCTURES(3-0) 3 hours credit. Prerequisite: SOC 1013 recommended.A review of research comparing major conventional and alternative familystructures in industrial countries.
4913 INDEPENDENT STUDY(3-0) 3 hours credit. Prerequisites: Permission in writing (formavailable) of the instructor, the student's Advisor, and the DivisionDirector and Dean of the College in which the course is offered.Independent reading, research, discussion, and or writing under thedirection of a faculty member. For students needing specialized work.May be repeated for credit, but not more than 6 hours will apply to theBachelor's degree.

SPECIAL STUDIES
(3-0) 3 hours credit. Prerequisite: Consent of Instructor.
An organized course offering specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a Bachelor's degree.
4983 HONORS SEMINAR
[4553] (3-0) 3 hours credit. Prerequisite: Enrollment limited to candidates forhonors in Sociology during their last two semesters.
A supervised, intensive examination of topical areas of Sociology.
4993 HONORS THESIS
[4563] (3-0) 3 hours credit. Prerequisite: Enrollment limited to candidates for
honors in Sociology during their last two semesters.
To be taken concurrently with SOC 4983 [4553]. Supervised research and
preparation of an honors thesis.

3103 MAJOR THEORIES [GQAGEPIS] OF THE SOCIAL SCIENCES
[2703] (3-0) 3 hours credit.
A review of seminal theories in nineteenth- and twentieth-century social science, illustrated in cases of social behavior. The contributions of Marx, Keynes, Durkheim, Weber, Freud, Malinowski, Skinner, and Chomsky.

3213 THEORIES OF THE CITY
(3-0) 3 hours credit.
A survey of current and classic explanations of the city including the city as polity, the city as plan, the city and the hinterland, and the advent of the metropolis, drawing on the various social sciences, philosophy and the arts.

## 4963 SOCIAL SCIENCE CONFERENCE COURSE

[4573] (3-0) 3 hours credit. Prerequisite: Enrollment limited to Social Science majors in their last two semesters.
A course designed to integrate the social sciences with the student's major discipline and explore related research findings.

DIVISION OF BICULTURAL-BILINGUAL STUDIES

The Division does not offer an undergraduate degree in BiculturalBilingual Studies. Support courses that may be taken as electives are given to provide students with training in approaches to and methods and techniques of bilingual and second language learning and teaching as well as in associated cultural studies [an-intensive-tpaining-in-łanguage farimariły-Spanish-and-Engłish子-and-in-asseeqiated-eułturał-studqesł. Students expected to be interested in these courses are those in bilingual teacher education at the elementary and secondary levels and those who wish to apply cultural knowledge to careers in business, international law, social work, public relations, journalism, etc.

The Division also offers courses in English as a Second Language [English-as-a-seeond-łanguage] designed to introduce students to the various strategies and methods of analysis of languages. Courses are designed for students who will be teaching second languages, but will also benefit students who plan to teach or to engage in other areas that rely heavily on an understanding of language. These students might include those in communication, with specialities in speech therapy, practice of law, careers in business, and those who simply wish to enlarge their understanding of the role that language plays in society.

COURSE DESCRIPTIONS
BICULTURAL-BILINGUAL STUDIES
(BBL)

## 3013 CONTRASTIVE LINGUISTICS AND BILINGUALISM [GEMPARAFI¥E-EINGHISFIGS ANE-BIETNGBAEISK]

3133 COMMUNICATIVE COMPETENCE IN A SPANISH-ENGLISH BILINGUAL SOCIETY [FEAGHING-GOMMUNIGAF¥ON-SKILES-IN-SPANISH-ANB-ENGEISH]

COURSE DESCRIPTIONS
ENGLISH AS A SECOND LANGUAGE (ESL)

3013 [4023] APPLICATIONS OF LINGUISTICS I [APPLIGAFIENS-QF-EINGUISFIGS] (3-0) 3 hours credit. A study of the applications of linguistics to the teaching of English to the non-native speaker: an overview.
 English-as-a-Seeond-tangtager]

3023
APPLICATIONS OF LINGUISTICS II
(3-0) 3 hours credit. Prerequisite: ESL 3013
A study of the applications of linguistics to the teaching of English to the non-native speaker: English structure and the ESL teacher.

3033 [4073] INTRODUCTION TO TEACHING ENGLISH AS A SECOND/FOREIGN LANGUAGE
(3-0) 3 hours credit. Prerequisite: ESL 3013 or consent of
 A study of the various theories and methods available for the teacher of English as a Second Language.

4013 ENGLISH AS A SECOND LANGUAGE IN EARLY CHILDHOOD AND ELEMENTARY
EDUCATION
(3-0) 3 hours credit. Prerequisite: ESL 3013
A course designed for examining, adapting, and utilizing approaches, methods, and techniques for English as a Second Language in early childhood and elementary school curriculum.

4023 ENGLISH AS A SECOND LANGUAGE IN SECONDARY AND ADULT EDUCATION (3-0) 3 hours credit. Prerequisite: ESL 3013
A course designed for examining, adapting, and utilizing approaches, methods, and technigues for English as a Second Language in secondary and adult education.

## DIVISION OF EDUCATION

IT San Antonio serves [is-Afamaing-te-serve] a confluence of cultures. Students Wił7] have continuing opportunities to observe classroom instruction of the liverse ethnic groups in the San Antonio metropolitan area. This enables [wif7 mable] students to make realistic and effective decisions about careers and uitable teaching strategies. By embarking upon professional associations, xperiences, and observations during their college careers, students [wiłł] ave time to consider carefully their commitments to the teaching profession. he undergraduate teacher education program provides [witi-previde] students in adequate background for the broad profession of teaching as well as for lorking in the more localized setting of South and Central Texas.

It the undergraduate level, two degree programs are available, the Bachelor If Arts Degree in Early Childhood and Elementary Education and the Bachelor of Science Degree in Health and Physical Education. Although a degree in sducation and a teaching certificate are two different things, students wishIng to be certified as elementary teachers or kindergarten teachers as well 15 students wishing to be certified as teachers of health and/or physical sducation at the elementary and/or secondary level should pursue one of these wo degree programs in education. Students majoring in these two degree prorams should enroll in professional education courses throughout the sophomore, junior, and senior years. [At-the-uadergraduate-7evet;-ore-degree-program 15-өfesently-avaiłabłes-the-Bachełer-of-Afts-Begree-in-Eaffy-6hiłdheed-aAd-
 if-kindergapten-teathers-wiłt-purstu-this-degree-in-the-Bivisien-ef-Education.

 $n$ the first semester of their freshman year they should contact the Underraduate Advisor of the Division of Education to facilitate program planning. ailure to do so may result in a longer degree program than might otherwise $\geq$ required.

Any student at UTSA can elect to take education courses and if later ad－ mitted to a teacher education program，can petition to have the courses counted toward that program．

Students wishing to be certified as secondary school teachers in other aca－ demic areas［will］follow degree programs in other Divisions of UT San Antonio and［wil7］take courses for Teacher Certification in the Division of Education．（A complete list of Certification Programs is contained in a brochure available from the Office of Teacher Certification and Place－ ment． 1

## BACHELOR OF ARTS DEGREE IN EARLY CHILDHOOD AND ELEMENTARY <br> EDUCATION

The minimum number of semester hours required for this degree，including the 50 hours of General Education Requirements，is 126 ，of which at least 57 ［60］must be at the upper－division leve］．All candidates for the degree must complete：

A．Twenty－four semester hours in one of the three groups of courses
listed below．［Fwenty－foup－semester－hours－in－the－major－－at
子east－78－өf－whieh－must－be－taken－from－one－of－the－three－groups－of ceurse－子デstings－sez－out－bełow．］

1）Elementary Education
ECE 3213 Language Arts in the Elementary School
ECE 3223 Social Science in the Elementary School
ECE 3233 Mathematics in the Elementary School
ECE 3303 Reading in the Primary Grades
ECE 3313 Reading in the Intermediate Grades
ECE 4213 Science in the Elementary School

## ECE 4133 The Expressive Modes of Children in the Elementary School

[E6E-42日3--Musie-and-Arも-in-the-Etementapy-Seheel]
ECE 4243 Second and Foreign Languages in the Elementary School
[Fereign-tanguages-ifa-the-Etementary-Seheot]
Three hours of upper-division electives in elementary education.
2) Early Childhood Education

ECE 3103 Young Children's Literature and Storytelling
ECE 3113 Play and Creative Activities in Early Childhood Education

ECE 3123 Development and Learning in Early Childhood
ECE 3133 Programs in Early Childhood Education
ECE 4103 Guidance of Young Children in Groups
ECE 4113 Language Development and Reading in Early Childhood Education

ECE 4123 Parents and Community Resources in Early Childhood and Elementary Education

Three hours of approved upper-division electives.
3) Reading

ECE 3323 Skill Development in the Reading Program
ECE 4303 Introduction to Reading Problems
[EEE-4306--Reading-Ppobłems]
ECE 4326 [EGE-4323] Practicum in Reading
Twelve hours of approved upper-division electives. [5i*

and-łanguage-er-psyekełegy.]
B. Twenty-two semester hours of course work in education, 21 of which are at the upper-division level.

Required courses are:
EDU 2001 Introduction to the School Environment
EDU 3003 Educational Sociology
EDP 3013 Growth，［and］Development and Learning Theories I
EDP 4013 ［EBP－3023］Growth，［and］Development and Learning
Theories II
EDU 4013 Classroom Climate in the Elementary School［7A－the
Seuthwesteph－United－States］
EDU 4031 Media Technology
EDU 4046 Student Teaching：Elementary＊
EDU 4072 Individualized Clinical Experiences

C．Thirty hours of free electives，twelve［feurteen］of which must be at the upper－division level．These may be taken from any Division of The University and for students seeking certificates can be used to satisfy a second teaching field．

COURSE DESCRIPTIONS
EARLY CHILDHOOD AND ELEMENTARY EDUCATION
（ECE）
3123 DEVELOPMENT AND LEARNING IN EARLY CHILDHOOD
（3－0） 3 hours credit．［Rpepequisitest－－EEP－3013－aAd－EAP－3023－ep－eensent $\theta$－tinstrueter．］
Growth and devełopment during infancy and early childhood．Reviews and integrates physical，social，emotional，and cognitive development． Includes motivation and early learning．Emphasizes individual differ－ ences，developmental assessment，need to optimize the match between developmental sequences and experience．Practice in observing and recording behavior．

3203 EVALUATION AS FEEDBACK AND GUIDE IN ELEMENTARY EDUCATION
（3－0） 3 hours credit．［Pperequisitest－－EAP－3日ł3－and－EBP－3日23－8p－eensent－ ef－instrueter．］
A study of activities and developmental skills needed to carry out evaluation of different segments of life of the individual student．

3213 LANGUAGE ARTS IN THE ELEMENTARY SCHOOL
（3－0） 3 hours credit．Prerequisites： 3 hours Speech， 3 hours English
Composition or consent of instructor．［EBF－3日 －f－instpteter．］
A systematic study of teaching and learning activities in reading，spelling， composition，listening，and handwriting in the elementary school．

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3223 SOCIAL SCIENCE IN THE ELEMENTARY SCHOOL
(3-0) 3 hours credit. Prerequisites: History and Political Science
as per General Education Requirements or consent of instructor.
[EBP-3873-and-EBP-3日23-0r-eensent-ef-instruezer.]
An overview of the purposes, selection, and organization of content,
teaching, and learning procedures, and evaluation of outcomes in the
elementary school social science program.
3233 MATHEMATICS IN THE ELEMENTARY SCHOOL
    (3-0) }3\mathrm{ hours credit. Prerequisites: 4 hours mathematics as per
    General Education Reguirements or consent of instructor. [EBP-3073
    and-EBP-30Z3-0r-e0nsent-0f-instpuctor.]
    An overview of the purposes, selection, and organization of content,
    teaching, and learning procedures, and evaluation of outcomes in the
    elementary school mathematics program.
3303 READING IN THE PRIMARY GRADES
    (3-0) 3 hours credit. Prerequisites: 9 hours English as per General
    Education Requirements or consent of instructor. [EBP-3073-aAd-EGF
    3023-0p-e0ASent-0f-iAStruetor]
    Introduction to the basic principles of reading instruction, including
    readiness for reading, initial stages of reading development with em-
    phasis on primary programs, individual differences among students.
    Observation of and participation in alternate methods and organizational
    patterns in a school setting.
3313 READING IN THE INTERMEDIATE GRADES
    (3-0) 3 hours credit. Prerequisites: ECE 3303 or consent of instructor.
    [E日P-3073-aAd-EBP-3023-0r-eensent-ef-inStrueter.]
    Basic principles of reading instruction for grades 4, 5, and 6, including
    transfer of reading skills to content area reading, development of
    comprehension, word recognition, vocabulary, and rate. Observation of
    and participation in alternate methods and organizational patterns in
    a school setting.
3323 SKILL DEVELOPMENT IN THE READING PROGRAM
    (3-0) 3 hours credit. [Prerequisitest--EEP-3日73-and-E日P-3023-0p-e0Asent
    0f-instryezer.]
    Skill development in the perceptual and conceptual areas. Relationships
    between skill development, child development, and curriculum development.
    The skills in reading growth are viewed as developmental and interrelated.
4113 LANGUAGE DEVELOPMENT AND READING IN EARLY CHILDHOOD EDUCATION
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    ef-ing#puezor.]
    Introduction to theories of language acquisition and development.
    Facilitating communication skills in young children and planning for the
    precocious reader. Relates principles of language learning to concepts
    of learning to read.
4133 THE EXPRESSIVE MODES OF CHILDREN IN THE ELEMENTARY SCHOOL [4203--MHSSE 
    ANB-ARF-IN-FHE-EEEMENTAR7-SEHOQE]
    (3-0) 3 hours credit. Prerequisites: MUS 3653 or consent of instructor.
    [EAP-3073-and-E日P-3023-0r-e0Asenも-0f-instryeter.]
    Multi-cultural approach to the structuring of experiences for children
    in creative dramatics, creative musical expression, children's folklore,
    art projects, socio-dramatic play, rhythmic movement, creative verbal
    and non-verbal expression. Examination also of the varying roles of
    the teacher in these experiences. EAn-0vepvieW-0f-the-purposes;-sefeetion,
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| 4213 | SCIENCE IN THE ELEMENTARY SCHOOL <br> （3－0） 3 hours credit．Prerequisites： 3 hours of science as per General <br> Education Requirements or consent of instructor．［EBP－3日F3－aAd－EBP－30z3 <br>  <br> An overview of the purposes，selection，and organization of content， teaching，and learning procedures，and evaluation of outcomes in the elementary school science program． |
| :---: | :---: |
| 4243 | SECOND AND FOREIGN LANGUAGES IN THE ELEMENTARY SCHOOL［FOREfGN－LANGHAGES IN－THE－EEEMENFARY－SEHO日E］ <br> （3－0） 3 hours credit．Prerequisites： 9 hours of foreign language as per General Education Requirements or consent of instructor． |
|  | A review of past practices and present trends in second and foreign |
|  | Tanguage teaching in the elementary school．Examination of the relation |
|  | of the child＇s developmental levels，adult attitudes，and pressure group |
|  | influences to second and foreign language teaching and learning．［A |
|  | perfew－өf－past－practices－and－present－trends－7n－foreign－7anguage－zeaching <br>  <br>  <br>  |
| 4303 | ［4396］INTRODUCTION TO READING PROBLEMS （2－1） 3 hours credit．［ $(3-3 \dagger-6$－heup－s－epedqも．］Prerequisite： 6 semester |
|  | hours of reading courses． <br> An intensive study of and laboratory experience in reading problems in the classroom，including causation．Diagnostic procedures and remedial measures in reading disability are developed． |
| 4326 | ［4323］PRACTICUM IN READING |
|  | （1－5） 6 hours credit．［f－3）－3－heups－epedż．］Prerequisite： 15 semester |
|  | hours of reading courses． |
|  | Application of diagnostic and remedial procedures in small group situat |
|  | Guided field based experiences with weekly seminars designed to enrich |
|  |  |
|  |  designed－єo－enrieh－the－子aboratery－experienee．］ |

## BACHELOR OF SCIENCE DEGREE IN HEALTH

## AND PHYSICAL EDUCATION

The minimum number of semester hours for this degree，including the 50 hours of General Education，＊is 126 ，of which at least 57 must be at the upper－ division level．All candidates for the degree must complete：

A．Twenty－four hours in Physical Education，or twenty－four hours in
Health，or twenty－four hours in a combination of Health and Physical
Education．
＊0f the 75 hours of required electives listed on p．，students must
take three hours in Anatomy and Physiology and three hours in Kinesiology．

1) Physical Education: Students should elect 8 of the following 9 courses:
HPE 3403 The Foundations of Physical Education HPE 3413 The Elementary School Physical Education Program
HPE 3423 The Secondary School Physical Education Program
HPE 3433 Individual and Dual Lifetime Sports
HPE 3443 Principles of Exercise and Physical Fitness
HPE 4403 Motor Learning and Skill Performance
HPE 4413 Coaching and Officiating
HPE 4423 Adapted and Remedial Physical Education
HPE 4433 Gymnastics
2) Health: Students should elect 8 of the following 9 courses:
HPE 3503 The Foundations of Health Education
HPE 3513 The Elementary School Health Program
HPE 3523 The Secondary School Heaith Program
HPE 3533 Risk Taking Behavior in Health
HPE 3543 Physical Growth and Development
HPE 4503 Personal and Family Health
HPE 4513 Consumer Health
HPE 4523 Human Sexuality
HPE 4533 Nutrition
3) Health and Physical Education: Students should elect 8 of
the 18 courses ifsted in "1" and "2".
B. Twenty-two semester hours of course work in education, 21 of which are at the upper-division level.

## Required courses are:

EDU 2001 Introduction to the School Environment
EDU 3003 Educational Sociology
EDP 3013 Growth, Development and Learning Theories I
EDP 4013 Growth, Development and Learning Theories II

EDU 4013 Classroom Climate in the Elementary School
or
EDU 4093 Classroom Climate in the Secondary School EDU 4031 Media Technology EDU 4046 Student Teaching: Elementary*
or
EDU 4056 Student Teaching: Secondary* EDU 4072 Individualized Clinical Experiences
C. Thirty hours of free electives, twelve of which must be at the upper-division level. These may be taken from any Division of The University and for students seeking certificates can be used to satisfy a second teaching field.**

All students selecting a degree in Health and Physical Education must elect 3 hours of HPE 1001 (Individual and Dual Physical Activity Sports) and 3 hours of HPE 1101 (Team Sports).

## COURSE DESCRIPTIONS

HEALTH AND PHYSICAL EDUCATION
(HPE)
1001 IND IV IDUAL AND DUAL PHYSICAL ACTIVITY SPORTS
(0-1.5) 1 hour credit.
Practice in the techniques of individual and dual sports, such as tennis, golf, handball, boxing, swimming, archery, badminton, wrestling, etc. Individual sections focus on particular sports as indicated in the semester schedule of courses. May be repeated for credit, but not more than 6 hours will apply to any UTSA degree.
*EDU 4043 and 4063 may substitute for 4046. EDU 4086 or EDU 4083 and EDU 4043 may al so substitute for EDU 4046. Students must inform the Director of Student Teaching of their plans to enroll in this course (these courses) one semester in advance.
$\star *$ For students seeking certification, 129 hours are required to complete the dual requirements of the degree and the certificate.
1101 TEAM SPORTS(0-1.5) Thour credit.Practice in the techniques of team sports, such as basketball, volley-ball, soccer, etc. This course will focus on the actual practice andthe development of team skills. Individual sections focus on particu-lar sports as indicated in the semester schedule of courses. May berepeated for credit, but not more than 6 hours will apply to any UTSAdegree.
3403 THE FOUNDATIONS OF PHYSICAL EDUCATION
(3-0) 3 hours credit.
A study of the history, principles, objectives, and current concepts ofphysical education and recreation.
3413 THE ELEMENTARY SCHOOL PHYSICAL EDUCATION PROGRAM(3-0) 3 hours credit.Physical education activities in elementary schools.
3423 THE SECONDARY SCHOOL PHYSICAL EDUCATION PROGRAM(3-0) 3 hours credit.
Physical education activities in secondary schools.
3433 INDIVIDUAL AND DUAL LIFETIME SPORTS
(3-0) 3 hours credit.
Instruction and deveTopment of skills in physical education activitieswith emphasis on individual and dual type sports. May be repeated forcredit, but not more than 6 hours will apply to any UTSA degree.
3443 PRINCIPLES OF EXERCISE AND PHYSICAL FITNESS(3-0) 3 hours credit.An analysis of the nature of physical fitness, basic principles of exer-cise and physical fitness, analysis of methods of developing and eval-uating physical fitness, motor development and movement perception.
3503 THE FOUNDATIONS OF HEALTH EDUCATION(3-0) 3 hours credit.
A study of the history, principles, objectives, and current concepts of
health education.
3513 THE ELEMENTARY SCHOOL HEALTH PROGRAM(3-0) 3 hours credit.A study of the health problems of elementary school students as a basisfor health instruction, utilizing the Texas Education Agency guidelinesas a basis for planning.
3523 THE SECONDARY SCHOOL HEALTH PROGRAM
(3-0) 3 hours credit.
A study of the health problems of secondary school students as a basis forhealth instruction, utilizing the Texas Education Agency guidelines asa basis for planning.
3533 RISK TAKING BEHAVIOR IN HEALTH
(3-0) 3 hours credit.
A study of the use and abuse of tobacco, alcohol, and other drugs; theuse of other mood and behavior modifiers, and their effects on one'sbehavior. The course emphasizes psychological, sociological, andphysiological factors involved as well as an evaluation of why peopletake chances when their health is involved.
3543 PHYSICAL GROWTH AND DEVELOPMENT(3-0) 3 hours credit.A review of physical growth and development as dynamic processes thatcontinue throughout a lifetime and follow predictable patterns, whileremaining unique for each individual. The course emphasizes the rapidchanges in early adolescence (physical and emotional) and trouble signsin the adolescent with a view toward providing help for students whenneeded.

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4403 MOTOR LEARNING AND SKILL PERFORMANCE
    (3-0) 3 hours credit.
    A study of learning in the psychomotor domain. Specific areas of study
    include motor learning theories, physiological basis of skill behavior,
    motor and skill learning and application of instructional techniques
    in motor learning and skill performance.
4 4 1 3 ~ C O A C H I N G ~ A N D ~ O F F I C I A T I N G ~
    (2-1) 3 hours credit.
    A study of the content and teaching techniques involved in coaching and of
    the standards and techniques in game officiating.
4 4 2 3 ~ A D A P T E D ~ A N D ~ R E M E D I A L ~ P H Y S I C A L ~ E D U C A T I O N ~
    (3-0) 3 hours credit.
    A study of theories and technigues of muscle re-education and application
    of exercise to orthopedic, medical, post-surgical, and neurological dis-
    orders. Administration and direction of therapeutic and adapted physical
    activity programs. A study of programs provided for students who are
    classified for physical education by medical authorities.
4433 GYMNASTICS
    (3-0) 3 hours credit.
    A study of methods for organizing a school or class for a balanced pro-
    gram of gymnastic activities. Evaluation methods are presented to deter-
    mine a person's present level and rate of progression.
4503 PERSONAL AND FAMILY HEALTH
    (3-0) 3 hours credit.
    An overview of medical and scientific facts and principles applied to
    healthful living, and prevention and control of diseases.
4513 CONSUMER HEALTH
    (3-0) 3 hours credit.
    A study of the consumer's selection of health products and services,
    and the acquisition of basic knowledge regarding consumer health with
    a view towards providing students with information that will help them
    make wise decisions when selecting professional health care, services,
    and products.
4523 HUMAN SEXUALITY
    (3-0) 3 hours credit.
    A study of human sexuality from conception to death. The course emphasizes
    ways of understanding the normal sexual drive which can help students
    deal more effectively with many pressures and conflicts.
4533 NUTRITION
    (3-0) 3 hours credit.
    A study of content, attitudes and practices regarding nutrition and its
    effects on man's health behavior.
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COURSE DESCRIPTIONS
EDUCATION
(EDU)
3003 EDUCATIONAL SOCIOLOGY
(3-0) 3 hours credit. Prerequisite: EDU 2001.
A study of the ways in which the school can effectively utilize the social process in developing and educating the individual and to show the interrelationships of the school with the family, the church, and other societal agencies particularly in the social and cultural setting of the Southwestern United States.

READING COMPREHENSION SKILLS FOR SECONDARY TEACHERS
（3－0） 3 hours credit．
The nature of developmental reading programs at the secondary level， and reading skills needed in the content area fields．
4013 CLASSROOM CLIMATE IN THE ELEMENTARY SCHOOL［IN－FHE－S日UTHWESFERN－HAIFEB SFAFES］
（3－0） 3 hours credit．Prerequisites：EDP 3013，EDU 3003，concurrent enroilment in EDU 4043－6 and 4072，and permission of the Director of Student Teaching required．Students must inform the Director of Student Teaching of their plans to enroll in this course one semester in advance． ［and－E日P－3023．］
The study of and practice in identifying and developing curricular materials， planning for instruction，developing effective elementary classroom climate，and evaluating instructional outcomes particularly in the context of the Southwestern United States；the methodology of instruction as related to specific disciplines．（This course is offered in multiple sections according to the subject matter to be taught．）

STUDENT TEACHING：ELEMENTARY
（0－3 or 6） 3 or 6 hours credit．Prerequisites：EDP 3013，EDU 3003， 15 of the 24 hours in elementary methods（e．g．，ECE 3213， 3223,3233 ， $3303,3313,4133,4213$ and 4243 ）and permission of the Director of Student Teaching required．Students must inform the Director of Student Teaching of their plans to enroll in this course one semester in advance． ［aAd－EBP－3023］
Field－based experiences in the elementary school．
4053 STUDENT TEACHING：SECONDARY
4056 （0－3 or 6） 3 or 6 hours credit．Prerequisites：EDP 3013，EDU 3003， and permission of the Director of Student Teaching required．Students must inform the Director of Student Teaching of their plans to enroll in this course one semester in advance．［and－E日P－3日23．］
Field－based experiences in the secondary school．
STUDENT TEACHING：KINDERGARTEN
（0－3） 3 hours credit．Prerequisites：EDP 3013，EDU 3003，and permission of the Director of Student Teaching required．Students must inform the Director of Student Teaching of their plans to enroll in this course one semester in advance．［and－EDP－3日23：］
Field－based experiences at the kindergarten level．
4072 INDIVIDUALIZED CLINICAL EXPERIENCES
（0－2） 2 hours credit．Prerequisites：Concurrent enroliment in EDU 4046 or EDU 4043，plus EDU 4053 or the equivalent．Permission of the Director of Student Teaching required．Students must inform the Director of Student Teaching of their plans to enroll in this course one semester in advance．
A series of simulated and direct experiences planned to develop and improve competency components which have been identified as needs of the individual students．The experiences are designed to provide opportuni－ ties for students to further investigate and apply strategies related to teaching／learning situations or to apply corrective measures to diagnosed areas of weaknesses．

STUDENT TEACHING：SPECIAL EDUCATION
（0－3 or 6） 3 or 6 hours credit．Prerequisites：EDP 3013 and EDU 3003. Permission of the Director of Student Teaching required．Students must inform the Director of Student Teaching of their plans to enroll in this course one semester in advance．［and－EBP－3日23．］
Field－based experiences in a speciai education classroom．

4093 CLASSROOM CLIMATE IN THE SECONDARY SCHOOL［IN－FHE－SOHFHWESFERN－HHIFE日 SFAFES ］
（3－0） 3 hours credit．Prerequisites：EDP 3013，EDU 3003，concurrent enrollment in EDU 4053－6 and EDU 4072，and permission of the Director of Student Teaching required．Students must inform the Director of Student Teaching of their plans to enroll in this course one semester in advance．［aAd－E日R－3023．］
The study of and practice in identifying and developing curricular materials，planning for instruction，developing effective secondary classroom climate，and evaluating instructional outcomes particularly in the context of the Southwestern United States；the methodology of instruction as related to specific disciplines．（This course is offered in multiple sections according to the subject matter to be taught．）

## COURSE DESCRIPTIONS

## EDUCATIONAL PSYCHOLOGY

（EDP）
3013 GROWTH，［ANQ］DEVELOPMENT AND LEARNING THEORIES I
（3－0） 3 hours credit．Prerequisite：EDU 2001.
A study of developmental psychology：human motivation and behavior，the relationships between development and learning，and the special nature of＂exceptiona］＂children and youth as learners．［AA－intpeduetien－te the－area－$\theta$－
 ment－өf－aehtevement：］
［ 3023 GROHFH－ANQ－OEHEEQRMENF－ANB－LEARNING－FHEQRIES－II





3603 INTRODUCTION TO EXCEPTIONALITY［IAFR日BUGFI日N－FQ－EXGEPFIQMAL－GHIEPREN］ （3－0） 3 hours credit．
A study of the nature and characteristics of exceptional children；edu－ cational and therapeutic services for exceptional children；at the local， state，national and international Tevel；as well as a study of demo－ graphics；etiology and efficiency of delivery systems of services for exceptional children．［Fhe－natupe－$\theta$ f－individuat－diffepenees：－－Speefat



［3673 EHARAGFERISFIES－ӨF－FHE－EHIL日－WIFH－LEARHIAG－BISABItIFIES


 given－te－diagnesis－and－te－the－eireums tanees－geveratag－refeprałs：］
3623 ASSESSMENT OF EXCEPTIONAL CHILDREN［EEYEL日PMENTAL－ASSESSMENF－AF－EX－ GEPFIGMAE－GHFEBREN ］
（ $3-0$ ） 3 hours credit．Prerequisite：EDP 3603 or consent of instructor． An introduction to both formal and informal assessment procedures． Students are trained to administer and evaluate the results of informal assessment devices in the areas of life skills，motor develop－ ment，perception，language and academic subject areas．［Fhe－applifatien өf－standardized－and－informat－ełas speem－evałtaztien－teehniques－te－teapaifg ppobtems．］

3633 BEHAVIOR MANAGEMENT OF EXCEPTIONAL CHILDREN [BEHAY FOR-MANAGEMENF-FN-FHE GEASSRGEM]
(3-0) 3 hours credit.
A study of behavior management strategies and techniques to alter, improve, and maintain children's academic and social behaviors. Application of
learning theory principles, measurement procedures, knowledge of divergent and convergent theories and practices regarding behavior change strategies, as well as current and significant research are emphasized. [A-study- - basís.]

## 3643 LANGUAGE AND COGNIT IVE DEVELOPMENT AND DYSFUNCTION

(3-0) 3 hours credit. Prerequisite: EDP 3603 or concurrent enrol 1 ment. Current theories in the areas of language development and cognition are studfed in terms of their contribution to the development of a methodology for the education of the exceptional child. Educational programs
in the areas of language and cognition are evaluated in terms of their theoretical basis and educational utility.

3653 PRACTICUM IN SPECIAL EDUCATION (INTRODUCTORY)
(0-9) 3 hours credit. Prerequisite: Concurrent enrollment in EDP 3603 and 3643 .
Observation and evaluation of educational procedures and services for exceptional children; observation and recording of the performance of children as learners.
3663 PRACTICUM IN SPECIAL EDUCATION (INTERMEDIATE)
(0-9) 3 hours credit. Prerequisite: Concurrent enrollment in EDP 3623 and 3633.
Working with teachers of exceptional children in developing, administerIng and evaluating assessment tools; planning language and learning sequences for children.
4013 GROWTH, DEVELOPMENT AND LEARNING THEORIES II
(3-0) 3 hours credit. Prerequisite: EDP 3013.
An introduction to the area of study which includes analysis and theoretiCal basis of learning, the assessment of learner and learner needs, and the measurement of achievement.
4603 PARENTS, COMMUNITY RESOURCES AND CONTINUING EDUCATION FOR EXCEPTIONAL CHILDREN [GOUNSEEFAG-WIFH-PAREMFS- $\theta F-E X G E P F I G A A E-G H F E B R E N]$ (3-0) 3 hours credit.
A study of methods and techniques for working with parents of exceptional children and for effecting cooperative home, school, and cormunity
relations for the improvement of the child's life and environment.


[4673 THE-PS\#GHOEEGZ- OF -ABJHS7MENF

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4653 [4633] PRACTICUM IN SPECIAL EDUCATION (ADVANCED) [PRAGFIEUM-IN-MENFAE REFARBAFIOH]
(2-1) 3 hours credit. Prerequisites: Enrollment in EDP 4603 and 4613. [EPP-4623z]
Field work with teachers in planning and implementing educational

 exłstifh

## 4953

SPECIAL TOPICS IN EXCEPTIONALITY
（3－0） 3 hours credit．Prerequisite： 12 hours of special education．
A study of topics，designed to supplement the background of special education students．Topics are determined by the needs of the students．
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f $\mathrm{E} \ddagger \mathrm{B} f]$
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## division of environmental studies

## COURSE DESCRIPTIONS

ENVIRONMENTAL MANAGEMENT
(ENV)

2013 INTRODUCTION TO ENVIRONMENTAL SYSTEMS
(3-0) 3 hours credit.
Empirical and analytical studies of spatial dimensions of regional development with emphasis on social, political, economic, demographical and environmental problems at regional levels. [Fhis-eөupse-may-ałse-be-taken-as-GRG 2073:]

3013 ENVIRONMENT AND HUMAN RESOURCES MANAGEMENT
(3-0) 3 hours credit.
Human resources as related to the total environment are studied. Special emphasis is given to the areas of manpower planning[s] and programming as related to the technological changes and the wise use of time in the community.

3033 ELEMENTS OF URBAN SYSTEMS MANAGEMENT
(3-0) 3 hours credit.
A focus on the role of man as a modifier of the environment. The impact of urban, rural and industrial developments is [ape] specifically considered. The basic principles governing urban planning, urban development, urban systems analysis[s] and the rural-urban transition process will be covered.

3523 THE CONTEMPORARY CITY
(3-0) 3 hours credit. Prerequisite: Consent of instructor [ENY-2073]. An introduction to the city as an extension of man with a review of the urban revolution and its impact on the contemporary United States. General trends in contemporary thought as they apply to the problems and future [ $\beta$ Peomisises] of American urban development.

4023 ENVIRONMENT, ENERGY AND SOCIETY
(3-0) 3 hours credit. Prerequisite: ENV 3023 or consent of instructor [the-equivałent].
Study of energy requirements for various components of [the] society and the wastage associated with modern living. Characteristics of various energy sources and conversion processes. Energy resources management considerations related to environmental quality and societal needs.

4103 THE GOVERNMENT AND ENVIRONMENTAL PROTECTION
(3-0) 3 hours credit. Prerequisite: ENV 3023 or consent of instructor [the-еquivałent].
A survey of current federal action directed at improving environmental quality. Evolution and effectiveness of the National [Natupał] Environmental Policy Act and its implications for the future of our society and various industries.

4503 ALTERNATIVE URBAN FUTURES
(3-0) 3 hours credit. Prerequisite: Consent of instructor [ENY-2日ł3].
4513 PROBLEMS OF URBAN CHANGE
(3-0) 3 hours credit. Prerequisite: Consent of instructor [ENヌ-2973].

4603 [4604] ENVIRONMENTAL QUALITY ANALYSIS AND MONITORING
$(3-0)[(3-3)] 3$ hours credit. Prerequisite: ENV 3023 or consent of instructor.
The procedures and instrumentation for the analysis of air, water[s] and soils [setids]. Environmental data acquisition and basic analysis for the interpretation and characterization of environmental quality.

4611 ENVIRONMENTAL QUALITY ANALYSIS AND MONITORING LABORATORY
(0-3) 1 hour credit.
This course must be taken concurrently with ENV 4603.
4663 THE LATIN AMERICAN CITY
(3-0) 3 hours credit. Prerequisite: Consent of instructor. A study of the physical structure of the Latin American city and its cultural, social and economic bases; current urban issues and environmental relationships.

The Division of Special Programs is responsible for preparing students majoring in the area of Criminal Justice, for administering The University's Army R.O.T.C. Program and for administering the Library Instruction course, LIB 1001, which is part of the university-wide general education requirements.

Criminal Justice. This program is intended to increase individual knowledge and skills useful in an important professional area, and to provide entrance into fields of specialization which can be of practical, functional value to a wide variety of law enforcement and related agencies.

Army R.O.T.C. A student enrolling at The University of Texas at San Antonio may pursue courses in Military Science designed to develop the knowledge and skills required for a commission as an officer in the U. S. Army. The Reserve Officer Training Corps (R.O.T.C.) is open to all qualified students (male and female) on a voluntary basis. The program is available under cooperative arrangements with St. Mary's University in San Antonio. All courses for those enrolled in the program are held on The University of Texas at San Antonio campus.

Library Instruction course. The goals of the Library Instruction course are to help students become aware of the basic resources (both collection and services) available in the library, to ensure that students have a basic level of skill in library use and to enable students to achieve a sense of confidence in using the library.

BACHELOR OF ARTS DEGREE IN CRIMINAL JUSTICE
The minimum number of semester hours required for this degree, including the 50 hours of General Education Requirements; is 124. All candidates for the degree must complete:
A. Thirty-six semester hours in the major, at least 24 of which must
be at the upper-division Tevel.
Required courses (Upper-Division):

1) 15 semester hours of Upper-Division Core Requirements.

CRJ 3013 Agency Administration and Supervision
CRJ 3123 Research and Data Processing in Criminal Justice

CRJ 3233 The Criminal Justice System in Modern Society

CRJ 3343 Planning in Criminal Justice Agencies
CRJ 3453 Contemporary Legal Issues
2) 9 semester hours of Upper-Division Specialization. Students must specialize in one of the following areas.
a) Agency Administration

CRJ 4013 Criminal Procedure and Evidence
MGI 3013 Organization and Management Theory
or
MGT 3183 Administrative Process
MGT 3613 Personnel Administration
b) Crime Investigation

CRJ 4023 Advanced Criminal Investigation
CRJ 4123 Advanced Criminalistics
CRJ 4223 Forensic Science
c) Crime Prevention

CRJ 4033 Public and Community Relations
CRJ 4133 Community Prevention Program
CRJ 4223 Conflict Resolution
Required courses (Lower-Division):

1) Transfer students from a junior college or other approved lower-division program may transfer 21 hours in Law Enforcement designated as the lower-division
```
core by the Texas Commission on Law Enforcement
Officer Standards and Education.*
    a) Introduction to Law Enforcement (3)
    b) Police Role in Crime and Delinquency (3)
    c) Criminal Investigation (3)
    d) Legal Aspects of Law Enforcement (3)
    e) Police Organization and Administration (3)
    f) Criminal Procedure and Evidence (3)
    g) Police-Community Relations (3)
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2) Students who begin at The University of Texas at San
Antonio and wish to enter the Criminal Justice Program
but who have not completed the 12 hours of the lower-
division Law Enforcement core component must complete
four of the following courses at another college or
university:
a) Introduction to Police Science (3)
b) Police Role in Crime and Delinquency (3)
c) Criminal Investigation (3)
d) Legal Aspects of Law Enforcement (3)
e) Police Organization and Administration (3)
These courses must be taken at a junior college or
other approved lower-division program of their choice
and are not offered by The University of Texas at San
Antonio. They may be completed by con-current
enrollment at The University of Texas at San Antonio.
B. The student must select 15 hours of upper-division elective
work related to the Criminal Justice Program as approved by the advisor.
*The courses listed are required for certification by the T.C.L.E.O.S.E.
C. 23 semester hours of free electives (no more than nine (9) hours
in Criminal Justice courses).

## COURSE DESCRIPTIONS

CRIMINAL JUSTICE
(CRJ)

| CRJ 3013 | AGENCY ADMINISTRATION AND SUPERVISION <br> (3-0) 3 hours credit Prerequisite: Lower division core |
| :---: | :---: |
|  | or consent of instructor. |
|  | An intensive examination of a variety of administrative and |
|  | management concepts as they pertain to law enforcement, courts, |
|  | corrections, and related criminal justice agencies. Empha- |
|  | sis is placed on personnel supervision, training, and evaluation |
|  | practices utilized by various agencies. |
| CRJ 3023 | POLICE - COMMUNITY RELATIONS |
|  | (3-0) 3 hours credit. |
|  | The role of the individual officer in achieving and maintaining |
|  | positive public response; inter-group relations and public |
|  | information. |
| CRJ 3033 | CRIMINAL PROCEDURE AND EVIDENCE |
|  | (3-0) 3 hours credit. |
|  | Introduction to the rules governing the admissability of |
|  | evidence and types of evidences; criminal procedure in various |
|  | courts, review of the Texas code of Criminal Procedure, in- |
|  | cluding laws of arrest, search and seizure, and leading case |
|  | Taws on each topic. |
| CRJ 3123 | RESEARCH AND DATA PROCESSING IN CRIMINAL JUSTICE |
|  | (3-0) 3 hours credit. Prerequisite: CRJ 3013 or consent of |
|  |  |
|  | An introduction to the general methodology of research |
|  | Tincluding experimental design, statistics, and computer |
|  | usage) that pertains to the administration of justice. |
|  | Special attention is given to the implications of automated |
|  | information systems in agency administration and in crime |
|  | detection and prevention. |
| CRJ 3223 | THE CRIMINAL JUSTICE SYSTEM IN MODERN SOCIETY |
|  | (3-0) 3 hours credit. Prerequisite: Lower division core or |
|  | consent of instructor. |
|  | An overview and integration of major propositions, concepts |
|  | assumptions, history, and methods from the various fields |
|  | of Crrminal Justice including law enforcement, the courts, |
|  | corrections, and legis lative control. The contributions of |
|  | other community agencies are explored. |
| CRJ 3343 | PLANNING IN CRIMINAL JUSTICE AGENCIES |
|  | (3-0) 3 hours credit. Prerequisite: CRJ 3013 or consent of |
|  | instructor. |
|  | Analysis of planning techniques related to the procedures, |
|  | personnel, physical and specialized equipment, budget and |
|  | a-agency activities. |


| CRJ 3453 | CONTEMPORARY LEGAL ISSUES <br> (3-0) 3 hours credit. Prerequisite: Lower division core or |
| :---: | :---: |
|  | consent of instructor. |
|  | Examination of recent judicial rulings and interpretations |
|  | having major significance in American society, especially |
|  | as they affect the maintenance of social order. Civil rights |
|  | and other major constitutional freedoms are considered in |
|  | relations to the gathering of evidence, the judicial process |
|  | and rights of the convicted. |
| CRJ 4023 | ADVANCED CRIMINAL INVESTIGATION: THEORY AND PRACTICE |
|  | (3-0) 3 hours credit. Prereguisite: Lower division core or |
|  | consent of instructor. |
|  | Analysis and discussion of investigative theory and practice |
|  | with special emphasis on technological innovation and current |
|  | judicial perspective. |
| CRJ 4033 | PUBLIC AND COMMUNITY RELATIONS |
|  | (3-0) 3 hours credit. Prerequisite: Lower division core or |
|  | consent of instructor. |
|  | Analysis of techniques utilized by administration of justice |
|  | agencies in both public and community relations programs which |
|  | are designed to improve public awareness and support of agency |
|  | goals. |
| CRJ 4123 | ADVANCED CRIMINALISTICS |
|  | (2-1) 3 hours credit. Prerequisite: Lower division core or |
|  | consent of instructor. |
|  | Scientific aids available to law enforcement officers, |
|  | including forensic chemistry, physics, and microanalysis. |
|  | Investigative procedures from crime scene, through labora- |
|  | tory analysis, to court. |
| CRJ 4133 | COMMUNITY PREVENTION PROGRAM |
|  | (3-0) 3 hours credit. Prerequisite: Lower division core or |
|  | consent of instructor. |
|  | An analysis of the typologies, philosophies, and operations |
|  | of existing and projected community-based crime prevention |
|  | programs. Emphasis on a variety of governmental and non- |
|  | governmental community support and action programs. |
| CRJ 4223 | FORENSIC SCIENCE |
|  | (2-1) 3 hours credit. Prerequisite: Lower division core or |
|  | consent of instructor. |
|  | The extensive examination of the wide field of issues in |
|  | which medicine comes into contact with the law. It involves |
|  | certification of the dead, the study of violent and unnatural |
|  | deaths, scientific criminal investigation, drug detection, the |
|  | duty of the medical examiner and procedures in courts of law. |
| CRJ 4233 | CONFLICT RESOLUTION |
|  | (3-0) 3 hours credit. Prerequisite: Lower division core or |
|  | consent of instructor. |
|  | An analysis of community and individual reaction to agency |
|  | policy and services. Emphasis is placed on the agency's |
|  | role as mediator between offenders and victims of crime and |
|  | between other groups and individuals in conflict. |

## ARMY RESERVE OFFICER TRAINING CORPS PROGRAM

To obtain a commission* as an officer in The U. S. Army, a baccalaureate degree in one of the disciplines offered by The University of Texas at San Antonio and 18 semester hours of military science courses are required. Credit for military science courses may be applied toward a baccalaureate degree only as free electives. With respect to the free electives specified in the degree requirements for each major, there is a maximum number of hours of military science that may be applied to the free electives allowed.

The maximum numbers of semester hours of military science which may be counted as free elective credit for the various degrees available at The University of Texas at San Antonio are set forth below. Credit for military science courses, when awarded by another accredited college or university, will be accepted by The University of Texas at San Antonio as free elective credit within the same limitations as military science credit earned at The University.

| Degree Program | $\frac{\text { Maximum Hours Applicable }}{\text { as Free Electives** }}$ |
| :--- | :---: |
| Accounting | $\underline{q}$ |
| Anthropology | $\underline{9}$ |
| Art | $\underline{0}$ |
| Biology | $\underline{9}$ |
| Chemistry | $\underline{8}$ |
| Criminal Justice | $\underline{9}$ |
| Early Childhood and Elementary Education | $\underline{0}$ |

*Some of the 18 hours of military science required for the commission may be waived (without credit) for prior military service and/or junior ROTC.
$\star *$ When fewer than 9 hours are allowed, the limitation results from the number of free elective hours available in the given degree program. Nevertheless, students in these degree programs may still enroll in the ROTC program.
Economics (BA) ..... g
Economics (BBA) ..... g
English ..... 9
Finance ..... $\underline{9}$
French ..... 9
Geography ..... 9
German ..... 9
Health and Physical Education ..... 0
History ..... 9
Humanities ..... $\underline{9}$
Management ..... $\underline{9}$
Mathematics, Computer Science
and Systems Design ..... g
Medical Technology ..... 0
Music ..... 0
Political Science ..... 9
Physics ..... 9
Psychology ..... 9
Sociology ..... 9
Spanish ..... $\underline{9}$

The 18 semester hours of military science courses which constitute the ARMY ROTC program at The University of Texas at San Antonio are offered in two parts: a Basic Course, consisting of 6 semester hours of course work, taken in the first two years at The University and an Advanced Course, consisting of 12 semester hours of course work taken in the last two years at The University.

The program requirements for the Basic Course are as follows:
First Year
$\frac{\text { Fall Semester }}{\text { MSC } 1011} \quad \frac{\text { Spring Semester }}{\text { MSC 1021 }}$

Second Year
$\xlongequal[\text { MSC 2012 }]{\text { Fall Semester }} \quad \frac{\text { Spring Semester }}{\text { MSC 2022 }}$
Students may enroll in the Basic Course without obligation to take
additional ROTC training. Students enrolled in the Basic Course are
furnished, free of charge, complete uniforms, texts, and necessary
equipment.

The program requirements for the Advanced Course are as follows:
First Year

| Fall Semester <br> MSC 3013 | Spring Semester |  |
| :---: | :---: | :---: |
| Fall Semester | Second Year | MSC 3023 |
| MSC 4013 |  | Spring Semester |

Students enrolled in the Advanced Course receive $\$ 100$ per month, and texts, uniforms, and equipment are provided. Upon entering the Advanced Course, a student is required to sign a contract which obiligates him or her to complete the ROTC program and serve a tour of active duty as a commissioned officer in The United States Army.

Participation in a leadership laboratory is required in connection with all courses, except MSC 4042: ROTC Flight Training. The leadership laboratory consists of a varied program of enrichment and development for future Army Officers consisting of an active guest speaker program, participation in civic action projects, tours of military and related installations, field training exercises, and a limited amount of drill and physical conditioning.

[^38] attend a six-week summer camp.


| 3013 | ADVANCED LEADERSHIP AND MANAGEMENT I <br> (3-2) 3 hours credit. Prerequisites: MSC 1011, 1021, 2012 |
| :---: | :---: |
|  | and 2022, or by consent of instructor. |
|  | Case studies in leadership and management. Development of the |
|  | student's ability to express himself clearly and accurately with |
|  | emphasis on the analysis of military problems, and preparation |
|  | and delivery of logical solutions. |
| 3023 | ADVANCED LEADERSHIP AND MANAGEMENT II |
|  | (3-2) 3 hours credit. Prerequisite: MSC 3013. |
|  | Analysis of the leader's role in directing and coordinating efforts |
|  | of individuals and small units in the execution of offensive and |
|  | defensive tactical missions. Case studies of leadership and |
|  | management. |
| 4013 | SEMINAR IN LEADERSHIP AND MANAGEMENT OF THE MILITARY TEAM |
|  | (3-2) 3 hours credit. Prerequisite: MSC 3023 or consent of |
|  | instructor. |
|  | Analysis of selected leadership and management problems. |
|  | Responsibilities of the Commander and staff in areas of |
|  | personnel, intelligence, operations, and logistics. Adminis- |
|  | tration of military law. The interrelationships of the military |
|  | team. |
| 4023 | SEMINAR IN LEADERSHIP AND MANAGEMENT |
|  | (3-2) 3 hours credit. Prerequisite: MSC 4013 or consent of |
|  | instructor. |
|  | Analysis of selected leadership and management problems. |
|  | Responsiblities of the Commander in the management of personnel, |
|  | account, logistics, operations, maintenance and unit readiness. |
|  | Seminars in the role of the officer in the conduct of personal |
|  | affairs. |
| 4042 | ROTC FLIGHT TRAINING |
|  | (2-2) 2 hours credit. Prerequisite: Senior standing, enrollment |
|  | in MSC 4013 and physical qualification. (3612 hours of filight |
|  | training: 35 hours of ground school. |
|  | Pre-solo, solo and cross-country flight instruction plus ground |
|  | instruction in theory of flight, Federal Air Regulations, |
|  | meteorology, navigation, and radio procedure. Student elfgible |
|  | for private pllot's license at completion of training. |
|  | COURSE DESCRIPTION |
|  | LIBRARY INSTRUCTION |
|  | (LIB) |
| 1001 | LIBRARY INSTRUCTION |
|  | (1-0) 1 hour credit. |
|  | Orientation to the nature and location of library materials |
|  | and services at The University of Texas at San Antonio. |
|  | Instruction and experience in using The University catalogs, |
|  | microform and other audio-visual equipment and indexes. |
|  | Instruction and practice in library search strategy and |
|  | compilation of a bibliography. |

［理－is－the－intent－日f］The College of Sciences and Mathematics［te］offers degree programs in Biology；Medical Technology；Occupational Therapy；Physical Therapy； Applied Science；Chemistry；Mathematics，Computer Science，and Systems Design； Mathematics，providing education in the theoretical foundations of each discipline while stressing applied aspects．This reflects the creative tension which has always existed［s］between inwardly directed and applied science．It also attempts to speak to the needs of the community in which The University is located．Thus the College has a strong technical and career thrust，educating［ppepaping］stu－ dents as mathematics and science teachers，medical laboratory technicians， industrial chemists and physicists，geologists，biostatisticians，and computer scientists．It also offers preprofessional courses of study for［frem］students preparing for careers in medicine，dentistry，and nursing．
［Within］The College is organized into［there－are］three Divisions encompassing the subject matter of traditional science departments：

1）Allied Health and Life Sciences
2）Earth and Physical Sciences
3）Mathematics，Computer Science，and Systems Design．
 Physiesヶ－Mathematies；－Єөmputer－Seienees－and－Systems－Besignt－Medieał－Fechrołegy； Oetupatienał－Fherapy－and－Physieał－Fherapy：］
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## division of allied health and <br> LIFE SCIENCES

The Division offers numerous degree options so that a highly individualized pro－ gram may be developed around the interests of the student．The Biology major proceeds from a comprehensive core curriculum and related offerings in chemistry， physics and mathematics into more highly specialized areas of the life sciences， such as physiology，genetics，microbiology，biochemistry，environmental biology and molecular biology．A major in Biology prepares the student for laboratory positions in industry and government and fulfills requirements for entrance into graduate school，medical school，dental school，veterinary school and schools of allied health．［Wopk－sもudy－positions－are－avaiłable；－and－speeqał－atもention－is－ given－te－students－tpansferping－inte－the－pregram－from－area－もwe－year－zełteges－at the－beginning－өf－the－junier－year－－－A－speeiat－program－fөp－majers－atse－is－being planned－in－cooperation－with－other－Bivisisiens－in－whieh－gtudents－ean－devełop－e日A－ siderabłe－praetieał－7aberatery－skitłs－by－the－beginning－өf－the－juniop－year－］

## ALLIED HEALTH PROGRAMS

The University has［ $\ddagger$ s－płanning－a－futl］programs of training in the Allied Health area carried out in cooperation with area health institutions and The University of Texas Health Science Center．

## PREPROFESSIONAL COURSES OF STUDY IN <br> THE HEALTH FIELDS

The University of Texas at San Antonio does not offer specific premedical，pre－ dental，or prenursing degree programs；rather preprofessional courses of study are available to prepare students for admission to medical，dental，and nursing school［ape－avałłabłe］．

## General Education Courses

The following courses are designed especially to satisfy The University＇s General Education Requirements：

BIO 1012， 1021 Life and Living Systems and Laboratory
BIO 1033， 1041 Human Biology：Anatomy and Physiology and Laboratory

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    BIO 1052, 1061 Introductory Microbiology and Laboratory
    BIO 2003 Human Reproduction, Fertility, and Demography
    BIO 2023 Drugs and Society
    BIO 2043 Nutrition
    BIO 2053 Man and His Environment
    BIO 3242, 3251 Field Biology and Ecology and Laboratory
    BIO 4073 Law, Ethics and the Life Sciences
    BIO 4083 Heredity, Evolution, Race and Society
[BIA-7072;-7027;-7033;-7047;-7052;-7067;-2043;-2053;-3042;-3057%-4073;-4083%--A-
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    B¥0-4073-----Еаws-Ethies-and-the-tife-Seiences
    BI0-4083----Hereditzy5-Evetutien5-Race-and-Seeiety
    47--BI0-707Z----ヒife-and-tiving-Systems
    EHE-7703----Intreductery-6hemi 5tpy-
    BI0-2053----Man-and-Hís-Enviponment]
The following sequence is recommended for students who are undecided about a major in Life Sciences．
［In－addition－－the－fetłowing－courses－designed－for－majors－may－be－used－te－fulffiff the－General－Education－Requirements：－ \(\mathrm{B}\{\theta-77 \theta 3 \div-7777 \div-7273=-2373 \div--\theta\) ther－e日urses
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| BIO 1103， 1111 | Principles of Biology |
| :--- | :--- |
| BIO 1213 | Principles of Environmental Biology |
| BIO 2313 | Genetics |

If a major is later declared，all of these courses apply to the major and the stu－ dent then elects the two laboratories（BIO 1221 and BIO 2321）that accompany Principles of Environmental Biology（BIO 1213）and Genetics（BIO 2313）．Other courses in the Life Science curriculum also may be used to satisfy General Edu－ cation Requirements，provided the student has the required prerequisites．

BACHELOR OF SCIENCE DEGREE IN BIOLOGY
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All candidates for the degree must complete：
A．Forty semester hours in Biology．
Required courses（ 20 semester hours）in the Biology Core Curriculum are：
BIO 1103， 1111 Principles of Biology and Laboratory
BIO 1213， 1221 Principles of Environmental Biology and Laboratory
BIO 2313， 2321 Genetics and Laboratory
BIO 3413， 3421 General Physiology and Laboratory
BIO 3513， 3521 Biochemistry and Laboratory

Twenty semester hours of additional Biology electives are required， 12
of which must be at the upper－division level．The Biology electives may be selected（in consultation with student＇s Advisor）from any of the Biology courses，except those for non－majors．

B．Twenty－six semester hours of support work in：
1）Chemistry．Fifteen semester hours are required as follows：
CHE 1103， 1122 Introductory Chemistry and Laboratory
CHE 2003 ［7Z日3－Prineíples－8f－6hemístry］ Chemical Principles

CHE 2012 ［ $\mathrm{ZE} 7 Z$ ］［Anełytical－Ghemistry－It］Inorganic Qualitative and Quantitative Chemistry CHE 2203 Organic Chemistry I［fone－semestept］ CHE 2212 ［Anałytieal－Ghemistry－I£t］Techniques of Organic Qualitative Analysis

2）Mathematics．Three semester hours（in addition to the four semester hours required under the General Education Requirements） are required as follows：

| MAT 2013 | Statistical Methods in Life and Social Sciences I or |
| :--- | :--- |
| MAT 1213 | Calculus I |

3）Physics．Eight semester hours are required as follows：
PHY 1803， 1811 Physics for Life Science I
PHY 1823， 1831 Physics for Life Science II
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C. Ten semester hours of free electives.
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BACHELOR OF SCIENCE DEGREE
IN MEDICAL TECHNOLOGY

The medical technologist performs or supervises the performance of laboratory tests which aid physicians in diagnosing diseases and in evaluating the effec－ tiveness of treatment of diseases．These tests are performed in the fields of hematology，chemistry，urinalysis，blood coagulation，immuno hematology and blood banking，immunology and serology，and microbiology．Medical technologists work in or direct laboratories in hospitals and clinics，medical schools，govern－ mental health departments，pharmaceutical companies or research institutions．The medical technologist may develop new techniques for the laboratory，contribute toward research，become a laboratory manager，or teach students to become members of the profession．

There are two programs of medical technology at UT San Antonio leading to a Bachelor of Science Degree in Medical Technology．One program consists of three years of academic work and twelve months of clinical laboratory training in a hospital school of medical technology approved by the Council of Education of the American

Medical Association. The second program is a four-year integrated program in which clinical training is introduced at the beginning of the program and in which there is a concentrated clinical experience in the last half of the fourth year. The integrated program is offered in cooperation with The University of Texas Health Science Center.

The academic requirements of these programs are designed not only to give theoretical basis for laboratory procedures, but also to provide a strong basic science foundation so that medical technologists who later may wish to attend graduate school are qualified academically to do so. The hospital and simulated student laboratory training provides specialized application of this knowledge and orientation to the clinical laboratories and patient contact environment. The curricula are subject to review by the Council on Medical Education of the American Medical Association through the National Accrediting Agency for Clinical Laboratory Sciences. Graduates may obtain Certification by passing the examination of the Board of Registry of the American Society of Clinical Pathologists.

Because of limited clinical facilities students wishing to enroll in the Integrated Program should apply for admission to the program upon completion of their first year of university work. Application should be made at the Office of the Division of Allied Health and Life Sciences.

Requirements for the Bachelor of Science Degree in Medical Technology

The minimum number of semester hours reguired for this degree, including the 50 hours of General Education Requirements, is 141.

All candidates for the degree must complete:
A. Thirty-one semester hours in the biological sciences:
BIO 1103, 1111 Principles of Biology and Laboratory
B10 $2313 \quad$ Genetics

BIO 3463,3471 Human Physiology and Laboratory
BIO 3513, 3521 Biochemistry and Laboratory
BIO 3713, 3721 Microbiology and Laboratory
BIO 4743, 4751 Immunology and Laboratory

BIO 4763, $4771 \quad$ Parasitology and Laboratory
BIO 4782, 4792 Pathogenic Microorganisms and Laboratory
B. Twenty-eight semester hours of support work in:

1) Chemistry. Fifteen semester hours are required as follows:

CHE 1103, 1122 Introductory Chemistry and Laboratory
CHE $2003 \quad$ Chemical Principles

CHE 2012 [Anałytitał-Ehemistry-It] Inorganic Qualitative and Quantitative Chemistry

CHE 2203 Organic Chemistry I
 Organic Qualitative Analysis
2) Mathematics. Five semester hours (in addition to the four semester hours required under the General Education Requirements) are required as follows:
MAT $1062 \quad$ Statistics

MAT 1213 Calculus I
3) Physics. Eight semester hours are required as follows:

PHY 1803, 1811 Physics for Life Science I
PHY 1823, 1831 Physics for Life Science II
C. Thirty-two semester hours (or their equivalents) are taken as follows in the one-year hospital training:

BIO 2412, 2422 Hematology and Laboratory
BIO 2533, 2542 Parasitology and Urinalysis and Laboratory
BIO 3773, 3782 Clinical Chemistry and Laboratory
BIO 3862, 3872 Immunohematology and Serology and Laboratory
BIO $4843 \quad$ Advanced Clinical Microbiology
BIO $4854 \quad$ Advanced Clinical Chemistry
BIO 4863 Advanced Clinical Hematology
BIO 4884 Advanced Immunohematology and Serology
Under the integrated program, all candidates for the degree must complete:

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A. Sixty-three semester houns in the Medical Technology curriculum.
    Thirty-one semester hours in the biological sciences are required
    as follows:
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    BIO 1103, 1111 Principles of Biology and Laboratory
    B10 2313 Genetics
    BIO 3463, 3471 Human Physiology and Laboratory
    BIO 3513, 3521 Biochemistry and Laboratory
    BIO 3713, 3521 Microbiology and Laboratory
    BIO 4743, 4751 Immunology and Laboratory
    BIO 4763, 4771 Parasitology and Laboratory
    BIO 4782, 4792 Pathogenic Microorganisms and Laboratory
    Eighteen semester hours in Medical Technology courses are required
    as follows:
    BIO 1871 Allied Health Sciences
    BIO 1883 Medical Technology
    BIO 2412, 2422 Hematology and Laboratory
    BIO 2533, 2542 Parasitology and Urinalysis and Laboratory
    BIO 3773, 3782 Clinical Chemistry and Laboratory
    Fourteen semester hours in hospital training courses are required
    as follows:
    | BIO | 4843 | Advanced Clinical Microbiology |
| :--- | :--- | :--- |
| BIO | 4854 | Advanced Clinical Chemistry |
| BIO | 4863 | Advanced Clinical Hematology |
| BIO | 4884 | Advanced Immunohematology and Serology |

B. Twenty-eight semester hours of support work in:

1) Chemistry. Fifteen semester hours are required as follows:

CHE 1103, 1122 Introductory Chemistry and Laboratory
CHE 2003 Chemical Principles
CHE 2012 [Analyticat-chemistry.I.] Inorganic Qualitative and Quantitative Chemistry

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| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| Organic Qualitative Analysis |  |  |  |  |  |  |  |
| 2） | Mathematics． | Five semester hours（in addition to the four |  |  |  |  |  |
|  | semester hours required under the General Education |  |  |  |  |  |  |
|  | are required as follows： |  |  |  |  |  |  |
|  | MAT 1062 Statistics |  |  |  |  |  |  |
|  | MAT 1213 Calculus I |  |  |  |  |  |  |
| 3） | Physics．Eight semester hours are required as follows： |  |  |  |  |  |  |
|  | PHY 1803， 1811 Physics for Life Science I |  |  |  |  |  |  |
|  | PHY 1823， 1831 Physics for Life Science II |  |  |  |  |  |  |

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## BACHELOR OF SCIENCE DEGREE IN OCCUPATIONAL THERAPY

Occupational therapy is the art and science of directing man's participation in selected tasks to restore, reinforce and enhance performance, facilitate learning of those skills and functions essential for adaptation and productivity, diminish or correct pathology and to promote and maintain health. Its fundamental concern is the development and maintenance of the capacity, throughout the life span, to perform with satisfaction to self and others those tasks and roles essential to productive living and to the mastery of self and the environment. Many different
activities and life-tasks, such as daily living skills, creative arts and manual arts, are used to help patients of all ages overcome physical, emotional and other developmental problems. The therapist may work in hospitals and clinics, rehabilitation centers, extended care facilities, workshops, camps, schools, private homes and community agencies.

The degree program is designed to provide each student with educational opportunity for development as a professionally competent entry-level occupational therapist. A strong background is provided in the life sciences, behavorial sciences, humanities and specific skill areas. Specific application of occupational therapy skills in laboratory and clinical settings occurs in the last two years of a student's program and includes a minimum of six months approved clinical experience.

Students should apply for admission to the program prior to completion of their second year of university work. Application should be made at the Office of the Division of Allied Health and Life Sciences.

The curriculum is subject to review by the Council on Medical Education of the American Medical Association in collaboration with the American Occupational Therapy Association. The student is awarded a B. S. degree in Occupational Therapy upon completion of theprogram and is eligible to take the national examination for registration with the American Occupational Therapy Association. The clinical portion of the program is scheduled to begin September, 1977.

Requirements for the Bachelor of Science Degree in Occupational Therapy

The minimum number of semester hours required for this degree, including the 50 hours of General Education Requirements, is 144.

All candidates for the degree must complete:
A. Seventy-two semester hours in the Occupational Therapy curriculum.

Twenty-two semester hours in the biological sciences are required as follows:

BIO 1103, 1111 Principles of Biology and Laboratory
BIO 2313, 2321 Genetics and Laboratory or BIO 1213, 1221 Principles of Environmental Biology and Laboratory

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BIO 3163, 3173 Human Anatomy and Laboratory
BIO 3463, 3471 Human Physiology and Laboratory
BIO 4463, 4471 Human Neurosciences and Laboratory
Fifty semester hours in Occupational Therapy courses are required
as follows:
\begin{tabular}{ll} 
BIO 1871 & Allied Health Sciences \\
BIO 1863 & Survey of Physical Medicine and Rehabilitation \\
BIO 2862 & Occupational Therapy Process \\
BIO 3752, 3761 & Dynamics of Motion I and Laboratory \\
BIO 3793 & Occupational Therapy Theory \\
BIO 3851 & Directed Observation in Occupational Therapy
\end{tabular}
    BIO 3902, 3911 Occupational Therapy: Therapeutic Skills and Laboratory
    BIO 4202, 4211 Dynamics of Motion II and Laboratory
    BIO 4802, 4811 Occupational Therapy Theory and Treatment Planning
        and Laboratory
    BIO 4823 Occupational Therapy: Management and Consultation
    BIO 4836 Clinical Medicine
    BIO 4913 Independent Study
    BIO 4943 Field Work Experience (repeated for credit to
        total }15\mathrm{ hours)
B. Eighteen semester hours of support work in:
    1) Chemistry. Nine semester hours are required as follows:
        CHE 1103, 1122 Introductory Chemistry
    CHE 2103, 2111 Elem. Organic and Biochemistry and Laboratory
    2) Psychology. Nine semester hours are required as follows:
    PSY 2013 Fundamentals of Psychology
    PSY 2513 Abnormal Psychology
    PSY 2583 Developmental Psychology
Support work in Sociology (six semester hours) and in Fine and Applied Arts
(ten semester hours)' is selected as part of the General Education requirements
with approval of the advisor.
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## BACHELOR OF SCIENCE DEGREE IN <br> PHYSICAL THERAPY

The physical therapist is a member of the health team who is concerned with restoration of function and the prevention of disability following disease, injury, or loss of a bodily part. The emphasis is to train or retrain the patient to perform activities associated with daily living and to overcome emotional barriers to recovery: Physical therapists work in hospitals, rehabilitation facilities, private offices, long-term care facilities, nursing homes and schools. The degree program emphasizes the biological and physical sciences essential for understanding the functioning of the human body, as well as the humanities, social sciences, behavorial sciences and skill areas. Preclinical and clinical experience is taken in the last two years of a student's program.

Students should apply for admission to the program prior to completion of their second year of university work. Application should be made at the Office of the Division of Allied Health and Life Sciences.

The curriculum is subject to review by the Council on Medical Education of the American Medical Association in collaboration with the American Physical Therapy Association. The student is awarded a B. S. degree in Physical Therapy upon completion of the program and is eligible to take the state licensure examination.

The clinical portion of the program is scheduled to begin September, 1977.

Requirements for the Bachelor of Science Degree in Physical Therapy

The minimum number of semester hours required for this degree, including the 50 hours of General Education Requirements, is 136.

All candidates for the degree must complete:

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CHE 2103， 2111 Elem．Organic and Biochemistry and Laboratory
2）Physics．Eight semester hours are required as follows：
PHY 1803， 1811 Physics for Life Sciences I and Laboratory
PHY 1823， 1831 Physics for Life Sciences II and Laboratory
3）Sociology or Psychology．Three semester hours（in addition to the nine semester hours selected as part of the General Education requirements in Sociology and Psychology）are required and are selected with approval of the advisor．

COURSE DESCRIPTIONS
biology

1012 LIFE AND LIVING SYSTEMS
（2－0） 2 hours credit．May not be applied to a major in this Division． ［bietegy］
An introduction to the life sciences emphasizing general principles， diversity of life forms，reproduction and interrelationships between living things．

1021 LIFE AND LIVING SYSTEMS LABORATORY
（ $0-3$ ）［2］ 1 hour credit．May not be applied to a major in this Division ［biètegy］
Must be taken concurrently with BIO 1012
Laboratory exercise，films and demonstrations in biology．
1033 HUMAN BIOLOGY：ANATOMY AND PHYSIOLOGY
（3－0） 3 hours credit．Prerequisite：College biology or consent of instructor．May not be applied to a major in this Division．［bietegy］ ［Ppimapify－fop－pre－nupsing－students．］The structure of human muscular， skeletal，nervous and organ systems as related to function．
1041 ANATOMY AND PHYSIOLOGY LABORATORY
（0－3）［2］ 1 hour credit．May not be applied to a major in this Division． ［的音撞多］
Must be taken concurrently with BIO 1033.
1052 INTRODUCTORY MICROBIOLOGY
（2－0） 2 hours credit．Prerequisite：College biology or consent of instructor．
May not be applied to a major in this Division．［biefogy］
A general study of microorganisms，their characteristics，isolation，
growth and importance in nature，industry，public health and human disease．
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1061 INTRODUCTORY MICROBIOLOGY LABORATORY
（ $0-2$ ） 1 hour credit．May not be applied to a major in this Division． ［bietegy］
Must be taken concurrently with BIO 1052.
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| 1103 | PRINCIPLES OF BIOLOGY <br> （3－0） 3 hours credit．Prerequisite：Placement by examination．［Higk <br>  <br> An introduction to living organisms emphasizing fundamentals of organiza－ tion，reproduction，growth and interrelationships between various forms of life． |
| :---: | :---: |
| 1863 | SURVEY OF PHYSICAL MEDICINE AND REHABILITATION |
|  | （3－0） 3 hours credit．Prerequisite：BIO 187］． |
|  | The role of each therapeutic discipline working within the process of |
|  | of illness on the patient． |
| 1871 | ALLIED HEALTH SCIENCES |
|  | （1－0） 1 hour credit． |
|  | Nature of the various allied health science programs and their interrelation |
|  | On－site hospital visits to the various programs． |
| 1883 | INTRODUCTION TO MEDICAL TECHNOLOGY |
|  | （3－0） 3 hours credit．Prerequisite：BIO 1871 |
|  | Clinical laboratory safety，specimen collection and preservation，quality |
|  | controls，medical laboratory calculations，reagent preparation and medical technical terminology． |
| 2003 | HUMAN REPRODUCTION，FERTILITY，AND DEMOGRAPHY |
|  | （3－0） 3 hours credit．Prerequisites：BIO 1012 or 1103 or consent of |
|  | instructor．May not be applied to a major in this Division． |
|  | Human reproductive anatomy and physiology，fertility control，reproductive |
|  | disease，and parameters influencing fertility patterns． |
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|  | ehemistpy：－－May－Ret－be－appłied－もe－a－majer－in－biełөgy＝ <br>  <br>  |
| 2023 DRUGS AND SOCIETY |  |
| （3－0） 3 hours credit．Prerequisites：BIO 1012 or 1103 or consent of |  |
|  | instructor．May not be applied to a major in this Division． |
| An examination of drugs and their role in society． |  |
| 2043 | NUTRITION |
|  | （3－0） 3 hours credit．Prerequisites：BIO 1033，1041，［and－B¥ ］or |
|  | BIO 1103，1111．［May－nөt－be－applied－もө－a－majer－in－biełegy－］］ |
|  | An examination of human nutritional needs from infancy to adulthood． ［Ppimariły－fop－ppe－Aupsing－students：］ |
| 2053 | MAN AND HIS ENVIRONMENT |
|  | （3－0） 3 hours credit．Prerequisite：College biology or consent of |
|  | instructor．May not be applied to a major in this Division． |
|  | The interaction of man with the eco－system and its consequences． |
| 2063 | INVERTEBRATE BIOLOGY |
|  | $(3-0) 3$ hours credit．Prerequisites：BIO 1103 and BIO 1111. |
|  | A comprehensive treatment of the invertebrate animals with emphasis on |
|  | their taxonomy，morphology，ecology，and evolution． |
| 2071 | INVERTEBRATE BIOLOGY LABORATORY <br> （0－3） 1 hour credit．Must be taken concurrently with BIO 2063. |
| ［2743 | －EGMPARAFIVE－VERTEBRAFE－EMARF $\theta$ E $\theta G 7$ <br>  |

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2162 HISTOLOGY AND CYTOLOGY [ $\mp I S S H E-B I \theta L \theta G Y$ ]
(2-0) [3] 2 hours credit. Prerequisites: BIO 1103 and BIO 1111.
The cytological and histological aspects of cellular organization.
2172 HISTOLOGICAL AND CYTOLOGICAL LABORATORY [FISSHE-BI日E日GF-EABORAFORY]
(0-6) [4] 2 hours credit.
Must be taken concurrently with BIO 2162.
2343 INTRODUCTION TO PLANT SCIENCES
(3-0) 3 hours credit. Prerequisites: B10 1103, 1111.
The life histories and phylogenetic relationships of vascular and non-
vascular plants. Emphasis on form, structure, function and development
of higher plants.
2412 HEMATOLOGY
(2-0) 2 hours credit. Prerequisite BIO 1883 or consent of instructor.
Normal and abnormal blood pictures and cell maturations with related
clinical analyses, hemoglobinopathies, bone marrows, blood coagulation
and all factors.
2422 HEMATOLOGY LABORATORY
(0-6) 2 hours credit. To be taken concurrently with BIO 2412.
Clinical hematological laboratory with blood drawing.
2533 PARASITOLOGY AND URINALYSIS
(3-0) 3 hours credit. Prerequisite: BIO 1883.
Study of human parasitology, urinalysis with correlation to physiological
condition.
2542 PARASITOLOGY AND URINALYSIS LABORATORY
$(0-6)$ 2 hours credit. To be taken concurrently with BIO 2533.
Clinical human parasitology and urinalysis.
2751 PHYSICAL THERAPY: HISTORY AND PHILOSOPHY
(1-0) 1 hour credit.
The history and philosophy of Physical Therapy. Includes presentations
on various aspects of the profession.
2762 PHYSICAL THERAPY PROCEDURES
$(2-0) 2$ hours credit. Prerequisite: Consent of the instructor.
Fundamental concepts for basic patient care and management.
2862 OCCUPATIONAL TMERAPY PROCESS
(2-0) 2 hours credit.
Principles and theories of occupational therapy; professional role and
function, history, organization and concepts.
3012 [ 7 ] INTRODUCTORY PATHOLOGY
(2-0) [7] 2 hours credit. [7] Prerequisites: BIO 1103, BIO 1111, or
BIO 1033. [BIO 3413, and BIO 3421. May not be applied to a major in
biology.] Concepts of disease and diagnosis of pathological conditions.
[Pfímariły-fer-Medíєał-Feehnełegy-students-]
3021 INTRODUCTORY PATHOLOGY LABORATORY
(0-2) 1 hour credit. [May-pet-be-app7ied-te-a-majep-in-bie7өgy-] To
[Must] be taken concurrently with BIO 3012. Optional for non-majors.

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Metheds－fer－papid－autemated－anałysis－өf－varítus－enzymes－and－eөnstituents $\theta$ f－bedy－f7uids：－－Ppimapify－for－medíeat－teehnefogy－students．］
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May－＾өt－be－applied－te－a－major－in－Bietegy：
A－study－ef－płants－and－animałs－in－theif－natural－environmentヶ－fiefd－trips；



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3113 KINESIOLOGY
（3－0） 3 hours credit．Prerequisite：BIO 1033 or BIO 2123.
A study of the principles of human motion．
3143 ［2743］COMPARATIVE VERTEBRATE EMBRYOLOGY
（3－0） 3 hours credit．Prerequisites：BIO 3413 and BIO 3421．［7703，7777］ Sequential analysis of development in vertebrates and the factors which effect fertilization organogenesis，and implantation．［with－partieułap


3151 ［275ł］COMPARATIVE VERTEBRATE EMBRYOLOGY LABORATORY
（0－3） 1 hour credit．
Must be taken concurrently with BIO 3143.
3163 HUMAN ANATOMY
（3－0） 3 hours credit．Prerequisite：BIO 2123 and consent of instructor．
Lectures and demonstrations on the structure of the human body．
3173 HUMAN ANATOMY LABORATORY
（0－9） 3 hours credit．
Must be takn concurrently with BIO 3163.
3233 RURAL AND MUNICIPAL SANITATION
（3－0） 3 hours credit．Prerequisites：BIO 1213，CHE 1203 and upper division standing．
An examination of sanitation practices in rural and urban environments； including insect and rodent control，swimming pool sanitation，rural water supply，food sanitation and disease transmission．

3242 ［3042］FIELD BIOLOGY AND ECOLOGY
（2－0） 2 hours credit．Prerequisite：BIO 1103 and BIO 1111 or consent of
 A study of plants and animals in their natural environment；field trips， collection and analysis of field data are included．

3251 ［305ł］FIELD BIOLOGY LABORATORY
（0－3） 1 hour credit．［May－net－be－applied－te－a－majer－in－Biełegy：］
Must be taken concurrently with BIO 3242．［3042］

## 3413 GENERAL PHYSIOLOGY

（ $3-0$ ） 3 hours credit．Prerequisites：BIO 1103 ，BIO 1111 and organic chemistry．
Fundamental properties and processes in living systems．［Basie－ceneepts
 watep－bałanee－and－өthep－preeesses－in－łiving－systems－」
［3433－MAMMALIAN－PHYSIӨt
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## ［3447－MAMMALIAN－PHYSI日L日G\＃－LABQRAF日RF

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3463 HUMAN PHYSIOLOGY
（3－0） 3 hours credit．Prerequisites：BIO 1103 and organic chemistry． physiological processes in human systems．

3471 HUMAN PHYSIOLOGY LABORATORY
$(0-3) 1$ hour credit．
Must be takenconcurrently with BIO 3463.

3513 BIOCHEMISTRY
（3－0） 3 hours credit．Prerequisites：CHE 2203［2223］and CHE 2212．［2232］
Introduction to biochemistry：amino acids；protein structures；enzyme action；lipids and saccharides；metabolism；nucleic acids and molecular




3521 BIOCHEMISTRY LABORATORY
（0－3） 1 hour credit．Must be taken concurrently or following BIO 3513.

Basic biochemical laboratory techniques：titration，protein purification， enzyme kinetics，chromatography，electrophoresis，centrifugation．［A
 as－6HE－4277：］

3633 PLANT ANATOMY
（3－0） 3 hours credit．Prerequisites：BIO 2343， 2351.
A comprehensive treatment of the development，function and evolutionary significance of the internal structure of plants．

3641 PLANT ANATOMY LABORATORY
$(0-3)$ Thour credit．To be taken concurrently with BIO 3633.

## 3713 MICROBIOLOGY

（3－0） 3 hours credit．Prerequisites：BIO 3513， 3521 or concurrent regis－
 euppentły－with－łatter－twe：］A comprehensive study of microorganisms including their composition，morphology，growth，metabolism，classification， ecology and significance in disease．

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3721 MICROBIOLOGY LABORATORY
    (0-3) [7] 1 hour credit.
    Must be taken concurrently with BIO 3713.
3741 INDUSTRIAL MICROBIOLOGY LABORATORY
    (0-3) [7] 1 hour credit.
    Mus\overline{t}}\mathrm{ be taken concurrently with BIO }3732
3752 DYNAMICS OF MOTION I
    (2-0)2 hours credit. Prerequisites: BIO 3463 or BIO 3163 and approval
    of the appropriate Allied Health Admissions Committee. Analysis and
    evaluation of movement disorders and the use of assistive devices for
    their prevention and correction.
3761 DYNAMICS OF MOTION I LABORATORY
    (0-4) }1\mathrm{ hour credit.
    Must be taken concurrently with BIO 3752.
3773 CLINICAL CHEMISTRY
    (3-0) 3 hours credit. Prerequisite: BIO 3513.
    Physiological systems in normal and diseased processes and their correlation
    with clinical chemistry laboratory.
3782 CLINICAL CHEMISTRY LABORATORY
    (0-6) 2 hours credit. To be taken concurrently with BIO }3773
    Analytical clinical chemistry technigues and automated clinical instrumen-
    tation with quality controls and blood analyses.
3793 OCCUPATIONAL THERAPY THEORY
    (3-0) 3 hours credit. Prerequisite: BIO 2862 and approval of Occupational
    Therapy Admissions Committee.
    Identification of the life tasks and adaptive skills of the developing
    human; observation and evaluation procedures used in the occupational
    therapy process correlated with field observations.
3813 CELLULAR BIOLOGY
    (3-0) 3 hours credit. Prerequisites: BIO 1103, BIO 1111 and CHE 2203.
    [BI0-3573-and-BI0-3527]
    The composition, function and interaction of cellular constituents and
    substructures at the ultra-structural level.
3821 CELLULAR BIOLOGY LABORATORY
    (0-3) [ł] 1 hour credit.
    Must be taken concurrently with BIO 3813.
3831 TISSUE AND ORGAN CULTURE
    (1-0) 1 hour credit. Prerequisites: BIO 3513, 3521. [3773;-3727;]
    Theoretical and practical aspects of maintaining and growing cells,
    tissues and organs from various sources.
3842 TISSUE AND ORGAN CULTURE LABORATORY
    (0-6) [4] 2 hours credit.
    Must be taken concurrently with BIO 3831.
3851 DIRECTED OBSERVATION IN OCCUPATIONAL THERAPY.
    (0-5) 1 hour credit. Prerequisite: approval of the Allied Health
    Admissions Committee in Occupational Therapy.
    Directed observation and participation in selected field settings.
    May be repeated for credit to a total of two hours by permission.
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3862 IMMUNOHEMATOLOGY AND SEROLOGY
    (2-0) 2 hours credit. Prerequisites: BIO 2412 and BIO 4743.
    Discussion of bloodbanking antigens and antibodies, crossmatching, and
    clinical serological assays in regard to normal and diseased states.
3872 IMMUNOHEMATOLOGY AND SEROLOGY LABORATORY
    (0-6) 2 hours credit. To be taken concurrently with BIO }3862
    BTood banking techniques and serological assays including RIA procedures.
3883 THERAPEUTIC CONCEPTS AND PROCEDURES IN PHYSICAL THERAPY
    (3-0) 3 hours credit. Prerequisite: approval of Physical Therapy
    Admissions Committee.
    Theory and application of the use of physical agents in patient treatment.
3893 THERAPEUTIC CONCEPTS LABORATORY
    (0-9) 3 hours credit. Must be taken concurrently with BIO }3883
3902 OCCUPATIONAL THERAPY: THERAPEUTIC SKILLS
    (2-0) 2 hours credit. Prerequisite: BIO 3793 and approval of Occupational
    Therapy Admissions Committee.
    Identification, analysis and adaptation of life tasks and activities
    related to age-specific needs, capacities and roles.
3911 THERAPEUTIC SKILLS LABORATORY
    (0-3) 1 hour credit.
    Must be taken concurrently with BIO 3902.
4073 LAW, ETHICS AND THE LIFE SCIENCES
    (3-0) 3 hours credit. Prerequisite: BIO 1103, BIO 1111 or consent of
    instructor: [E0łfege-bi0łegy] May not be applied to a major in this
    Division. [bietegy]
    An examination of the ethical, philosophical and social implications of
    studies in those areas of the life sciences which affect public policy
    or action, e.g., incentives to slow population growth; psychology of
    consciousness and definitions of life and death.
4083 HEREDITY, EVOLUTION, RACE AND SOCIETY
    (3-0) 3 hours credit. Prerequisite: BIO 1103, BIO 1111 or consent of
    instructor. [Eełfege-b;ełegy] May not be applied to a major in this
    Division. [bï\mp@code{ogy]}
    A study of variation and evolutionary change in relation to human thought,
    experience, cultural evolution, diversity and mating systems.
4 2 0 2 ~ D Y N A M I C S ~ O F ~ M O T I O N ~ I I ~
    (2-0) 2 hours credit. Prerequisite: BIO 3752
    A continuation of BIO 3752.
4211 DYNAMICS OF MOTION II LABORATORY
    (0-4) 1 hour credit.
    Must be taken concurrently with BIO 4202.
4222 ADVANCED CONCEPTS AND PROCEDURES IN PHYSICAL THERAPY
    (2-0) 2 hours credit. Prerequisite: approval of Physical Therapy
    Admissions Committee.
    Advanced training in developing rehabilitation treatment plans for com-
    prehensive patient care.
4231 ADVANCED CONCEPTS LABORATORY
    (0-4) I hour credit.
    Must be taken concurrently with BIO 4222.
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| 4243 PHYSIOLOGICAL ECOLOGY |  |
| :---: | :---: |
|  | (3-0) 3 hours credit. Prerequisites: BIO 3213, 3221, 3242, and 3251. |
|  | An integration of physiological and biochemical solutions, and mechanisms |
|  | to environmental problems at the organismic level. |
| 4251 | PHYSIOLOGICAL ECOLOGY LABORATORY |
|  | (0-3) 1 hour credit. Must be taken concurrently with BIO 4243. |
| 4353 | COMPARATIVE PHYSIOLOGY |
|  | (3-0) 3 hours credit. Prerequisites: BIO 3413, 3421. |
|  | A phylogenetic study of physiologic adaptation in animals. |
| 4361 | COMPARATIVE PHYSIOLOGY LABORATORY |
|  | (0-3) 1 hour credit. Must be taken concurrently with BIO 4353. |
|  | A laboratory course illustrating the principles presented in BIO 4353. |
| 4413 | MAMMALIAN PHYSIOLOGY |
|  | (3-0) 3 hours credit. Prerequisite: BIO 3413, BIO 3421 and consent of |
|  | instructor. Physiology of mammalian organs and organ systems. |
| 4421 | MAMMALIAN PHYSIOLOGY LABORATORY |
|  | $(0-3) 1$ hour credit. Must be taken concurrently with BIO 4413. |
| 4433 | NEUROBIOLOGY |
|  | (3-0) 3 hours credit. Prerequisites: BIO 3413 and BIO 3421. |
|  | Anatomy and physiology of nervous systems, the mechanisms of neuronal |
|  | functions. Physitelogy-日f-the-sensery-peeepters-and-eentrat-and-peripherat |
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| 4443 | ENDOCRINOLOGY |
|  | (3-0) 3 hours credit. Prerequisites: BIO 3413, [3] 3421, [4] and 3513. A consideration of the physiological effects $\overline{o f}$ hormones on the organism |
|  | in health and disease, together with a study of the gross and microscopic |
|  | morphology of the glands of internal secretion. |
| 4463 | HUMAN NEUROSCIENCES |
|  | (3-0) 3 hours credit. Prerequisites: BIO 3413 or BIO 3463. |
|  | Structure and function of the human nervous system. |
| 4471 | HUMAN NEUROSCIENCES LABORATORY |
|  | (0-3) 1 hour credit. |
|  | Must be taken concurrently with BIO 4463. |
| 4493 | AIR POLLUTION AND INDUSTRIAL HYGIENE |
|  | (3-0) 3 hours credit. Prerequisites: BIO 1213, CHE 2003 and upper division |
|  | standing. |
|  | Discussion of the sources, quantities, effects sampling and control of air- |
|  | borne pollutants in ambient air and industrial environments. |
| 4523 | INTERMEDIARY METABOLISM |
|  | (3-0) 3 hours credit. Prerequisites: BIO 3513 and BIO 3521. |
|  | A detailed consideration of metabolic pathways, energy metabolism and <br>  |
| 4531 | INTERMEDIARY METABOLISM LABORATORY |
|  | (0-30 [7] 1 hour credit. |
|  | Mus $\bar{t}$ be takn concurrently with BIO 4523. |
|  | [7his-cetipse-may-atse-be-taken-as-6HE-4237-] |


| 4543 | BIOCHEMICAL TECHNIQUES <br> (0-6) 3 hours credit. Prerequisites: BIO 3513 [4523] and BIO 3521 [4531]. Laboratory experience in methods of biochemical fractionation, purification and analysis of components. |
| :---: | :---: |
| 4603 | PLANT PHYSIOLOGY <br> (3-0) 3 hours credit. Prerequisites: BIO 2343, 2351; CHE 2203, 2212. Principles of organization of cellular activity and molecular structure of protoplasm; with emphasis on nutrition translocation, mineral metabolism, respiration and photosynthesis. |
| 4611 | PLANT PHYSIOLOGY LABORATORY <br> (0-3) 1 hour credit. To be taken concurrently with BIO 4603. |
| 4622 | BIOLOGICAL LITERATURE <br> (2-0) 2 hours credit. Prerequisite: senior standing. Survey of selected biological references with emphasis on utilization of journals and scientific writing. |
| 4731 | VIROLOGY LABORATORY (0-3) [7] 1 hour credit. |
| 4751 | IMMUNOLOGY LABORATORY (0-3) [7] 1 hour credit. Mus $\bar{t}$ be taken concurrently with [er-fełfewing] BIO 4743. |
| 4782 | [4783] PATHOGENIC MICROORGANISMS <br> (2-0) [3] 2 [3] hours credit. Prerequisites: BIO 3713 and BIO 3721. A consideration of medically important microorganisms and their interaction with animal and human hosts. |
| 4792 | [4797] PATHOGENIC MICROORGANISMS LABORATORY (0-6) [3] 2 [7] hours credit. <br> Must be taken concurrently with BIO 4782 [4783]. |
| 4802 | OCCUPATIONAL THERAPY THEORY AND TREATMENT PLANNING |
|  | (2-0) 2 hours credit. Prerequisite: approval of Occupational Therapy Admissions Committee. |
|  | Overview of life tasks and adaptive skills of the developing human; treatment planning and professional communications correlated with field |
|  | observations. |
| 4811 | THEORY AND PLANNING LABORATORY |
|  | (0-3) 1 hour credit. |
|  | Must be taken concurrently with BIO 4802. |
| 4823 | OCCUPATIONAL THERAPY: MANAGEMENT AND CONSULTATION |
|  | (3-0) 3 hours credit. Prerequisite: approval of Occupational Therapy Admissions Committee. |
|  | Planning, organizing, supervising, and implementing occupational therapy |
|  | services as a line function and as a consultant; legal and ethical considerations. |
| 4836 | CLINICAL MEDICINE |
|  | (6-0) 6 hours credit. Prerequisites: BIO 3463 and approval of the appro- |
|  | priate Allied Health Admissions Committee. |
|  | Lectures covering the various areas of medicine and surgery emphasizing |
|  | the conditions commonly encountered in physical medicine and rehabilitation. |
| 4843 | ADVANCED CLINICAL MICROBIOLOGY |
|  | (2-6) 3 hours credit. Prerequisite: approval of Medical Technology |
|  | Admissions Committee. |
|  | An integrated lecture and laboratory with emphasis on abnormal microbial flora found in diseased humans. |


| 4854 ADVANCED CLINICAL CHEMISTRY |  |
| :---: | :---: |
|  | Admissions Committee. |
|  | An integrated lecture and laboratory with emphasis on special clinical |
|  | chemistries, toxicology, and clinical chemistry of abnormal or diseased |
|  | states. |
| 4863 | ADVANCED CLINICAL HEMATOLOGY |
|  | (2-6) 3 hours credit. Prerequisite: approval of Medical Technology |
|  | Admissions Conmittee. |
|  | An integrated lecture and laboratory with emphasis on blood pictures, bone |
|  | marrows and hematological findings of diseased states. |
| 4871 | PRECLINICAL TRAINING |
|  | (0-5) 1 hour credit. Prerequisite: approval of the Allied Health |
|  | Admissions Committee in Physical Therapy. |
|  | Observations and practical experience in a clinical setting. May be |
|  | repeated for credit to a total of two hours by permission. |
| 4884 | AdVANCED ImMunohematology and serology |
|  | (2-9) 3 hours credit. Prerequisite: approval of Medical Technology |
|  | Admissions Cormittee. |
|  | An integrated lecture and laboratory with emphasis on unusual antibodies |
|  | and incompatibilities. |
| 4913 | INDEPENDENT STUDY |
|  | 3 hours credit. Prerequisites: permission in writing (form available) |
|  | of the instructor, the student's Advisor, and the Division Director and |
|  | Dean of the College in which the course is offered. |
|  | Independent reading, research, discussion, and/or writing under the |
|  | direction of a faculty member. For students needing specialized work. |
|  | May be repeated for credit, but not more than 6 hours will apply to the |
|  | Bachelor's degree. |
| 4923 | UNDERGRADUATE RESEARCH PROJECT |
|  | (0-6) 3 hours credit. Prerequisite: Consent of Division Director. |
|  | An intensive laboratory research project. |
| 4933 | CLINICAL EDUCATION |
|  | (0-15) 3 hours credit. Prerequisite: approval of the Allied Health |
|  | Admissions Cormittee in Physical Therapy. |
|  | Supervised training in a treatment setting to fulfill professional |
|  | curriculum requirements. May be repeated for credit to a total of |
|  | six hours by permission. |
| 4943 | FIELD WORK EXPERIENCE |
|  | (0-15) 3 hours creidt. Prerequisite: approval of the Allied Health |
|  | Admissions Committee in Occupational Therapy. |
|  | In-depth experience in and responsibility for the delivery of health car |
|  | services to patient/clients. May be repeated for credit to a total |
|  | fifteen hours by permission. |
| 4953 | SPECIAL STUDIES |
|  | 3 hours credit. Prerequisite: Consent of instructor. |
|  | An organized course offering specialized study not normally or not often |
|  | available as part of the regular course offerings. Special Studies Courses |
|  | may be repeated for credit when the topics vary, but not more than 6 hours |
|  | within any one discipline will apply to a Bachelor's degree. |
| 4972 | PROSEMINAR |
|  | (2-0) 2 hours credit. Prerequisite: consent of Division advisor. |
|  | Presentation and discussion of current scientific literature. |

The degree programs offered by this Division reflect its policy of providing comprehensive education of the highest quality, individualized to the needs and interests of the student. Completion of a core curriculum permits entry into one of several highly specialized areas in Applied Science (applied geology, applied physics, food technology, polymer science) [eapth-seqenee], chemistry. [of-physics]. A major in any of these prepares the student for positions in industry and government as well as entry into professional and graduate schools. The recommended programs [ppogram] for majors concentrate [eeneentrates] much of the specialty in the early years, thereby permitting increased specialization later in the college career.

A major in any of the Applied Science options provides a sound background for completion of an engineering degree program with a minimum of duplication in course material.

The Bachelor of Science in Applied Science has three major goals: (1) to prepare a student for employment in one of the option areas (Applied Geology, Applied Physics, Food Technology and Polymer Science), (2) to provide the fundamental courses enabling a student to transfer to The University of Texas at Austin to complete a degree program in Civil Engineering, Environmental Engineering, Chemical Engineering, Electrical Engineering or Engineering Science, and (3) to provide the background necessary for graduate study in a variety of science and engineering specialty areas.
A. Applied Geology

The severe shortages occurring in the materials needed to maintain an industrial civilization call for a growth in manpower and technology in the area of Applied Geology. Graduates of this program work in mineral
exploration and development, water resources, environmental geology and
other applications, In addition the program provides a strong background for cont inued study at the graduate Yevel.
B. Applied Physics

The Applied Physics Opt ton is Intended for students who wish to pursue an Industrial career involving the numerous practical applications of Physics. Modern discoveries such as the radar, transistors, and computers are exemplary of such training. The program emphasizes a unique combination of fundamental concepts of Physics with the vast potential for their industrial. applications. Graduates trained under this program find employment opportunities in areas such as newer forms of energy, newer forms of communication and transportation and newer industrial aspects of sound and light. Industries deal ing with satellite communications, solar energy utilization, and efficient conversion of chemical energy into mechanical energy are among those job opportunities for graduates of this option. The basic physics component of this option remains sufficiently strong to meet the needs of students who plan graduate work in physics, as well as those planning graduate work in other sciences and medicine.
C. Food Technology

The Food Technology Option is formulated on the basis of the broad-based food industry in the Nation and in the State of Texas. Graduates in this area find opportunities in the food industries. Examples are the production of cotton seed oil, peanut butter, cotton seed protein, dairy products, fruits, meat and meat by-products.

Major upper-division courses required for this option will appear in the next issue of this catalog. Students interested in this option should consult the Director of the Division of Earth and Physical Sciences. D. Polymer Science

The Polymer Science Option is formulated on the basis of relevance to local
and national needs, estimated present and future job market trends, and local resources in the petrochemical industries, Many industrial polymers are derived from petrol eum. Examples are paints and coatings, synthetic fibers; polymer foams; photographic films and printing inks. Transportation, construction, furniture and bedding, flotation, packaging, footwear and numerous other consumer needs are strongly dependent upon a polymer-science base.

For those students who seek a formal engineering degree, these curricula offer an opportunity to obtain a major part of their engineering training at The University of Texas at San Antonio prior to transfer. For example, the program enables UTSA graduates in Applied Science to earn a second bachelor's degree at The University of Texas at Austin in Petroleum, Environmental and Civil Engineering (Applied Geology), Electrical Engineering or Engineering Science (Applied Physics) or Chemical Engineering (Polymer Science and Food Technology). For those students who plan to transfer to an engineering curpiculum prior to completing the Bachelor of Science in Applied Science degree, a sequence of courses, tailored to the engineering program of interest, will be recomended by the advisor.

## BACHELOR OF SCIENCE DEGREE

IN APPLIED SCIENCE
The minimum number of semester hours required for this degree, including the 50 hours of General Education Requirements, is 128*.

All candidates for the degree must complete the following core of 33 semester hours in the sciences and mathematics:

AS 2902 Introduction to Applied Science or
AS 2912 Introduction to Engineering
*Thirty-nine of the total credit hours required for the degree must be at the upper-division level.

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AS 4933 Practicum in Applied Science
AS 4953 Special Studies Project
CHE }1103\mathrm{ Introductory Chemistry
CHE }1203\mathrm{ Chemical Principles
CHE 1212 Inorganic Qualitative and Quantitative Analysis
MAT 1213 Calculus I
MAT }1223\mathrm{ Calculus II
CS 1713 Introduction to Computer Science
PHY 1903 Technical Physics I
PHY 1911 Technical Physics I Lab
PHY }1923\mathrm{ Technical Physics II
PHY 1931 Technical Physics II Lab
In addition, students must complete 45 semester hours in one of the following
options: Applied Geology, Applied Physics, or Polymer Science.
Applied Geology
A. Thirty-five semester hours in Applied Geology. Required courses (23
    semester hours) are:
    AS 1002 Interpreting the Earth
    AS 1011 Interpreting the Earth Laboratory
    AS }1022\mathrm{ Earth History and Stratigraphy
    AS 1031 Earth History and Stratigraphy Laboratory
    AS 2002 Earth Materials I
    AS 2012 Earth Materials I Laboratory
    AS 2022 Earth Materials II
    AS 2032 Earth Materials II Laboratory
    AS 3002 Structural Geology: Map and Photo Analysis
    AS 3011 Structural Geology: Map and Photo Analysis Laboratory
    AS 3022 Surface Processes and Sedimentary Geology
    AS 3031 Surface Processes and Sedimentary Geology Laboratory
    AS 3043 Field Methods in Geology
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Twelve semester hours of approyed elective courses in applied science at the upper-diviston level to be chosen from the following:
AS 3042 Economic Geology I: Metals and Industrial Minerals
AS 3063 Oceanography
AS 3082 Economic Geology II: Fuels
AS 3091 Economic Geology II: Fuels - Laboratory
AS 4022 Engineering Geology
AS 4042 Hydrogeology
AS 4053 Hydrology
AS 4062 Principles of Environmental Geology
B. Ten semester hours of approved support work.

## Applied Physics

A. Thirty-nine semester hours in Applied Physics. Required courses (16
semester hours) are:
AS 3231 Electronics Laboratory
AS 3263 Microphysics
AS 3283 Electricity and Magnetism
AS 3293 Thermodynamics
AS 3383 Dynamics
Twenty-three semester hours of approved elective courses in applied
science* at the upper-division level to be chosen from the following:
AS 3203 Circuit Analys is
AS 3211 Circuit Analysis Laboratory
AS 3273 Statics
AS 3303 Alternative Energy Sources
AS 3312 Experimental Physics I

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    AS 3323 Wave Motion
    AS 3332 Experimental Physics II
    AS 3363 Biophysics I
    AS 3373 Bfophystcs II
    AS 4263 Introduction to Quantum Mechanics
    AS 4283 Electromagnetic Radiation
    AS 4293 Fluid Mechanics
    AS 4323 Acoustics
    AS 4331 Acoustics Laboratory
    AS 4363 Nuclear Energy
    AS 4373 General Geophysics
    AS 4382 Exploration Geophysics
    AS 4391 Exploration Geophysics Laboratory
B. Six semester hours of required support work in Mathematics:
    MAT 2213 Calculus III
    MAT 3243 Calculus for Applications
    Polymer Science
A. Nineteen semester hours in Polymer Science. Required courses (12
    semester hours) are:
    AS 3603 Polymer Science I
    AS 3611 Polymer Science I Laboratory
    AS 3623 Polymer Science II
    AS 3631 Polymer Science II Laboratory
    AS 4653 Polymer Technology
    AS 4661 Polymer Technology Laboratory
    Seven semester hours of approved elective courses in applied science
    at the upper-division level to be chosen from the following:
    AS 3643 Natural and Synthetic Organic Polymers
    AS 3651 Natural and Synthetic Organic Polymers Laboratory
    AS 4623 Coatings Technology
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AS 4703 Organic Chemistry of Coatings
AS 4723 Corrosion
AS 4743 Industrial and Commercial Applications of Polymers
B. Twenty-six semester hours of support work. Required courses (20
semester hours) are:
CHE 2203 Organic Chemistry I
CHE 2212 Organic Qualitative Analysis
CHE 3003 Organic Chemistry II
CHE 3012 Organic Quantitative Analysis
CHE 3203 Physical Chemistry I
CHE 3212 Laboratory Techniques of Physical Chemistry
CHE 3223 Physical Chemistry II
CHE 3232 Instrumental Analysis
Six semester hours of approved coursework in upper-division physical chemistry, organic chemistry, biochemistry, biology, physics, and/or 4000-level polymer science courses.

COURSE DESCRIPTIONS APPLIED SCIENCE (AS)

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| 3011 STRUCTURAL GEOLOGY: MAP AND PHOTO ANALYSIS LABORATORY |  |
| :---: | :---: |
|  |  |
|  | registration for AS 3002 required; exceptions with consent of instructor. |
|  | Laboratory study of structural interpretation using maps, cross-sections, |
|  | air photos, and descriptive geometric and stereographic methods. |
| 3022 | SURFACE PROCESSES AND SEDIMENTARY GEOLOGY |
|  | (2-0) 2 hours credit. Prerequisites: AS 2022 and 2032. Concurrent |
|  | registration for AS 3031 required; exceptions with consent of instructor. |
|  | Processes of erosion, transportation and deposition that transform the |
|  | surface of the continents and form bodies of sedimentary rock and their |
|  | primary structures. |
| 3031 | SURFACE PROCESSES AND SEDIMENTARY GEOLOGY LABORATORY |
|  | (0-3) 1 hour credit. Prerequisites: AS 2022 and 2032. Concurrent |
|  | registration for AS 3022 required; exceptions with consent of instructor. |
|  | Field trips and laboratory studies of sedimentary processes and their |
|  | products. |
| 3042 | ECONOMIC GEOLOGY I: METALS AND INDUSTRIAL MINERALS |
|  | (2-0) 2 hours credit. Prerequisites: AS 1002 and 1011. |
|  | Ore and industrial mineral genesis. Description and distribution |
|  | of the major mineral deposits. |
| 3063 | OCEANOGRAPHY |
|  | (3-0) 3 hours credit. Prerequisite: Upper division standing or consent |
|  | of instructor. |
|  | General oceanography, with emphasis on marine geology and especially the |
|  | continental margins. |
| 3082 | ECONOMIC GEOLOGY II: FUELS |
|  | (2-0) 2 hours credit. Prerequisites: AS 1002, 1011, 1022, and 1031. |
|  | Concurrent registration for AS 3091 required; exceptions with consent |
|  | of instructor. |
|  | Geology of petroleum, natural gas, coal, uranium, and geothermal energy |
|  | sources. |
| 3091 | ECONOMIC GEOLOGY II: FUELS LABORATORY |
|  | (0-3) 1 hour credit. Prerequisites: AS 1002, 1011, 1022, and 1031. |
|  | Concurrent registration for AS 3082 required; exceptions with consent of |
|  | instructor. |
|  | Laboratory studies of samples, maps and logs. Preparation of sample |
|  | logs and subsurface maps. |
| 3203 | CIRCUIT ANALYSIS |
|  | (3-0) 3 hours credit. Prerequisites: PHY 1923, CS 1713 and MAT 2213. |
|  | AS 3211 should be taken concurrently. |
|  | Steady state analysis of linear DC and AC networks. The course |
|  | emphasizes matrix analysis and computer methods. |
| 3211 | CIRCUIT ANALYSIS LABORATORY |
|  | (0-3) 1 hour credit. Pre- or co-requisite: AS 3203. |
|  | Laboratory to accompany AS 3203. |
| 3223 | ELECTRONICS |
|  | (3-0) 3 hours credit. Prerequisite: PHY 1923. AS 3231 should be taken |
|  | concurrently. <br> Introduction to DC and AC circuits, electronic components and their |
|  | uses in basic circuits for instrumentation commonly encountered in the |
|  | scientific laboratory. |

3231 ELECTRONICS LABORATORY
(0-3) Thour credit, Pres or co-requisite; AS 3223.
Laboratory to accompany AS 3223 .
3243 ELECTRONLC CIRCUITS
(3-0) 3 hours credit. Prerequisite: AS 3223. AS 3251 should be taken
concurrentiy.
Design of Tinear amplifters, power supplies and other basic electronic
instrumentation in common use.
3251 ELECTRONIC CIRCUITS LABORATORY
(0-3) 1 hour credit. Pre- or co-requistte: AS 3243.
Laboratory to accompany AS 3243.
3263 MICROPHYSICS
$(3-0) 3$ hours credit. Prerequisite: PHY 1923. Pre- or co-requisite:
MAT 2213.
Atomic-, molecular-, nuclear-, and solid-state physics; basic concepts,
principles and applications.
3273 STATICS
$(3-0) 3$ hours credit. Prerequisite: PHY 1903 and MAT 1223.
Vector algebra, force systems, free body diagrams; engineering appli-
cations of equilibrium, centroids; moments of inertia.
3283 ELECTRICITY AND MAGNETISM
(3-0) 3 hours credit. Prerequisite: PHY 1923. Pre- or co-requisite:
MAT 3243.
Theory and applications of electrostatics, currents, magnetic fields.
Introduction to MaxwelT's equations.
3293 THERMODYNAMICS AND STATISTICAL MECHANICS
(3-0) 3 hours credit. Prerequisites: PHY 1923, CHE 2003, and MAT 2213.
Heat, kinetic theory of gases, laws of thermodynamics and their practical
applications. Elements of statistical mechanics.
3303 ALTERNATIVE ENERGY SOURCES
(3-0) 3 hours credit. Prerequisites: PHY 1923 and CHE 2003. AS 3312
should be taken concurrently.
Solar, wind and tidal energy. Energy storage problems. Basic physics,
current technology and some economic considerations.
3312 EXPERIMENTAL PHYSICS I
(0-6) 2 hours credit. Pre- or co-requisite: AS 3303.
Laboratory to accompany AS 3303. Experiments applicable to energy
studies. May include field trips.
3323 WAVE MOTION
(3-0) 3 hours credit. Prerequisites: MAT 2213 and an upper division
Physics lecture course. AS 3332 should be taken concurrently.
The essential features of wave motion and its applications primarily in
physical optics. Optical correlation technlques, lasers, holography,
fiber optics, magneto- and electro-optical phenomena and their appli-
cations are covered as time permits.
3332 EXPERIMENTAL PHYSICS II
(0-6) 2 hours credit. Pre- or co-requisite: AS 3323.
Laboratory to accompany AS 3323. Experiments mainly in optics.

| 3363 | BIOPHYSICS I |
| :---: | :---: |
|  | (3-0) 3 hours credit. Prerequisites: CHE 2003, PHY 1923 or PHY 1823, |
|  | and MAT 1223. |
|  | Study of biological systems from the physicist's point of view. Topics |
|  | are: introduction to atomic structure, molecular bonds, concepts of |
|  | molecular biophysics, macro-molecules, interaction of radiation with |
|  | biological materials. |
| 3373 | BIOPHYSICS II |
|  | (3-0) 3 hours credit. Prerequisite: AS 3363. |
|  | Study of biological systems from a physicist's point of view. Topics |
|  | are: molecular transformations and methods of regulation, survey of |
|  | physical experimental techniques in molecular biophysics, macroscopic |
|  | structures in the context of molecular biophysics, and some thermo- |
|  | dynamics of living systems. |
| 3383 | DYNAMICS |
|  | (3-0) 3 hours credit. Prerequisite: PHY 1923. Pre- or co-requisite: |
|  | MAT 2213. |
|  | Kinematics and dynamics of a particle, systems of particles, rigid |
|  | body motion in a plane. Applications are emphasized. |
| 3603 | POLYMER SCIENCE I |
|  | (3-0) 3 hours credit. Prerequisite: CHE 3203. |
|  | Basic principles of polymer science; kinetics and mechanisms of poly- |
|  | merization and copolymerizations; methods of polymerization; molecular |
|  | weight determinations and characterization of polymers; solution |
|  | properties; polymer reactions, crosslinking, graft and block co- |
|  | polymerizations; polymer degradation and stabilization. |
| 3611 | POLYMER SCIENCE I LABORATORY |
|  | (0-3) 1 hour credit. Prerequisite: AS 3603 or concurrent registration. |
|  | Laboratory projects illustrating and extending the concepts discussed |
|  | in AS 3603. |
| 3623 | POLYMER SCIENCE II |
|  | (3-0) 3 hours credit. Prerequisite: AS 3603. |
|  | Structural and physical aspects of polymers; molecular basis for |
|  | polymer properties and behavior; the rubbery, glassy and crystatione |
|  | states; viscoelectricity and rubber elasticity; glass transition; |
|  | structure, morphology, mechanical, optical and electrical properties. |
| 3631 | POLYMER SCIENCE II LABORATORY |
|  | (0-3) 1 hour credit. Prerequisite: AS 3623 or concurrent registration. |
|  | Laboratory projects illustrating and extending the concepts discussed |
|  | in AS 3623. |
| 3643 | NATURAL AND SYNTHETIC ORGANIC POLYMERS |
|  | (3-0) 3 hours credit. Prerequisite: AS 3623. |
|  | Preparation, structure and properties of addition and condensation |
|  | polymers; polymerization by ring opening; block and graft polymers. |
|  | Structure and properties of cellulose, proteins, rubber and their |
|  | derivatives. |
| 3651 | NATURAL AND SYNTHETIC ORGANIC POLYMERS LABORATORY |
|  | (0-3) Thour credit. Prerequisite: AS 3643 or concurrent registration. |
|  | Laboratory projects illustrating and extending the concepts discussed |
|  | in AS 3643. |


|  | ENGINEERING GEOLOGY |
| :---: | :---: |
|  | (2-0) 2 hours credit, Prerequisite AS 1002 and 1011 and consent of |
|  | instructor. |
|  | Geologic factors in the construction of large structures and excavations. |
|  | Physical properties of natural materials. Case studies. |
| 4042 | HYDROGEOLOGY |
|  | (2-0) 2 hours credit. Prerequisites: AS 1002 and 1011 and consent of |
|  | instructor. |
|  | Hydrologic cycle and the theory of underground water. Recharge and |
|  | discharge of aquifers; water quality; exploration and development of |
|  | ground water supplies. |
| 4053 | HYDROLOGY |
|  | (3-0) 3 hours credit. Prerequisite: AS 4293 or consent of instructor. |
|  | The examination of various components of the hydrologic cycle in the |
|  | atmosphere and outer crust of the earth. Emphasis is placed on surface |
|  | waters through analysis of hydrologic data relating to rainfall, runoff, |
|  | infiltration and evaporation. |
| 4062 | PRINCIPLES OF ENVIRONMENTAL GEOLOGY |
|  | (2-0) 2 hours credit. Prerequisites: AS 1002 and 1011 and consent of |
|  | instructor. |
|  | Geologic factors important to city and regional planning. Land capability |
|  | studies; geologic hazards. |
| 4263 | INTRODUCTION TO QUANTUM MECHANICS |
|  | (3-0) 3 hours credit. Prerequisites: AS 3263 and MAT 3243. |
|  | Wave packets, uncertainty principle, Schrodinger equation, one- |
|  | dimensional problems, the hydrogen atom and angular momentum. |
| 4283 | ELECTROMAGNETIC RADIATION |
|  | (3-0) 3 hours credit. Prerequisite: AS 3283. |
|  | Maxwell's equations, electromagnetic waves, interaction of electro- |
|  | magnetic radiation with matter, such as in reflection and refraction, |
|  | waveguides and scattering of plane waves. |
| 4293 | FLUID MECHANICS |
|  | (3-0) 3 hours credit. Prerequisites: AS 3273 and MAT 1223. |
|  | Dynamical properties of fluids from basic equations of motion; behavior |
|  | of fluids in actual situations: The atmosphere and the ocean. |
| 4323 | ACOUSTICS |
|  | (3-0) 3 hours credit. Prerequisites: PHY 1923 and MAT 2213. AS 4331 |
|  | should be taken concurrently. |
|  | Applications of infrasound and ultrasound, including sonar and biomedical |
|  | applications. Noise suppression methods. |
| 4331 | ACOUSTICS LABORATORY |
|  | (0-3) 1 hour credit. Pre- or co-requisite: AS 4323. |
|  | Laboratory to accompany AS 4323. |
| 4363 | NUCLEAR ENERGY: FISSION AND FUSION |
|  | (3-0) 3 hours credit. Prerequisite: AS 3263. |
|  | Review of the physics of the nucleus. Fission: survey of nuclear |
|  | reactor technology, and consideration of potential hazards versus |
|  | benefits. Fusion: physics of electro-magnetism and statistical |
|  | mechanics necessary to a qualitative understanding of the plasma state |
|  | of matter; current technology surveyed. Comparison with other energy |
|  | sources. |


| 4373 | GENERAL GEOPHYSICS |
| :---: | :---: |
|  | (3-0) 3 hours credit. Prerequisite; Consent of instructor and |
|  | AS 1002, 1011, PHY 1923. |
|  | Geomagnetism, gravity, seismology, and heat flow. Interior of the |
|  | earth and tectonics. |
| 4382 | EXPLORATION GEOPHYSICS |
|  | (2-0) 2 hours credit. Prerequisite: AS 4373. Concurrent registration |
|  | for AS 4391 required; exceptions with consent of instructor. |
|  | Principles of geophystcal prospecting. Magnetic, gravity and seismic |
|  | methods. |
| 4391 | EXPLORATION GEOPHYSICS - LABORATORY |
|  | (0-2) 1 hour credit. Prerequisite: AS 4373. Concurrent registration |
|  | for AS 4382 required; exceptions with consent of instructor. |
|  | Planning and execution of exploration programs and interpretation of |
|  | the results of magnetic, gravity and seismic surveying. |
| 4623 | COATINGS TECHNOLOGY |
|  | (3-0) 3 hours credit. Prerequisite: AS 3623. |
|  | Convertible and nonconvertible coatings; solvents, plasticizers, lacquers, |
|  | varnishes, formulation, pigmentation; film properties, chemical resistance, |
|  | adhesion, hardness, flexibility, abrasion resistance, strength, color, |
|  | opacity gloss; electrocoating; radiation and photo-curing. Pigmented |
|  | coatings (dispersion, characteristics, vehicle characteristics, formu- |
|  | lation, manufacture, application; extender pigments) decorative paints |
|  | and industrial finishes; corrosion and chemical resistant paint systems. |
| 4653 | POLYMER TECHNOLOGY |
|  | (3-0) 3 hours credit. Prerequisite: AS 3651. |
|  | Finishing of polymers; thermosets; molding powders, laminates; polymer |
|  | foams; coatings, drying oils, alkyds, epoxy resins, urethanes, natural |
|  | and synthetic rubber processing; vulcanization and oxidation of polyote- |
|  | fins and polydiones; polymer latices. Film and fiber formation; melt, |
|  | wet and dry spinning, orientation; adhesion; adhesive systems, potymer- |
|  | plasticizer interaction, polymer-fiber interactions, reinforced systems, |
|  | packaging materials. |
| 4661 | POLYMER TECHNOLOGY LABORATORY |
|  | (0-3) Thour credit. Prerequisite: AS 4653 or concurrent registration. |
|  | Laboratory projects illustrating and extending the concepts discussed |
|  | in AS 4653. |
| 4703 | ORGANIC CHEMISTRY OF COATINGS |
|  | (3-0) 3 hours credit. Prerequisite: CHE 3213. |
|  | Chemistry of autoxidation, glyceride oils; varnishes; and resins, |
|  | including alkyd, epoxy, amino and phenol formaldehyde, rubber and |
|  | silicone resins; acrylic and vinyl coatings; polyurethanes and copolymers. |
|  | Radiation curing, electrodeposition, photo-curable coatings. |
| 4723 | CORROSION |
|  | $(3-0) 3$ hours credit. Prerequisite: CHE 3213. |
|  | Electrochemical aspects, reaction mechanisms, thermodynamics and |
|  | kinetics of corrosion processes; prevention of corrosion, cathodic |
|  | and anodic protection; inhibitors, passivators; coatings. |

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4743 INDUSTRIAL AND COMMERCIAL APPLICATIONS OF POLYMERS
    (3-0) 3 hours credit, prerequisite; AS 3623.
    Mechanical, electrical and thermal properties of engineering plastics;
    applications as matertals of construction; polymers in biology and
    biomedical engineering; space technology; specialty polymers for high
    temperature applications, environnmental effects on polymers; rain
    erosion, weathering, corrosive environment, biological environment;
    radiation effects.
4 9 2 3 ~ S P E C I A L ~ S T U D I E S ~ P R O J E C T ~
    (0-variable) 3 hours credit. Prerequisite: Consent of Division Director.
    A special studies Taboratory research or library readings project
    resulting in a report. [imited to students in their final year of
    undergraduate study.
4933 PRACTICUM IN APPLIED SCIENCE
    (0-variable) 3 hours credit. Prerequisite: Consent of Division Director.
    A twelve-week summer program of research and/or supervised applications
    of theory in an industrial environment.
4943 FIELD METHODS IN GEOLOGY
    (0-8) 3 hours credit. Prerequisites: AS 1002 and 1011.
    Use of surveying methods and topographic and air photo bases for
    geologic mapping. Description, recording, and interpretation of field
    relationships.
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## COURSE DESCRIPTIONS

PHYSICS
（PHY）

1603 PRACTICAL PHYSICS
（3－0） 3 hours credit．Prerequisite：high school algebra．A one－ semester course in selected topics of particular interest to personnel
in the auxiliary health professions and nursing．The orientation is
practical，and one class meeting per week is held in the laboratory．
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1803 PHYSICS FOR LIFE SCIENCES I
（3－0） 3 hours credit．Prerequisite：working knowledge of high school algebra．PHY 1811 should［must］be taken concurrently［unłess－ałpeady passed］．
The principles of physics with applications and problem solving useful to biology and pre－medical students．
Topics are：mechanics and wave phenomena．［3prepepties－өf－mattep；


1811 PHYSICS FOR LIFE SCIENCES I LABORATORY
（0－3） 1 hour credit．Pre－or co－requisite：PHY 1803.
Laboratory to accompany PHY 1803．［Expepiments－ppimapizy－in－meє月aniess－


1823 PHYSICS FOR LIFE SCIENCES II
（3－0） 3 hours credit．Prerequisite：PHY 1803．PHY 1831 should［mbst］ be taken concurrently［unłess－ałready－passed：］
The principles of physics with applications and problem solving useful to biology and pre－medical students．Topics are electricity and



1831 PHYSICS FOR LIFE SCIENCES II LABORATORY
（0－3） 1 hour credit．Pre－or co－requisite：PHY 1823.

 Fe－be－taken－with－PHY－7823－］

1903 TECHNICAL PHYSICS I
（3－0） 3 hours credit．Pre－or co－requisite：［Prepequisitte］MAT 1213 or concurrent registration；and concurrent registration in PHY 1911.
 tャatien：］
The basic concepts and methods of physics．Topics are mechanics and wave phenomena．［7he－basie－e日feepts－$\theta$ f－




1911 TECHNICAL PHYSICS I LABORATORY
（0－3） 1 hour credit．Pre－or co－reguisite：PHY 1903.
Laboratory to accompany PHY 1903．［Experiments－ppimapify－in－meehaniєs and－waves：－－Fe－be－taken－with－PHF－7903：］

1923 TECHNICAL PHYSICS II
（3－0） 3 hours credit．Prerequisites：PHY 1903 and MAT 1223.


A continuation of PHY 1903．Topics covered are electricity and
magnetism，optics and an introduction to modern physics．
 trie\＃tyт－magnetifitis－epties－and－medeph－physies：］

1931 TECHNICAL PHYSICS II LABORATORY
（ $0-3$ ） 1 hour credit．Pre－or co－requisite：PHY 1923.
Laboratory to accompany PHY 1923．［Experfiments－ppimapiły－in－ełeєtrititys



[^44]BACHELOR OF SCIENCE DEGREE
IN CHEMISTRY

The minimum number of semester hours required for this degree，including the 50 semester hours of General Education Requirements，is 128．＊［726．］All candidates for the degree must complete：

A．Thirty－nine［37］semester hours in chemistry，26［78］of which must be at the upper－division level．Required courses（ 31 semester hours） are：［Fhe－e日urses－are + ］ CHE 1103 Introductory Chemistry CHE 2003 Chemical Principles

CHE 2012 Inorganic Qualitative and Quantitative Analysis
CHE 2203 Organic Chemistry I
CHE 2212 Organic Qualitative Analysis
CHE 3003 Organic Chemistry II
CHE 3012 Organic Quantitative Analysis
CHE 3203 Physical Chemistry I
CHE 3212 Laboratory Techniques of Physical Chemistry
CHE 3223 Physical Chemistry II
CHE 3232 Instrumental Analysis
CHE 4923 Special Studies Project（or the equivalent）
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    An additional }8\mathrm{ semester hours of electipe chemistry at the upper-
    division level, approved by the advisor.
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    Opganie-6hemfstpy-f6HE-424z}
    Phys;eał-Ghemistpy-fGHE-4253)
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B. Twenty-nine semester hours of support work in Science and Mathematics.
    Required courses (23 semester hours) are:
    PHY }1903\mathrm{ Technical Physics I
    PHY 1911 Technical Physics I Laboratory
    PHY 1923 Technical Physics II
    PHY 1931 Technical Physics II Laboratory
    MAT 1213 Calculus I
    MAT 1223 Calculus II
    MAT 2213 Calculus III
    CS 1723 Information Structures I
    CS 1713 Introduction to Computer Science
    An additional }6\mathrm{ hours of elective support work are required in
    courses in the College of Sciences and Mathematics, approved by
    the advisor.
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    Requ;^ed-eөurses-{20-semester-hoursł-анet
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    C. A minimum of 10 semester hours of free electives.
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COURSE DESCRIPTIONS
CHEMISTRY
(CHE)

1103 INTRODUCTORY CHEMISTRY
（3－0） 3 hours credit．
An introduction to descriptive inorganic chemistry and atomic－molecular structure．Including such fundamental concepts as the periodic system of elements，valency，chemical bonding，reactions and reaction mechanisms， stoichiometry，equilibria，acids and bases，thermochemistry，molecular－ kinetic theory，and states of matter．



1111 INTRODUCTORY CHEMISTRY LABORATORY
（0－3） 1 hour credit．Co－requisite：CHE 1103.
An introduction to the basic operations of the chemical laboratory with examples chosen from inorganic chemistry．This course is designed for
dental auxiliary students，pre－nursing students and physical therapists；
it may not be applied to a major in chemistry，biology or medical
technology．
1122 INTRODUCTORY CHEMISTRY LABORATORY WORKSHOP
$(0-6) 2$ hours credit．Co－requisite：CHE 1103.
An introduction to chemical problem solving and the basic operations of the chemical laboratory；and a survey of inorganic chemical reactions． This course consists of problem sessions，lecture－demonstrations， and／or laboratory experience and is strongly recommended for students planning advanced course work in chemistry．
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1153 THE CHEMISTRY OF FASHION
（3－0） 3 hours credit．May not be applied to a major in chemistry ［science］．A survey of the chemical nature of synthetic fibers，fabrics，
scents，dyes，cosmetics，and tolletries．
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1173 ALCHEMY AND THE SOURCES OF MODERA CHEMI STRY
（3－0） 3 hours credit．
May not be applied to a major in chemistry．
Scientiflc content of magic，witcheraft，aTchemy，and fatrochemistry．
Origins and development of ideas concerning composition and transfor－
mations of matter：metallurgy，ceramics，fermentation，etc．Readings
will include primary materials selected from Renaissance and modern literary and scientific sources．
2003 CHEMICAL PRINCIPLES
（3－0） 3 hours credit．Prerequisite：CHE 1103．CHE 1122 is also recommended．
Primarily for science majors．Elementary inorganic and physical chemistry：a continuation of descriptive inorganic chemistry，coordi－ nation chemistry，solutions and electrolytes，redox processes，elementary thermodynamics，chemical kinetics，and reaction mechanisms；electromag－ netic properties of molecules；elementary electrochemistry and nuclear chemistry；introduction to organic chemistry．

2012 INORGANIC QUALITATIVE AND QUANTITATIVE ANALYSIS
（0－6） 2 hours credit．Prerequisite：CHE 2003 ［1203］or concurrent registration．
Techniques of qualitative and quantitative chemical analysis，illustrated primarily via inorganic chemical systems and their reactions．
［7272－－ANAEFFIGAE－GHEMISFR7－7

eөReepts；－theories－and－ławs：］
2093 INTRODUCTION TO INFORMATION SCIENCE
（3－0） 3 hours credit．Prerequisites：CHE 2003 and CS 1711. A survey of information science and its methods，the information science concept，major manual and computer－based systems，and the relevance of information science methods to physical science needs．
2103 ELEMENTARY ORGANIC AND BIOCHEMISTRY
（3－0） 3 hours credit．Prerequisite：CHE 2012［7203］［6HE－7723］．May not be applied to a major in chemistry．
A one semester survey of organic and biochemical structure and reactions， for dental auxiliary students，etc．
2203 ORGANIC CHEMISTRY I
（3－0） 3 hours credit．Prerequisites：CHE 2003 ［7203］and CHE 2012 ［72ł2］．
Primarily for science majors．
An elementary study of structure，reactions，and reaction mechanisms associated with organic compounds，e．g．，aliphatic and aromatic hydrocarbons，alcohols，ethers，organic halogen compounds，aldehydes， and ketones．
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2212 ORGANIC QUALITATIVE ANALYSIS
[ANAE FFIGAE-GHEMISFR7-II]
(0-6) [ft-3)] 2 hours credit, Prerequisite: CHE 2203 or concurrent registration, Primarily for science majors,
Determination of physical constants of organic compounds; separation methods: vacuum distillation, crystallization, column chromatography, and gas chromatography; organic elemental analysts, functional group study and qualltative analysis.

ORGANIC CHEMISTRY II
(3-0) 3 hours credit. Prerequisites: CHE 2203; CHE 2212; or concurrent registration.
Continuing study of fundamentals of structure, stereo-chemistry, reactions and reaction mechanisms of carbonyl compounds and their derivatives; organic compounds containing nitrogen, phosphorus and sulfur; polyfunctional organic compounds; including an introduction to biochemistry. A continuation of CHE 2203.



ORGANIC QUANTITATIVE ANALYSIS
(0-6) 2 hours credit. Prerequisite: CHE 2212; CHE 3003 or concurrent registration; or consent of instructor.
Continuing laboratory study of quantitative analysis of organic reactions, multi-step synthetic procedures, and molecular structure; qualitative and quantitative use of infrared, ultraviolet, and proton nuclear magnetic resonance spectrometry; introduction to mass spectrometry.
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3143 MEDICINAL CHEMISTRY, PHARMACOLOGY AND FOLKLORE MEDICINE
(3-0) 3 hours credit. Prerequisites: CHE 3003 and CHE 3012
Primarily for science majors.
[ecture/seminar course which provides in-depth examination of selected examples of naturally occurring drugs (alkaloids, terpenoids, and other natural products), their sources, modes of physiological activity and active analogues. May be repeated for credit when topics vary, with consent of instructor and Division Director.

3193 PHYSICAL CHEMISTRY FOR LIFE SCIENCES
(3-0) 3 hours credit. Prerequisites: CHE 2203, BIO 3143, BIO 3421, MAT 1213.
May not be applied to a major in chemistry.
Selected topics from Physical Chemistry with special emphasis on
biological systems and applications. Topics covered include thermodynamics, energetics, kinetics, spectroscopy, nuclear chemistry and macromolecules.

3203 PHYSICAL CHEMISTRY I
(3-0) 3 hours credit. Prerequisites: CHE 2003, CHE 2012, MAT 1223, PHY 1923, and PHY 1931; at least one semester of organic chemistry is also recommended.
States of matter, gas laws, equations of state, inter-molecular interactions; thermodynamics and physical equllibria, elements of molecular-
kinetic theory and statistical mechanics; physico-chemical properties
of solutions, chemical equilibria, phase equilibria, and changes of
state.





3212 PHYSICAL CHEMISTRY I LABORATORY
(0-6) ${ }^{2}$ hours credit. Prerequis ite: CHE 3203.
Experimental study of thermodyamics and electrochemistry, spectroscopy, and reaction kinetics.
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3223 PHYSICAL CHEMISTRY II
(3-0) 3 hours credit. Prerequisite: CHE 3203.
Chemical kinetics, elecyrolytes and electrochemistry, elements of quantum mechanics, chemical bonds, spectroscopy, and photochemistry. A continuation of CHE 3203.



3232 INSTRUMENTAL ANALYSIS
(0-6) 2 hours credft. Prerequisites: CHE 3012; CHE 3212 and CHE 3223; or concurrent registration.
Electrochemical methods; use of modern spectrometric and chromatographic
instrumentation in separation, purification, and/or quantitative characterization of chemical systems.
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3252 CHEMISTRY IN INDUSTRY
$(2-0) 2$ hours credit. Prerequisite: CHE 3003 and CHE 3203 or concurrent registration; or consent of instructor.
The roles and problems of chemistry and chemists in the chemical industry:
Taboratory and operations management; basic research and product development; production, quality control, pollution and waste materials control, and safety; advertising, sales, and patents; the governmental/industrial interface; economic considerations, employment practices, and professional societies will also be explored.

3333 MARINE CHEMISTRY
(3-0)3 hours credit. Prerequisite: CHE 3003 and CHE 3023 or concurrent registration; or consent of instructor.
Fundamental concepts of marine chemistry; structure and properties of water; elemental composition of sea water, the carbonate system; marine organic chemistry; a review of marine sediments.

3352 MINERAL ANALYSIS
(2-0) 2 hours credit. Prerequisite: CHE 2003, CHE 2012, AS 2002, AS 2012, and concurrent registration for CHE 3361; or consent of instructor.
Theory of $x$-ray diffraction, spectrographic, and other methods of analysis of Earth materials.

3361 MINERAL ANALYSIS LABORATORY
$(0-3) 1$ hour credit. Prerequisite: concurrent registration for CHE 3352 or consent of instructor.
Methods and techniques of analyzing Earth materials.
（3－0） 3 hours credit，Prerequisites；CHE 3003 and CHE 3203；or consent of instructor，
A survey of geochemical processes and the distr tbution of elements in the earth．Application of chemical methods and data to the solution of geologic problems．

3423 INFORMATION SOURCES
（3－0） 3 hours credft．Prerequisite：CHE 2093.
A survey of reference and blbliographic sources for the physical sciences：
catalogs and Indexing；abstracting services for books，journals，docu－
ments and technical reports；bibilographic controls of the scientific Titerature．

3953 INTRODUCTION TO RESEARCH TECHNIQUES
（1－6） 3 hours credit．Prerequisite：Upper division standing and consent of instructor．
Practical introduction to techniques and methodology of chemical research． May be repeated for credit with consent of instructor and Division Director．
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4223 ADVANCED BIOCHEMISTRY
（3－0） 3 hours credit．Prerequisite：B10 3513， 3521 and CHE 3003， 3012.
Regulation and control mechanisms；membrane－related phenomena；
oxidative phosphorylation and photosynthesis；transport mechanisms；con－
tractility of muscle．
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4231 PHYSICAL TECHNIQUES IN BIOCHEMISTRY
（0－3） 1 hour credit．Prerequisite：CHE 4223 or concurrent registration．
Applications of UV－visible and NMR spectroscopy，electrophoresis，gas
chromatography，mass spectrometry and other physical techniques to
biochemistry．
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4243 ORGANIC CHEMISTRY III
（3－0） 3 hours credit．Prerequisites：CHE 3003 ［2zzz？and CHE 3223
［2232］；CHE 3203 or consent of instructor．
An advanced organic chemistry．A continuation of CHE 3003 ［2223］．
4253 PHYSICAL CHEMISTRY III
（3－0） 3 hours credit．Prerequisites：CHE 3003，CHE 3223 and CHE 3232；
or consent of instructor．
An advanced physical chemistry；a continuation of CHE 3223.
4263 INORGANIC CHEMISTRY I(3-0) 3 hours credit, Prerequisite; CHE 3203 [32ł2],A study of the elements and their periodic properties; acid-base theory,crystalline state, coordination chemistry, non-aqueous solvents andother advanced toptcs.

4273 INORGANIC CHEMISTRY II(3-0) 3 hours credit. Prerequisite: CHE 4263 or consent of instructor.An advanced study of atomic and molecular structure, ionic crystals,metal complexes, acid-base theory and other subjects. A continuation ofCHE 4263.
4282 INORGANIC PREPARATIONS(0-6) 2 hours credit. Prerequisite: CHE 3232 or consent of instructor.A laboratory study of coordination compounds and inorganic structure.

4293 NUCLEAR CHEMISTRY AND PHYSICS [RA日IOISOFOPE-FEGHNIQUES](3-0) 3 hours credit. Prerequisite: Consent of instructor.A study of nuclear reactions, radiation detection and measurement, andchemical applications.
4301 NUCLEAR CHEMISTRY AND PHYSICS LABORATORY [AMAE $7 F \ddagger$ EAE-GHEMISFRY- $¥ \ddagger \ddagger$ ]$(\overline{0-3})$ l hour credit. Prerequisite: CHE 4293 or concurrent registrationand consent of instructor.
A laboratory study of nuclear reactions, radiation detection andmeasurement, and chemical applications.
4311 GLASSBLOWING
(0-3) 1 hour credit. Prerequisite: CHE 2212, CHE 3203, and consentof the instructor.
Techniques used in constructing glass scientific apparatus.
4321 CHEMICAL LITERATURE
(1-0) 1 hour credit. Prerequisite: CHE 3003 and CHE 3203.A survey of important chemical reference works and periodicals and
practice in their use.
4343 QUANTUM CHEMISTRY(3-0) 3 hours credit. Prerequisite: MAT 3243; CHE 4253 or AS 4263 orconcurrent registration with either of these; or consent of instructor.
Electronic structure of atoms and molecules, ab initio and semi-empiricalmethods, variational and perturbational techniques, time dependentperturbations, optical transitions in atoms and molecules.
4272 EXPLORATION GEOCHEMISTRY(2-0) 2 hours credit. Prerequisite: CHE 3373.Principles and methods of geochemical prospecting. Trace element analysis.
4402 ABSTRACTING AND INDEXING
(2-0) 2 hours credit. Prerequisite: CHE 3423.
A survey of abstracting and indexing methods, automatic indexingtechnology, effectiveness of indexing; the indexing thesauri and theirconstruction.
4413 PATENT SEARCH AND PREPARATION
(3-0) 3 hours credit. Prerequisite: CHE 3423.
National systems for patent control; retrieval of patent information in

## science and technology, Patentability, the legal enyironment, prepara-

 tion of patent applications;4503 WATER AND WASTEWATER TREATMENT
(3-0) 3 hours credyt Prerequisttess CHE 2003 and AS 4293 or consent of instructor.
The application of chemical, biochemtcal, physical and mathematical processes to water treatment, wastevater treatment and pollution control. Reconmended for students contemplating eng ineering degree.
4913 INDEPENDENT STUDY
3 hours credft. Prerequisites: Permission in writing (form available) of the instructor, the student's Advisor, and the Division Director and Dean of the College in which the course is offered. Independent reading, research, disclission, and, or writing under the direction of a faculty member. For students needing specialized work. May be repeated for credit, but not more than 6 hours will apply to the Bachelor's degree.
4933 INTERNSHIP IN APPLIED CHEMICAL OPERATIONS
(0-vartable) Variable credit. Prerequisite: CHE 3252, CHE 3012, and CHE 3232 or concurrent registration; and consent of Division Director. Practical introduction to industrial and/or similar applied chemistry operations, via supervised extracollegiate internship, resulting in a report.
4953 SPECIAL STUDIES
3 hours credit. Prerequisite: Consent of instructor.
An organized course offering specialized study not normally or not
often available as part of the regular course offerings. Special
Studies Courses may be repeated for credit when the topics vary, but
not more than 6 hours within any one discipline will apply to a
Bachelor's degree.
4973 PROSEMINAR
(1-0) 1 hour credit. Prerequisite: CHE 3003 and CHE 3203.
Oral reports on current publications in chemistry and chemical technology. May be repeated for credit when topics vary, with consent of the Division Director.

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DIVISION OF MATHEMATICS, COMPUTER
SCIENCE, AND SYSTEMS DESIGN
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The aim of the Division of Mathematics, Computer Science, and Systems Design is to give the student a broad foundation of knowledge across the areas of mathematics, statistics, and computer science.

The Division offers a Bachelor of Science Degree in Mathematics, Computer Science, and Systems Design. Courses, in addition to those required for the degree, may be chosen so that the student's work is concentrated in the areas of mathematics, applied mathematics, statistics, computer science, systems science, process control, actuarial science, or any combination thereof. The Division also offers a Bachelor of Science Degree in Mathematics which is intended for students who plan to enter secondary education.

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BACHELOR OF SCIENCE DEGREE IN MATHEMATICS, COMPUTER SCIENCE, AND

SYSTEMS DESIGN

The minimum number of semester hours required for this degree, including the 50 hours of General Education Requirements, is 126.*

* Thirty-nine of the total semester hours required for the degree must be at the upper-division level.

All candidates for the degree must complete:

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A. 47 [27] semester hours [0f-required-ceurses] in the major, in addition
    to [inetuding] the four hours of General Education Requirements in Math.*
    Required Courses ( 21 semester hours) are:
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        MAT 1213 Calculus I
        MAT 1223 Calculus II
        MAT 2213 Calculus III
        MAT 3513 Probability and Statistics
        MAT 3523 [3533] Statistical Methods [App+4ed-Statisties-I]
        CS [MAF] 1713 Introduction to Computer Science
        CS [MAF] 1723 Information Structures I
    An additional twenty-six semester hours of electives are required in the
    major. Twenty-one of these must be at the upper-division level, and none
    may be selected from courses numbered between 1000 and 1999. [B:-39-addi-
    
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B. [6] 29 semester hours of free electives.

## BACHELOR OF SCIENCE DEGREE IN MATHEMATICS

The minimum number of semester hours required for this degree, including the 50 hours of General Education Requirements, is 131.*

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All candidates for the degree must complete:
    A. }36\mathrm{ semester hours in the major, in addition to the four hours of General
    Education Requirements in Math.*
    Required Courses are:
    MAT 1213 Calculus I
    MAT 1223 Calculus II
    MAT 2213 Calculus III
    MAT }3213\mathrm{ Foundations of Analysis
        MAT 3233 Modern Algebra
        MAT 3513 Probability and Statistics
        MAT 3523 Statistical Methods
        CS 1713 Introduction to Computer Science
        CS 1723 Information Structures I
        An additional nine upper-division hours are required in Mathematics,
        Computer Science, or Systems Design.
    B. Forty-five semester hours of electives selected with the approval of the
    student's advisor.
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* The student who is not prepared to begin MAT 1213 must take MAT 1011, Algebra and/or MAT 1092, Elementary Functions.
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1092 ELEMENTARY FUNCTIONS［FRIGENOME FRł］
$(2-0) 2$ hours credit．Prerequisite：MAT 1011 or the equivalent．
Polynomial and rational functions，exponential functions，logarithmic func－ tions，trigonometric functions，functions of several variables．［A－basie
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## 1103 CONSUMER MATHEMATICS

（3－0） 3 hours credit．
Emphasis on mathematical tools required in the modern technological society， such as linear equations and inequalities，ratios，proportion and variation， mathematics of finance．

1122 MATHEMATICS FOR ELEMENTARY EDUCATION MAJORS II
（2－0） 2 hours credit．Prerequisite：Must have a declared major of Ele－ mentary Education，and MAT 1112.
The real［namber］system，complex numbers，and complex number systems．
1213 CALCULUS I
（3－0） 3 hours credit．Prerequisites：MAT 1011 and MAT 1092 or the equi－ valents．An introduction to the concepts of limit，continuity and deriva－ tive，mean value theorem，and applications of derivatives suchas velocity， acceleration maximization and curve sketching．

1223 CALCULUS II
（3－0） 3 hours credit．Prerequisite：MAT 1213.
The Riemann integral and the fundamental theorem of calculus．Transcen－ dental functions，［pełap－eөerdinates］methods of integration and applica－ tions of the integral．
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2213 CALCULUS III
（3－0） 3 hours credit．Prerequisite：MAT 1223.
Topics in differential and integral calculus．Taylor series，power series， convergence tests，vectors，functions of several variables，partial deriva－ tives，multiples integrals．［infinite－sefies－and－differentiał－equaもiens．

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## 2923 MATHEMATICS OF FINANCE

（3－0） 3 hours credit．Prerequisite：MAT 1062.
Theory of rates of interest，discount，present value，annuities．Deter－ mination of prices and value of mortgages，bonds，shares of stock．

3013 STATISTICAL METHODS IN THE LIFE AND SOCIAL SCIENCES II
（3－0） 3 hours credit．Prerequisites：MAT 2013 and CS 1713 or CS 1073.
An introduction to multivariate statistical methods：the multinormal distribution；tests concerning means；multivariate analysis of variance； principal components and factor analysis；use of existing computer program packages in analyzing multivariable data．Emphasis on applications and examples in the life and social sciences．

## 3113 ALGEBRA FOR ELEMENTARY TEACHERS

（3－0） 3 hours credit．Prerequisite：Must have a declared major of Ele－ mentary Education，or MAT 1122 ［7723〕．
Linear equations，quadratic equations，systems of equations and inequalities．
3131 FUNCTIONS AND LIMITS
（1－0） 1 hour credit．Prerequisite：MAT 1011.
A basic，indepth study of mathematical functions incorporating the concept of the limit of a function．

## 3213 FOUNDATIONS OF ANALYSIS

（3－0） 3 hours credit．Prerequisite：MAT 2213 ［2223］．
A rigorous development of the foundations of real analysis；basic point set topology；limits；continuity．Emphasis on theorem proving and mathe－ matical rigor．

3243 CALCULUS FOR APPLICATIONS
（3－0） 3 hours credit．Prerequisite MAT 2213.
Topics may include：line integrals，Green＇s theorem，Stoke＇s theorem，
Fourier Series，Laplace Transforms，complex variables．
3513 PROBABILITY AND STATISTICS
（3－0） 3 hours credit．Prerequisite or corequisite：MAT 2213．MAT 2013 recommended but not required．［Pperequitsitet－MAF－2223］
Axioms of probability，probability functions and density functions，random variables and their sampling distributions．［Basie－e日feeptef－prebabifity



3523 STATISTICAL METHODS［MAFHEMAFIEAL－SFAFISFIES］
（3－0） 3 hours credit．Prerequisites：MAT 3513 and CS 1713．［Ppepequisizes： MAF－3573］
Methodology of applied statistics；tests for randomness and independence， simple and compound tests of hypothesis，confidence interval and point esti－ mation，simple linear models．Frunetiens－өf－pandem－variablest－dístpíbution
 and－hypethesis－testing－］
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## 3613 DIFFERENTIAL EQUATIONS I

（3－0） 3 hours credit．Prerequisite or corequisite：MAT 2213．［Ppepequisite\％ MAF－2273］
Basic notions of differential equations，solution of first order equations and linear equations with constant coefficients，$n$ order initial value prob－ lems，power series solutions of differential equations．［fatroduction－te－the



3623 DIFFERENTIAL EQUATIONS II
（3－0） 3 hours credit．Prerequisite：MAT 3613.
Topics inclyde stability，partial differential equations and boundary value problems．［fntroduction－to－theөry－өf－partiat－differentiat－equations－－－First өpder－equatiens

3633 NUMERICAL ANALYSIS I
（3－0） 3 hours credit．Prerequisites：MAT 2213 and CS［MAF］ 1723.
Solution of linear and non－linear equations，curve－fitting，matrix eigen－ value problems．［numerieat－integratiens］
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［3723－PROGRAMMING－EANGHAGES

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3933 MATHEMATICS OF INSURANCE
（3－0） 3 hours credit．Prerequisite：MAT 3513.
Probability theory applied to problems involving life and death，costs of
life assurances，life annuities，pension，reserves．
4112 MATHEMATICAL TOPICS FOR ELEMENTARY TEACHERS（2－0） 2 hours credit．This course cannot be applied to the major inMathematics，Computer Science and Systems Design，or in Mathematics．Selected topics of an advanced nature relevant to the modern elementarymathematics curriculum．
4123 HISTORY OF MATHEMATICS（3－0） 3 hours credit．A survey of mathematical explorations developed through selected historicalissues and biographies．
4233 MODERN ABSTRACT ALGEBRA I（3－0） 3 hours credit．Prerequisite：MAT 2213．MAT 3233 recommended．［Pperequisitte：－MAF－z223］
An in－depth study of groups and rings．
4513 INTRODUCTION TO SAMPLE SURVEY THEORY AND METHODS［MUEFIVAR¥AFE§FAFISFIES］（3－0） 3 hours credit．Prerequisite：MAT 3523．［Pperequisitet－MAF－3263－and－MAF－3533］
Basic tools，simple random sampling，stratifies random sampling，ratio andregression estimates，systematic sampling，cluster sampling，unequal pro－bability sampling，two－stage and multistage sampling，non－sampling errors．
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4523 STATISTICAL DESIGN OF EXPERIMENTS EAPPE $\ddagger$ EB－SFAFISłIES－$\ddagger \ddagger 子$ （3－0） 3 hours credit．Prerequisite or corequisite：MAT 3523．［Prepequisite： MAF－3533］
Concepts of randomization，replication，orthogonality，blocking，confounding， transformations；various designs such as completely randomizedblocks，latin squares，balanced incomplete block，factorial and fractional factorial es－ pecially $2^{K}$ and $2 k-b$ designs．［Simpłe－7ineap－pegressi日R－－
 and－míヶed－mөde7－anөvas－7inear－and－nөA－7inear－regressien－］
4533 NON－PARAMETRIC STATISTICAL METHODS
（3－0） 3 hours credit．Prerequisite or corequisite：MAT 3523．［Ppepequisize： MAF－3533］
A survey of non－parametric methods；order statistics，tests based on runs， goodness of fit tests，one sample，two sample and paired sample techniques， location and scale tests．
4543 INTRODUCTION TO STOCHASTIC PROCESSES
（3－0） 3 hours credit．Prerequisite：MAT 3513．［Ppepequisite؛－MAF－3523］ An introduction to the theory and applications of stochastic processes with emphasis on Markov processes．
4553 INTRODUCTION TO MULTIVARIATE－STATISTICAL ANALYSIS
$(3-0) 3$ hours credit．Prerequisites：MAT 3523，MAT 2233.
Introduction to the theory and methodology of multivariate statistics．
4563 THEORY OF RELIABILITY AND LIFE TESTING
（3－0） 3 hours credit．Corequisite：MAT 3523.
Structural reliability，failure data analysis，point estimates and interval estimates for the reliability of components，sampling plans for failure data， maintenance policies，models for reliability growth．

4573 APPLIED REGRESSION ANALYSIS
(3-0) 3 hours credit. Prerequisite: MAT 2233.
An introduction to regression analysis with emphasis on practical aspects,
fitting a straight line, examination of residuals, matrix treatment of regression analysis, fitting and evaluation of general linear models, nonlinear regression.
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[4773-E日MP 4 ERS -ANA-ASSEMBLERS


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teaders;-jөb-sеqueneers-and-supepyisөpy-systems.]
[4733-SEQUENFIAE-MAEHINES



[4743-FӨRMAE-LANGUAGES-ANB-AGFӨMAFA



COURSE DESCRIPTIONS
COMPUTER SCIENCE

1043 INTRODUCTORY COMPUTER PROGRAMMING FOR BUSINESS APPLICATIONS
(3-0) 3 hours credit. Prerequisite: MAT 1011.
Introductory programming. Sorting and ranking; plotting; inventory control.
1073 INTRODUCTORY COMPUTER PROGRAMMING FOR SCIENTIFIC APPLICATIONS
(3-0) 3 hours credit. Prerequisite: MAT 1011.
Introductory programming. Sorting and ranking; plotting; numerical taxonomy.
Solution of non-linear equations, linear regression. Solution of linear
systems.
1133 COMPUTER LITERACY
(3-0) 3 hours credit.
A survey of Computer Science designed to give a general understanding of
the computer, its uses and social impact. This course is designed for
students not wishing to major in Computer Science.
1713 INTRODUCTION TO COMPUTER SCIENCE(2-2) 3 hours credit. Prerequisite: MAT 1011.Introduction to basic concepts of Computer Science including algorithmicprocesses, functional design of computers, and data representation. Bothnumerical and non-numerical algorithms are discussed.
1723 INFORMATION STRUCTURES I(3-0) 3 hours credit. Prerequisite: CS 1713Theory and application of single-cell and elementary multi-dimensional datastructures; review of set theory and introduction to boolean algebra, thepropositional calculus, and list processing.
2003 DATA ANALYSIS(3-0) 3 hours credit. Prerequisite: MAT 1011.Open to students from all disciplines. Emphasis on familiarization withnumerical data, student computer interaction, and visual display of data.Data analysis techniques including: stem and leaf plotting, box plottingfitting lines and frequencies to medians, transformations to Tinearity.
2734 COMPUTER ORGANIZATION AND PROGRAMMING SYSTEMS(3-2) 4 hours credit. Prerequisite: CS 1723.Representation of programs, instructions, and data in modern computers, andthe basic organization of computer systems.
2743 INFORMATION STRUCTURES II(3-0) 3 hours credit. Prerequisite: CS 1723.Theory and application of lists, trees, and graphs.
3713 ANALYSIS OF ALGORITHMS(3-0) 3 hours credit. Prerequisite: CS 2743.Analysis of the performance of algorithms and discussion of programmingtechniques and data structures used in the writing of effective algorithms.
3723 PROGRAMMING LANGUAGES(3-0) 3 hours credit. Prerequisite: CS 2743.Study of the concepts and features of programming languages, with examplesdrawn from procedure-oriented, list-processing, string-manipulation, business-processing, and simulation programming languages.
3773 PROGRAMMING METHODOLOGY(3-0) 3 hours credit. Prerequisite: CS 2743.
Discussion of modular (structures) programming methods, programming style,ard program verification techniques.
3783 DATA BASE MANAGEMENT TECHNIQUES(3-0) 3 hours credit. Prerequisite: CS 1723.Discussion of file structures, random access devices, file creation, file
maintenance, interface languages, and data base management systems.
3793 HEURISTIC PROGRAMMING AND ARTIFICIAL INTELLIGENCE
(3-0) 3 hours credit. Prerequisite: CS 2743.
Discussion of theorem proving by machine, computational linguistics, psy-
chological modeling and computer games.

4103 COMPUTERS AND MATHEMATICS CURRICULA
(3-0) 3 hours credit. Prerequisite: An elementary course in Computer Science. This course cannot be applied to a major in Mathematics, Computer Science, and Systems Design or in Mathematics.
The course, for teachers of Mathematics, will focus attention on the various computer-oriented curricula, hardware and software for educators, and economic considerations for equipment acquisition.

4163 COMPUTER CONCEPTS FOR EDUCATORS, ADMINISTRATORS, AND MANAGERS
(3-0) 3 hours credit. This course cannot be applied to a major in Mathematics, Computer Science, and Systems Design or in Mathematics.
A non-technical course emphasizing the total environment of human-computer
interaction and the general educational value of learning to program and work with computers.

4713 COMPILER DESIGN
$(3-0) 3$ hours credit. Prerequisites: CS 3723 and CS 2733.
Study of techniques used in the design and implementation of compilers.
4733 SEQUENTIAL MACHINES
$(3-0) 3$ hours credit. Prerequisite: CS 2743 and MAT 3233 or equivalents. Discussion of finite-state machines, finite-state automata, Kleen's theorem, pushdown automata, linear-bounded automata and Turing machines.

4743 FORMAL THEORY OF LANGUAGES AND AUTOMATA
(3-0) 3 hours credit. Prerequisite: CS 4733.
Relationships between languages and automata, regular grammars, context free
grammars, and their significance in language and compiler design.
4753 FUNDAMENTALS OF OPERATING SYSTEMS
(3-0) 3 hours credit. Prerequisites: CS 3723 and CS 2733.
Topics discussed to include multi-programming, multiprocessing, segmentation,
paging, deadlocks, semaphores, and scheduling.
4783 INFORMATION STORAGE AND RETRIEVAL
(3-0) 3 hours credit. Prerequisite: CS 3783.
Discussion of methods for storage and retrieval of large-scale data bases.

COURSE DESCRIPTIONS
SYSTEMS DESIGN
(SD)
2815 DIGITAL CIRCUITS DESIGN I
(3-4) 5 hours credit. Prerequisite: CS 1723.
An introduction to modern integrated digital computer circuits. Basics of
DTL, TTL, and MOS technologies. Hardware realizations of logical equations.
Implementation of digital arithmetic.
2835 DIGITAL CIRCUITS DESIGN II
(3-4) 5 hours credit. Prerequisite: SD 2815.
Design of synchronous sequential circuits. State minimization techniques.
Design of a small synchronous processor.
2853 DATA ACQUISITION
(2-2) 3 hours credit. Prerequisite: CS 1713.
Operating characteristics of digital-to-analog and analog-to-digital con-
verters. Programming techniques used to interface a minicomputer to scien-
tific laboratory instrumentation.
2873 REAL-TIME PROCESS CONTROL(2-2) 3 hours credit. Prerequisite: SD 2852.
Operating principles of real-time disk operating systems for minicomputers.Programming techniques for on-line interactive data acquisition, monitoring,and process control application.
3843 MINICOMPUTER SYSTEMS ARCHITECTURE(3-0) 3 hours credit. Prerequisite: SD 2835.A presentation of the hardware organization and systems architecture of state-of-the-art minicomputer systems. Topics include instruction decoding andcentral processor organization, memory organization, floating-point processororganization, input/output functions and direct memory access, writable controlstore organization and microprogramming.
3853 INSTRUMENTATION CIRCUITS DESIGN (3-0) 3 hours credit. Prerequisites: SD 2815, SD 2853, PHY 1923.
Functional characteristics of state-of-the-art integrated operational ampli- fiers, regulated power supplies, digital-to-analog and analog-to-digital convertors, isolation amplifiers, serial transmitters, design of hardware configurations to interface scientific and industrial instrumentation to a minicomputer.
3863 REAL-TIME OPERATING SYSTEMS FOR MINICOMPUTERS
(3-0) 3 hours credit. Prerequisites: SD 3843 and SD 2873.
A study in the design of real-time operating systems for minicomputers. Memory management. Task scheduling in a multitask environment, input/output scheduling, and spooling.
3873 ANALOG SIMULATION(2-2) 3 hours credit. Prerequisite: MAT 1223.Operational amplifier principles, summers, integrators, multipliers, magnitudeand time scaling, the inverse function principle for operational amplifiers.Techniques for simulation of mechanical, electrical, and biological systems.
4613 OPERATIONS RESEARCH I(3-0) 3 hours credit. Prerequisite: MAT 2213.Introduction to analytical methods and models of Operations Research, withemphasis on optimization. Linear, integer and non-linear programming. Net-
work analysis, including PERT and CPM. Introduction to dynamic programming.
4623 OPERATIONS RESEARCH II
(3-0) 3 hours credit. Prerequisite: MAT 3513 or equivalent.
Introduction to probabilistic analysis and models in Operations Research.
Decision analysis, Markov chains, queuing models.

## 4633 SIMULATION

(3-0) 3 hours credit. Prerequisite or corequisite: SD 4623.
Construction and use of simulation models on a digital computer. Monte
Carlo techniques and associated statistical methods.

## 4643 SYSTEM DESIGN LABORATORY

(0-6) 3 hours credit. Prerequisite or corequisite: SD 4623.
A project-oriented course designed to give students experience in applying system analysis and design procedures. Subject matter may include development, evaluation and implementation of models for socio-technical systems. Activities include written project proposals and technical report. May be repeated for credit. Not more than 6 hours can be counted for a degree.

## 4803 MICROPROCESSOR LABORATORY I

(0-6) 3 hours credit. Prerequisite: SD 3843.
Principles of large-scale integration. Organization and systems architecture of state-of-the-art microprocessors. Large scale integration of random access memory and programmable read-only memory. Assemblers, compilers, and operating systems for microprocessors.

4813 MICROPROCESSOR LABORATORY II
(0-6) 3 hours credit. Prerequisite: SD 4803.
Students execute projects dealing with the design and implementation of microprocessor software for selected applications in the area of process control.

## 4823 SYSTEM ANALYSIS

(3-0) 3 hours credit. Prerequisite: MAT 2213.
Mathematical concepts relevant to the formulation of models for physical systems. Initial value problems. Laplace transforms and the concept of transfer function. Detailed analysis of simple control systems for position and velocity teaching. Stability. The course deals mainly with linear systems.

4833 OPTIMAL CONTROL
(3-0) 3 hours credit. Prerequisite: SD 4823.
Stability and Liapunov's method. Formulation of state equations for continuous and discrete systems. Formulation of the optimal control problem. Pontrygin's maximum principle. Dynamic programming, adaptive control systems.

4853 COMPUTER INTERFACES
(3-0) 3 hours credit. Prerequisite: SD 4803.
Basic characteristics and design considerations of printer, tape, disk controllers, multiplexers and other devices for computer communications and teleprocessing.

## APPENDIX A

BORROWING AND FINE REGULATIONS OF THE JOHN PEACE LIBRARY
Qualified borrowers are of three types: general, special, and 1 imited borrowers.

General Borrowers:
(1) Enrolled students at UTSA, UTHSC, UT Nursing School at San Antonio, and
(2) Members of the UTSA non-professional staff. Students auditing only must secure a Limited Borrower's Card if they wish to borrow books.
Special Borrowers:
(1) Members of the Board of Regents of The University of Texas System;
(2) Members of the administration, faculty and professional staff of The University of Texas System;
(3) Members of the UTSA Associates and The University of Texas at San Antonio Development Board; and
(4) Members of the professional staff of the Southwest Research Consortium. Limited Borrowers:
(1) Faculty of institutions belonging to CORAL;
(2) Students of institutions belonging to CORAL and holding a valid CORAL checkout card; and
(3) Holders of a Limited Borrower's Card.

The UTSA Library is open to the public for consultation. By paying $\$ 15.00$, a Texas resident may obtain a Limited Borrower's Card for borrowing unrestricted materials in person; this fee is also required of non-students who are auditing UTSA courses. The fee is waived for retired UT System faculty and professional staff, but all borrowers, except faculty of institutions belonging to CORAL, must obtain a card for identification purposes. Persons holding a Limited Borrower's Card are charged a fee of $\$ 2.00$ (plus copying costs, if any) for each interlibrary loan request.

Fines are charged for materials that are overdue, lost or damaged.

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Fines for Overdue Materials:
    Borrowers are subject to the following fines for fatling to return
    materials on or before the due date. All fines are to be paid at the
    Circulation Desk. Students with outstanding fines have a hold placed
    on their records and are not allowed to register again unt1l the fines
    have been paid. Faculty and staff may have paychecks withheld until
    fines have been paid.
        A. Two-hour materials - $. 25 per hour or fraction thereof per
        item. Maximum accumulation of $10.00 per item.
            B. Two-day materials - $1.00 per day or fraction thereof per item
            up to a maximum accumulation of $10.00 per item.
            C. Seven-day and two-week materials - $.05 per day or fraction
            thereof per item for the first seven days and $.25 per day
            thereafter to a maximum accumulation of $10.00 per item.
            D. Books recalled for reserve or for use by another borrower - $1.00
            per day or fraction thereof, commencing with the fifth calendar
            day after recall notice is mailed.
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Fines for Loss or Damage:
All borrowers are charged for lost items. The charge for the item is the
retail price listed in Books in Print or if the price is not available
there, the charge is $\$ .05$ per page plus $\$ 2.25$ for binding (based on Uni-
versity Microfilms Books on Demand charges). If the item has been damaged
rather than lost and the material is repairable, a suitable assessment for
repairs is made.
Whenever an item is presumed by the library to be lost, borrowers are
liable for a processing fee of $\$ 3.00$.
Fines accumulate until the time at which the item is reported or presumed lost.
Items are presumed by the library to be lost when no response is made to the second
overdue or recall notice.

## APPENDIX B

RULES AND REGULATIONS FOR DETERMINING RESIDENCE STATUS
I. Minors
C. Abandoned Child

In the case of an abandoned child, the residence of a person who has stood in loco parentis for a period of time may determine the residence of such abandoned child. The fact of abandonment must be clearly established and must not have been for the purpose of affecting the residence of the minor, and the minor must have actually resided in the home of such person for two years immediately prior to registering in an institution of higher education in Texas and such person must have provided substantially all of the minor's support. [must-have-reeeived-substantiałły-ałt-өf-his-suppert-frem-sueh-persen_] In the event that the in loco parentis relationship has not existed for the full two year period, a lesser period of time is acceptable in unusual hardship cases, such as death of both parents.
D. Orphan

An orphan who has lived for longer than a year in an established orphan's home in Texas operated by a fraternal, religious, or civic organization and has been graduated from the orphan's home shall be considered a resident of Texas provided such orphan [he] remains in Texas from the time of such graduation until he enters an institution of higher education.
G. Minors Whose Parents Moved to Another State or Foreign Country If a minor whose parents have moved their legal residence to another state or foreign country resides in Texas for 12 consecutive months following his or her 21 st birthday whose [and-by-his] actions clearly indicate[s] [that-his] intention [ ${ }^{\mathbf{q} 5]}$ to establish permanent residence in the state, the minor [he] may be classified as a resident student effective with the beginning of the term or semester following his or her 22nd birthday despite the fact the minor's
[that-h4s] entire period of residence in Texas has been as a student.
II. Residence of Individuals Over Twenty-One

Establishment of Residence
A person classified as a nonresident student upon his first enrollment in an institution of higher education is presumed to be a nonresident for the period during which he or she continues as a student. If such nonresident student withdraws from school and resides in the state while gainfully employed for a period of 12 months, upon re-entry into an institution of higher education the student [he] will be entitled to be reclassified as a resident for tuition purposes. Accumulations of summer and other vacation periods do not satisfy this requirement. Reclassification to residence status after residing in the state for 12 months cannot be based solely upon the student's or the student's spouse's [A-stu--

 registration of a motor vehicle and payment of personal property taxes thereon, or the securing of a Texas Driver's license. The presumption of a "nonresident" is not a conclusive presumption, however, and other facts may be considered to determine if the presumption has been overcome. Material to this determination is business or personal facts or actions unequivocally indicative of a fixed intention to reside permanently in the state. Such facts may include, but are not limited to the length of residence and full-time employment prior to registering in the institution, the fact of full-time employment and the nature of such employment (regular industrial, business or professional employment as distinguished from student-type employment) while a student, purchase of a homestead with substantial down-payment, dependency upon a parent or guardian who has resided in Texas for at least 12 months immediately preceding the student's registration, and marriage to a resident of Texas. All of these facts are weighed in the light of the fact that a student's residence while in school is primarily for the purpose of education and not to establish residence, and that decisions of an individual as to residence are generally made after the completion of an education and not before.

## IV. Military Personnel and Veterans

## A. Certification of Assignment to Duty in Texas

Subsection (b) provides that military personnel assigned to duty within the State of Texas, their husband or wife as the case may be and their dependent children, shall be entitled to pay the same tuition as a resident of Texas regardless of the length of their physical presence in the state. To be entitled to pay the resident tuition fees, such military personnel shall submit at the time of each registration a statement from their [his] commanding officer or personnel officer certifying that they [his] are [is] then assigned to duty in Texas and that same will be in effect at the time of such registration in an institution of higher education. This subsection also provides that a nonresident member of an out-of-state National Guard unit who is temporarily training with a Texas National Guard unit will be entitled to pay the resident tuition.

## B. Spouse and Children of Member of Armed Services

Subsection (g) provides that the spouse and dependent children of a member of the armed forces who is assigned to duty outside the State of Texas may be entitled to pay the resident tuition if they reside in Texas and file with the institution of higher education at which a child or spouse plans to register [and-sends-his
 fiłe-with-the-qnstitutien-өf-highep-edueation-at-which-the-student-inteads-te register] a letter of intent, an affidavit or other evidence satisfactory to the institution of stating [that子 they intend to become permanent residents of Texas.

## D. Legal Residence of Person in Military Service

A person in military service is presumed to maintain during his or her entire period of active service the same legal residence which was in effect at the time of enterimg [he-entered] military service. A person stationed in a state on military service is presumed not to establish a legal residence in that state because his or her presence is not voluntary but under military orders. It is possible for a member of the military service to abandon his domicile of original
entry into the service and to select another, but to show establishment of a new domicile during the time of active service, there must be clear and unequivocal proof of such intent. An extended period of service alone is not sufficient. The purchase of residential property is not conclusive evidence unless coupled with other facts indicating an intent to put down roots in the community and to reside there after termination of military service. Evidence which will be considered in determining this requisite intent includes, but is not limited to a substantial investment in a residence and the claiming of a homestead exemption thereon, registration to vote, and voting in local elections, registration of antomobile in Texas and payment of personal property taxes thereon, obtaining a Texas driver's license, maintaining checking accounts, savings accounts, and safety deposit boxes in Texas banks, existence of wills or other legal documents indicating residence in Texas, change of home-of-record and designation of Texas as the place of legal residence for income tax purposes on military personnel records, business transactions or activities not normally engaged in by military personnel, membership in professional or other stateorganizations, and marriage to a resident of Texas. Purchase of property during terminal years of military service preceding retirement generally is given greater weight than a similar purchase made prior to such terminal period.

## VI Student Employees

Statute: Section 54.051 (0) A teaching assistant, research assistant, or other student employee of any institution covered by this section is entitled to register himself, his spouse, and their children in a state institution of higher education by paying the tuition fees and other fees or charges required for Texas residents, without regard to the length of time he had [has] resided in Texas; provided that said student employee is employed at least one-half time in a position which relates to his degree program under rules and regulations established by the employer institution. This exemption shall continue for students employed two consecutive semesters through the summer session following such employment if the institution is unable to provide employment and, as determined under standards established by
the institution，if the employee has satisfactorily completed his employment．

A student employed at least half－time by any public institution of higher edu－ cation in a degree program related position［pesititen－whieh－rełates－te－his－degree pregrams with an effective date of employment on or before the 12th class day of a regular semester，or the 4 th class day of a summer term，may pay the same tuition as a resident of Texas for him or herself，spouse，［himse子fy－his－husband op－wffe－as－the－ease－may－be］and their children regardless of the length of resi－ dence in the state．The institution which employs the student shall determine whether or not the student＇s job relates to his or her degree program．［IA－epder to－be－ełtgínle－under－this－ppoyisiens－the－student－empleyeels－pesitien－must－pełate
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 If a student is employed by an institution of higher education for consecutive Fall and Spring semesters and he was further eligible to pay the tuition charged to Texas residents during those Fall and Spring semesters because of the provisions of this subsection，then the student may continue to pay the resident tuition rate during the summer session following the Spring employment if the institution is unable to provide employment and if the student＇s employment was satisfactorily completed．［student－has－satififaeterify－e日mpleted－his－empleyment－］

## VII．Competitive Scholarships

Statute：Section 54.051 （p）A［non－kesident］student［hotding］who holds a competitive scholarship of at least $\$ 200$ for the academic year or summer for which he is enrolled and who is either a nonresident or a citizen of a country other than the United States of America is entitled to pay the fees and charges required of Texas residents without regard to the length of time he has resided in Texas，provided that he must compete with other students，including Texas resi－ dents，for the scholarship and that the scholarship must be awarded by a scholar－ ship committee officially recognized by the administration of the institution of
higher education.****

An official scholarship committee or committees of a public institution of higher education may award competitive scholarships in amounts of $\$ 200$ or more for the academic year, the surmer session or both. If a nonresident or foreign student, in competition with other students, including Texas residents, obtains one of these competitive scholarships, the student may pay the same tuition as a resident of Texas during the registration period in which the scholarship is in effect. The student must present a statement from the official scholarship committee certifying the period of time during which the scholarship will be in effect.
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—. $\begin{gathered}\text { ***These provisions apply only to foreign students who enter state colleges }\end{gathered}$ and universities for the first time after June 19, 1975.
VIII. Reciprocity Clause Applicable to Junior Colleges, Upper Level
Institutions
Statute: Section 54.060 Resident of Bordering State: Tuition. The nonresident
tuition fee prescribed in this chapter does not apply to a nonresident student
who is a resident of a state situated adjacent to Texas and who registers in
any Texas public junior college situated in a county immediately adjacent to
the state in which the nonresident student resides. The nonresident junior
college student described in this section shall pay an amount equivalent to the
amount charged a Texas student registered at a similar school in the state in
which the nonresident student resides. The nonresident student described in
this section shall pay equivalent fees and charges to those charged Texas students
registered at a similar institution in the state in which the nonresident student
resides, when such student registers at a Texas Public upper level lthose insti-
tutions obfering only junior, senior, and graduate level programsl institution
of higher education located within the Texas public junior college district from
which the nonresident student has graduated or completed 45 semester hours.
which the nonresident student has graduated or completed 45 semester credit hours,
similar institution in the bordering state.
programs) which is located within the Texas public junior college district from
a nonresident, who is a resident of a state of the United States bordering Texas,
is entitled to pay Texas resident rates upon registering in any Texas public
junior college if the district of such college includes any part of a county
that is immediately adjacent to the state in which the nonresident resides, pro-
viding that Texas residents are entitled to pay in-state fees and charges at a
similar school in the bordering state.

## X．Student Responsibilities

A．Student Responsibility to Register Under Proper Classification The responsibility of registering under the proper residence classification is that of the student．［and子 If there is any question as to［ef－has］right to classification as a resident of Texas，it is the student＇s［his］obli－ gation，prior to or at the time of his registration to raise the question with the administrative officials of the institution in which he or she is registering and have such officially determined．

B．Notification Upon Becoming a Nonresident
Every student who is classified as a resident student but who becomes a non－ resident at any time by virtue of a change of legal residence by the student＇s ［his］own action or by the person controlling the student＇s［his］domicile is required to notify the proper administrative officials of his or her institution at once．

XI．Official Change of Residence Status
A．Application for Reclassification
Every student classified as a nonresident student shall be considered to retain that status until he or she［sueh－括e－as－he－sha子］－have－made］makes written application for reclassification in the form prescribed by the institution and shall have been officially reclassified in writing as a resident of Texas by the proper administrative officers of the institution．

## B．Reclassification as a Nonresident

Every person who has been classified as a resident of Texas shall be reclassified as a nonresident student whenever he or she shall report，or there is found to exist，circumstances indicating a change in legal residence to another state．If any student who has been classified as a resident of Texas shall be found to have been erroneously so classified，that student shall［he－shałł］be reclassified as a non－ resident and shall be required to pay the difference between the resident and non－ resident fees for those［sueh］semesters in which he or she was so erroneously
classified. In addition, the student [he] shall be required to pay back all monies borrowed from the Texas Opportunity Plan Fund.
C. Reclassification as a Resident

If any student has been erroneously classified as a nonresident student and subsequently proves to the satisfaction of the appropriate officials of an institution of higher education that he or she should have been classified as a resident student, that student [he] shall be reclassified as a resident of Texas and shall be entitled to a refund of the difference between the resident and nonresident fees for the semester in which he or she was so erroneously classified.
XII. Penalties

Student Compliance with Institutional Rules and Regulations
Each institution has been authorized by statute to assess and collect from each nonresident student failing to comply with the provisions of the tuition statute and with these interpretations concerning nonresident fees a penalty not to exceed $\$ 10.00$ a semester. In addition, if a student has obtained residence classification by virtue of deliberate concealment of facts, or misrepresentation of fact, that student [he] may be subject to appropriate disciplinary action, in accordance with the rules and regulations that may be adopted by the governing boards of the respective institutions of higher education.

## APPENDIX C

PREPROFESSIONAL COURSES OF STUDY IN THE
HEALTH FIELDS

The University of Texas at San Antonio does not offer specific premedical, predental, or prenursing [degree] programs; rather students select courses of study in preparation for admission to medical, dental, and nursing schools in terms of individual preferences and in terms of specific program requirements of individual professional schools.

The semester hour and grade requirements set forth below for medicine, dentistry, and nursing are minimum requirements, and satisfaction of these requirements does not assure admission to any such professional schools, since applications for admission far exceed spaces available.

Additional information on preprofessional courses of study can be obtained at the Office of the Division of Allied Health and Life Sciences and through the Chairman of the Health Related Professions Advisory Committee at UT San Antonio.

Preparation for nursing school. Admission requirements for The University of Texas System School of Nursing are likewise representative of admission requirements for most other American nursing schools. A minimum of 60 semester hours of college work from an accredited college or university is required, including six semester hours of college English, nine hours in behavioral sciences, twelve hours in history and government, three hours in statistics, and eighteen [twetve] hours in natural sciences, which must include chemistry, anatomy, physiology, [and] microbiology,
 and-a-e日urge-in-nutpititin-atse-weutd-be-desirable:] An overall minimum grade-point average of 2.0 is necessary.[and] At least 2.0 is necessary in all required courses. [is-neeessary] For specific requirements for admission to other nursing schools, students should contact the School of Nursing in question. For admission to the UT System School of Nursing at San Antonio, students should contact the Student Personnel Office of the UT System School of Nursing at San Antonio.

## APPENDIX D

## COURSES ELIGIBLE FOR THE GENERAL EDUCATION REQURIEMENT

 IN HISTORY AND GOVERNMENTThe State of Texas stipulates that course work taken for the Bachelor's degree include (a) six semester hours of United States history, three of which may be Texas history, and (b) six semester hours of courses treating the United States constitution and the constitution of the State of Texas. The University of Texas at San Antonio courses which apply to these requirements are listed below:

```
A. United States and Texas History
    HIS 1013 United States Political History, 1775-1868: (U.S.)
            The Development of American Political Insti-
            tutions and the Era of Constitution Crisis
    HIS 1023 United States Political History, 1865-1918: (U.S.)
            The Readjustment of the American Political
            System
    HIS 1033 United States Political History, 1918 to the (U.S.)
            Present: Politics in an Era of Crisis and
            World Power
    HIS 2013 Colonial America and the Formation of (U.S.)
            American Society
    HIS 2033 Economics Development and Social Change__(U.S.)
            in the United States Since 1850
    HIS 2043 The International Relations of the United (U.S.)
    States, 1782-1950
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HIS 2053 History of Texas Since 1826 (Texas)
HIS 3013 The American Experience ..... (U.S.)
HIS 3023 American Independence and National Unity, ..... (U.S.) 1760-1820
HIS 3043 Populism and Progressivism ..... (U.S.)
HIS 3053 Jacksonian Democracy and National Expansion, ..... (U.S.)1820-1860
HIS 3093 United States Constitutional and Legal ..... (U.S.)
History
HIS 3123 History of Texas: The Colonial and Mexican ..... (Texas)
Periods and the War of Independence
B. United States and Texas Government
POL 1013 Introduction to American Politics ..... (U.S.)
POL 1023 The Politics of the American Economy ..... (U.S.)
POL 2013 The Political Systems of the United States ..... (U.S.)
and Mexico
POL 2023 Civil Liberties in American Law and Practice (U.S.)
POL 2033 The Origins of the American Constitutional ..... (U.S.)
System
POL 3303 Executive-Legisfative Relations in the ..... (U.S.)
United States
POL 3323 Constitutional Law ..... (U.S.)
POL 1033 American State Politics ..... (Texas)
POL 1043 Introduction to Texas ..... (Texas)
POL 2043 Contemporary Public Policy in Texas (Texas)
POL 2053 Federalism in the United States and Mexico (Texas)
POL 3313 The American Federal System ..... (Texas)

## DIRECTORY FOR CORRESPONDENCE

Requests for information should be directed to the offices shown below. The University's address is: The University of Texas at San Antonio, [4242-Piedras Brive-East;-Suite-250;] San Antonio, Texas 78285. The main telephone number of UT San Antonio is 512-691-4011.[is-f572)-732-2747-] Offices and classrooms of the Division of Continuing Education are located in the Institute of Texan Cultures in the HemisFair Plaza in downtown San Antonio. The telephone number for the Division is (512) 227-9146.


THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT DALLAS
5323 Harry Hines Boulevard, Dallas, Texas 75235

Deputy Chancellor E. D. Walker
The University of Texas System
601 Colorado Street
Austin, Texas 78701
Dear Mr. Walker:

The docket for the March 26, 1976 meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.
Sincerely,
(i) intervener

Charles C. Spfague, M.D. President

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BOARD OF REGENTS MEETING - MARCH 26, 1976
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## TRAVEL



## DALLAS HEALTH SCIENCE CENTER

1. T. Dudley Cottle, John V. Dunbar, and Vester B. Lewis, Probationary Police Officers, University Police, to travel to The University of Texas Police Academy in Austin to attend 22nd Basic Training School from February 1, 1976 through April 16, 1976; expenses will be paid by the University Police Department.

## DALLAS MEDICAL SCHOOL

1. Jere Mitchell, M.D., Professor, Department of Internal Medicine, to travel to Copenhagen, Denmark to serve as Visiting Research Professor to learn techniques and procedures in human exercise for the period of May 30, 1976 to August 31, 1976; expenses will be paid from Moss Various Donors account.

## GIFTS

DALLAS MEDICAL SCHOOL


Donor
Amount
Bristol Laboratories
P. O. Box 657

Syracuse, New York 13201

* 1. Purpose and Condition. Funds to purchase laboratory equipment for Dr. Charles Baxter, Department of Surgery.
$\$ 8,500.00$
The Bristol-Myers Fund
345 Park Avenue
New York, New York 10022
** 2. Purpose and Condition. Funds for support of Dr. Roger Unger's research on diabetes.

Helena Laboratories
P. O. Box 752

Beaumont, Texas 77704
3. Purpose and Condition. Contribution of a used Quick Scan Densitometer for the Medical Technology program.
$\$ 2,500.00$
Henry S. Jacobus
3717 Republic National Bank Tower
Dallas, Texas 75201
4. Purpose and Condition. Funds for the purchase of a specular microscope from Syber, Inc. for the Department of Ophthalmology.
$\$ 5,000.00$
Mrs. Percy Jones
P. O. Box 176
Abilene, Texas 79604

$$
\text { 5. Purpose and Condition. Contribution to cancer research } \quad \text { in Pathology. } \$ 5,000.00
$$

[^47]DALLAS MEDICAL SCHOOL - continued

Donor Amount

Florence Latz Charitable Trust
666 Fifth Avenue
New York, New York 10019

* 6. Purpose and Condition. Proceeds from the sale of 1,340
shares of common stock of Seligman \& Latz, Inc. The
money is to be used for the research program in diabetes
under the direction of Dr. Roger H. Under.

Harry S. Moss Trust
First National Bank in Dallas
P. O. Box 6031

Dallas, Texas 75283
7. Purpose and Condition. Funds for the Harry S. Moss Heart
Center directed by Dr. Jere Mitchell. $\$ 35,000.00$

Southwestern Gynecologic Assembly
900 W. Randol Mill Road
Arlington, Texas 76012
** 8. Purpose and Condition. Contribution to the Jack Pritchard
Professorship in Obstetrics and Gynecology.
$\$ 10,000.00$

Southwestern Medical Foundation
1601 Republic National Bank Building
Dallas, Texas 75201
9. Purpose and Condition. Funds for the Phase I Building Program.
J. B. Williams Company, Inc.

767 Fifth Avenue
New York, New York 10022
**10. Purpose and Condition. Funds to be used for studies relative to "Iron Economy in Women," Department of Obstetrics and Gynecology.

\$ 10,000.00

GRANTS, CONTRACTS, AND AGREEMENTS (NONGOVERNMENTAL)
DALLAS MEDICAL SCHOOL

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The Arthritis Foundation
North Texas Chapter
3300 W. Mockingbird Lane, Suite B-134
Dallas, Texas }7523
*** 1. Grant
    Grant for the Rheumatic Disease Unit.
    Morris Ziff, M.D., Department of Internal Medicine
    January 1, }1976\mathrm{ through December 31, 1976
    $34,100.00
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[^48]```
Beecham Laboratories
50l Fifth Street
Bristol, Tennessee 37620
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* 2. Research Grant
"Pharmacology and Efficacy of Ticarcillin in Infants." Additional income.
John D. Nelson, M.D., Department of Pediatrics
$\$ 8,000.00$
CIBA-GEIGY Corporation
Summit, New Jersey 07901
* 3. Research Grant
"Diabetes Research." Additional income.
Roger H. Unger, M.D., Department of Internal Medicine \$6,000.00

4. Research Grant
"Comparison of Metoprolol (CGP-2175/E) with Hydrochlorothiazide in
Treating Patients with Mild to Moderate Uncomplicated Essential
Hypertension." A drug study.
Bryan Holland, M.D., Department of Internal Medicine $\$ 45,228.00$

The Clark Foundation
6116 North Central Expressway
Suite 304
Dallas, Texas 75206
5. Research Grant
"Endothelial Protector During Phakoemulsification." Objective is to design a device intended to protect the corneal endothelium from damage by lenticular nuclear fragments during cataract extraction.
John D. Brodrick, M.D., Department of Ophthalmology
Commencing April 1, 1976
$\$ 6,400.00$
Cystic Fibrosis Foundation
3379 Peachtree Road N.E.
Atlanta, Georgia 30326
6. Grant
"Cystic Fibrosis Care, Teaching and Research Center." Continued support.
Robert I. Kramer, M.D., Department of Pediatrics
March 1, 1976 through February 28, 1977
$\$ 27,865.00$

[^49]```
The Educational Foundation
    of the American Society of
    Plastic and Reconstructive
    Surgeons, Inc.
29 East Madison Street
Suite 807
Chicago, Illinois 60602
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    7. Research Grant
    "Periosteal Regeneration of Bone in Rats." Study whereby a model in
    which periosteum failed to demonstrate bone growth is converted to
    successful bone growth by the addition of bone induction principle.
    Kenneth E. Salyer, M.D., Department of Surgery
    \$2,976.50
    Leland Fikes Foundation, Inc.
3200. Republic National Bank Tower
Dallas, Texas 75201
8. Research Grant
"Neurological Research of Diseases of the Nervous System." Research
on major, common neurological diseases.
Roger N. Rosenberg, M.D., Department of Neurology
\$102,966.00
The Ford Foundation
320 East 43rd Street
New York, New York 10017
9. Research Grant 660-0370C
"Research and Training in the Neural Control of Gonadotropin Secretion."
Research to provide a thorough understanding of the complex regulation of sex behavior and of gonadotropin and prolactin secretion by the adenohypophysis.
Samuel M. McCann M.D., Department of Physiology
October 1, 1975 through September 30, 1978
\$112,500.00
Hoechst-Roussel Pharmaceutica1s, Inc.
Route 202-206 North
Somerville, New Jersey 08876
10. Research Grant
"Plasma Renin Activity Response to Intravenous Furosemide." A drug study.
Bryan Holland, M.D., Department of Internal Medicine \$10,315.00
B. Braun Melsungen

Aktiengesel1schaft
3508 Me1sungen
Postfach 110 und 120
Germany
11. Research Grant
"Use of Lipofundin S-15 in the Experimental Animal." A continuation grant.
Ekkehard W. Reimold, M.D., Department of Pediatrics
January 1, 1976 through December 31, 1976
\$114,604.00

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GRANTS, CONTRACTS, AND AGREEMENTS (NON-GOVERNMENTAL) - cont inued
DALLAS MEDICAL SCHOOL - continued
    The National Foundation
    March of Dimes
    1275 Mamaroneck Avenue
    White Plains, New York 10605
    *12. Research Grant
    "Pharmacogenetic Studies in Families with Single-gene Forms of
    Hyperlipidemia." A drug study.
    Joseph L. Goldstein, M.D., Department of Internal Medicine
    April 1, }1976\mathrm{ through March 31, 1978
    $60,000.00
    New England Nuclear Corporation
    575 Albany Street
    Boston, Massachusetts 02118
    **13. Research Grant
        "Imaging of Acute Myocardial Infarction." A drug study.
        Robert W. Parkey, M.D., Department of Radiology
        $3,670.00
    Pharmaceutical Manufacturers
    Association Foundation, Inc.
1155 Fifteenth Street, N.W.
Washington, D.C. }2000
    **14. Research Grant
    "Progesterone Interaction on the Gastrointestinal Tract Smooth Muscle
    Function." A second year award.
    Larry A. Bruce, Ph.D., Department of Physiology
    $5,000.00
Schering Corporation
60 Orange Street
Bloomfield, New Jersey 07003
    15. Research Grant
        "Intrathecal Therapy of Gram Negative Meningitis of Infancy." Supple-
        mental award.
        George H. McCracken, Jr., M.D., Department of Pediatrics
        $11,500.00
    16. Research Grant
    "Antimicrobial Susceptibilities of E. Coli Isolated from Neonates."
    Additional income.
    George McCracken, Jr., M.D., Department of Pediatrics
    $2,500.00
    17. Research Grant
    "Usage of Sisomicin in Experimental Osteomyelitis." A drug study.
    George H. McCracken, M.D., and Thomas Tetzlaff, M.D., Department of
    Pediatrics
    $13,2?0.00
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    * Original Award Letter Not Received
    ** No Award Letter Received

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W. L. Sinclair
4 7 7 7 \text { First National Bank Building}
Dallas, Texas 75202
    18. Research Grant
            "Pediatric Hematology-Oncology Program." Continued support.
            Jo Ann M. Cornet, M.D., Department of Pediatrics
            January 1, 1976 through December 31, }197
            $31,790.00
Southwestern Medical Foundation
1601 Republic National Bank Building
Dallas, Texas 75201
    19. Grant
            "An Audio-Visual System for Interdisciplinary Training in the University
            Affiliated Center." Purpose is to provide interdisciplinary training
            in the field of developmental disabilities.
            Doman K. Keele, M.D., Director, University Affiliated Center, Department
            of Pediatrics
            $8,600.00
The Upjohn Company
Kalamazoo, Michigan 49001
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    20. Research Grant
    "Minoxidil Emergency Protocol 2703, Evaluation of U-10, 858." Additional
            income.
            William A. Pettinger, M.D., Department of Pharmacology
            \$2,625.00
    *21. Research Grant
"Early and Late Effects of Sulfonylureas on Insulin Release." Additional
income.
Holbrooke S. Seltzer, M.D., Department of Internal Medicine
\$10,000.00
*22. Research Grant
"Influence of Solu-Medrol on Infarct Size in Patients." Additional
income.
James T. Willerson, M.D., Department of Internal Medicine
\$13,500.00

USV Pharmaceutical Corporation
1 Scarsdale Road
Tuckahoe, New York 10707
23. Research Grant No. 2CP-125 \& 2CP-126
"Long Term Study of 25 mg and 50 mg Chlorthalidone in the Treatment of Hypertension in Mild Hypertensives." A drug study. O. Bryan Holland, M.D., Department of Internal Medicine $\$ 16,666.68$

GRANTS, CONTRACTS, AND AGREEMENTS (NON-GOVERNMENTAL) - cont inued
DALLAS MEDICAL SCHOOL - continued
Wyeth Laboratories
P.O. Box 8299

Philadelphia, Pennsylvania 19101

*24. Research Grant<br>"Blind Evaluation of the Antihypertensive Efficacy and Safety of Guanabenz (WY8678) vs. Guanabenez plus Hydrochlorothiazide." Additional income.<br>Norman M. Kaplan, M.D., Department of Internal Medicine<br>$\$ 10,000.00$

Zale Foundation
3000 Diamond Park
Dallas, Texas 75247
25. Research Grant
"Pediatric Fellowship Training Program for Adolescent Pediatrics."
Fellowship to train a black physician to aid in this program on the problems of the black adolescent.
Heinz F. Eichenwald, M.D., Department of Pediatrics
Ju1y 30, 1976 through July 29, 1977
$\$ 15,000.00$
The University of Alabama in Birmingham
University Station
Birmingham, Alabama 35294
**26. Sub-Contract NOI-AI-22532-UAB under Prime Contract NIH-NIAID-72-2532-UAB "A Collaborative Study of Ara-A in Serious DNA Viral Infections." Continuation in the contract project.
James P. Luby, M. D., Department of Internal Medicine
June 26, 1975 through June 25, 1976
Payment not to exceed $\$ 1,000.00$ per patient
27. A lease agreement whereby The University of Texas Health Science Center at Dallas, Southwestern Medical School, Department of Psychology, agrees to lease 1,168 square feet of space located at 5415 Maple, Suite 302, Dallas, Texas, from H. K. Huie, Jr., for 28 months beginning February 1, 1976 and ending May 31, 1978, at the rental rate of $\$ 465$ per month. Funding is approved in NIH Grant 1-R01-DA-01300-01 for the study of "Inhalant Abuse Among Mexican-American Juveniles."
28. A contract of services between The University of Texas Health Science Center at Dallas, Southwestern Medical School, Medical Computing Resources Center, and the Dallas County Hospital District, whereby Dr. David Mishelevich, Director of the Medical Computing Resources Center and Chairman of the Department of Medical Computer Science, shall be available for at least ten percent ( $10 \%$ ) of his time and no more than twenty percent ( $20 \%$ ) of his time to serve as the Technical Advisor of Information Services for the Dallas County Hospital District, for a total amount not to exceed $\$ 15,000$ for the period of January 1,1976 through December 31, 1976, renewable on a yearly basis.
29. A contract between The University of Texas Health Science Center at Dallas, Southwestern Medical School, Department of Pathology, and the World Health Organization whereby the Department of Pathology under the direction of Dr. John A. Shadduck, D.V.M., Ph.D., agrees to work as a WHO Collaborating Centre on biological control for the project, "Safety Testing of Insect Pathogens to Mamnals," with remuneration of $\$ 5,000$.

[^50]30. A supplemental contract between The University of Texas Health Science Center at Dallas, Southwestern Medical School, Department of Pathology, and the World Health Organization whereby WHO agrees to support the costs for personnel and equipment needed by the Health Science Center during the first year of collaborative research on the project entitled "Safety Testing of Insect Pathogens to Mammals." This project is under the direction of John A. Shadduck, D.V.M., Ph.D., Department of Pathology; remuneration of said contract is $\$ 2,700$.
31. A lease agreement whereby The University of Texas Health Science Center at Dallas, Southwestern Medical School, agrees to lease 4,840 square feet of space located at 2600 Stemmons Freeway, Building I, Suites 107 and 111 from 2600 Stemmons Freeway Company for 30 months beginning March 1, 1976 and ending August 31,1978 , at the rental rate of $\$ 1,916$ per month. This space was needed by the OB Associates due to the increased number of patients being seen. Also, the new programs of Oncology and Endocrinology will be performed at this location.
32. A lease agreement whereby The University of Texas Health Science Center at Dallas, Southwestern Medical School agrees to lease 2,185 square feet of space located at 2600 Stemmons Freeway, Building I, Suite 127 from 2600 Stemmons Freeway Company for 38 months beginning March 1, 1976 and ending April 30, 1979, at the rental rate of $\$ 865$ per month. This space will be used by Family Planning. This lease cancels and supersedes the present lease for Suites 127 and 131.
33. An agreement between The Winston School and The University of Texas Health Science Center at Dallas, Southwestern Medical School, whereby UTHSCD agrees to provide a Medical Director from the Department of Neurology for the period of September l, 1975 through August 31, 1976, with remuneration not to exceed $\$ 42,311.60$.
34. Amendment No. 1 to the contract entitled "Agreement for Chief of Service for Department of Physical Medicine Presbyterian Hospital of Dallas" between Presbyterian Hospital of Dallas and The University of Texas Health Science Center at Dallas, Southwestern Medical Schoo1, whereby Southwestern Medical School agrees to provide a senior faculty member to serve in the position of Chief of Service for the period of September 1, 1975 through August 31, 1976, with remuneration not to exceed $\$ 51,676.55$.

GRANTS, CONTRACTS, AND AGREEMENTS (STATE)

## DALIAS HEALTH SCIENCE CENTER

1. Interagency Cooperation Contract $\operatorname{IAC}(76-77)-0816$ whereby The University of Texas Health Science Center at Dallas agrees to perform professional, administrative and clerical services for the Special Supplemental Food Program for Women, Infants, and Children for the Texas Department of Health Resources from December 1, 1975 through June 30 , 1976, with remuneration not to exceed $\$ 86,000$.
2. Interagency Contract No. (76-77)-0487, Amendment No. 1, between The University of Texas Health Science Center at Dallas and The University of Texas at Dallas whereby the salary of Sara Bogan is adjusted to reflect a merit increase for the period of January 1, 1976 through August 31, 1976, with remuneration not to exceed $\$ 5,270.64$.
3. Interagency Contract No. (76-77)-0489, Amendment No. I, between The University of Texas Health Science Center at Dallas and The University of Texas at Arlington whereby the salary of Sara Bogan is adjusted to reflect a merit increase for the period of January 1, 1976 through August 31, 1976, with remuneration not to exceed $\$ 5,270.64$.

GRANTS, CONTRACTS, AND AGREEMENTS (STATE) - continued
DALLAS MEDICAL SCHOOL

1. Cost Reimbursable Subcontract under Prime Contract No. N01-CN-45150, Modification No. 4 between The University of Texas System Cancer Center, M. D. Anderson Hospital and Tumor Institute and The University of Texas Health Science Center at Dallas, Southwestern Medical School. This modification extends the period of performance to October 30 , 1976 , with additional funds of $\$ 18,878$. This action increases total funding available during the period June 28,1974 through October 30 , 1976 , to a level of $\$ 48,425$. This sub-contract is directed by Dr. James Dowdy, Associate Professor of Radiology.
2. Interagency Cooperation Contract $\operatorname{IAC}(76-77)-0848$ whereby The University of Texas Health Science Center at Dallas, Southwestern Medical School agrees to participate in the development of a state wide program for education and outreach in arthritis and arthritis related diseases in behalf of Texas Department of Health Resources from January 1, 1976 through June 30, 1976, with remuneration not to exceed $\$ 12,855$.
3. Interagency Cooperation Contract $\operatorname{IAC}(76-77)-0903$ whereby The University of Texas Health Science Center at Dallas, Southwestern Medical School agrees to provide teaching services to Texas Woman's University in Pathophysiology for the period of February 6, 1976 through May 31,1976 , with remuneration not to exceed $\$ 4,178$.

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT DALLAS
FEDERAL CONTRACTS AND GRANTS

BOARD OF REGENTS MEETING - MARCH 26, 1976

DALLAS MEDICAL SCHOOL
Department of Health, Education, and Welfare
Public Health Service

1. Research Grant 5 R01 AM18179-02
"Hyperlipemia and Diabetes: Glucose Lipid Interactions."
A continuation grant.
Philip Raskin, M.D., Department of Internal Medicine
January 1, 1976 through December 31, 1976
\$37,770.00
Dallas County
2. Research Grant 5 R01 AM11313-10
"Structures and Mechanisms of Citrate Enzymes." A continuation grant.
Paul A. Srere, Ph.D., Department of Biochemistry
January 1, 1976 through December 31, 1976
\$27,496.00
Dallas County
3. Research Grant 5 R01 AM06912-14
"Estrogen Production from Plasma Precursors in Humans." A continuation grant.
Paul MacDonald, M.D., Department of Obstetrics and Gynecology January 1, 1976 through December 31, 1976
\$64,184.00
Dallas County
4. Research Grant 5 R01 AM14157-07
"Biosynthesis and Regulation and Pyridoxal 5'-Phosphate."
A continuation grant.
Walter B. Dempsey, Ph.D., Department of Biochemistry
January 1, 1976 through December 31, 1976
\$22,290.00
Dallas County
5. Institution Allowance, Fellowship Number 1 F32 AI05058-01

Allowance awarded to Dr. Donald J. Capra, Department of Microbiology, as sponsor of a postdoctoral fellow, Dr. Charles E. Wilde, III.
November 14, 1975 through November 13, 1976
$\$ 3,000.00$
Da1las County
6. Research Grant 5 R01 HL14706-05
"Fetal Hearts in Organ Culture." A continuation grant.
C. Kern Wildenthal, M.D., Department of Physiology

January 1, 1976 through December 31, 1976
$\$ 45,231.00$
Dallas County

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    Department of Health, Education, and Welfare
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    Public Health Service
    * 7. Research Grant 3 P50 HL14187-05S2
    "University of Texas Center for Lung Research in Dallas."
    A continuation grant.
    Sami I. Said, M.D., Department of Internal Medicine
    December 1, 1975 through November 30, 1976
    \(\$ 137,201.00\)
    Da1las County
    8. Research Grant 5 R01 MH05831-15
    "Mechanisms of Storage and Release of Amines."
    A continuation grant.
    Parkhurst A. Shore, Ph.D., Department of Pharmacology
    January 1, 1976 through December 31, 1976
    \(\$ 63,878.00\)
    Dallas County
    9. Research Grant 7 R01 NS13225-01
    "Effects of Environmental Stresses on Brain Development."
    The developing rat cerebellum will be used to analyze effects of a
    variety of stresses known to influence growth of development of human
    brains.
    Donald J. Woodward, Fh.D., Department of Cell Biology
    January 1, 1976 through April 30, 1976
    \(\$ 10,000.00\)
    Dallas County
    10. Research Grant 2 R01 HD05151-06
    "Neural Control of Gonadotropin and Prolactin Secretion."
    Research to provide a thorough understanding of the complex regulation
    of gonadotropin and prolactin secretion by the adenohypophysis.
    Samuel M. McCann., M.D., Department of Physiology
    January 1, 1976 through December 31, 1976
    \(\$ 82,000.00\)
    Dallas County
    11. Research Grant 5 R01 AI11893-03
    "Specific Activation of \(T\) and B Lymphocytes." A continuation grant.
    John R. Kettman, Jr., Ph.D., Department of Microbiology
    February 1, 1976 through January 31, 1977
    \$31,144.00
    Dallas County
    12. Research Grant 5 R01 AI11879-03
    "Polymorphism of a Major Histocompatibility Complex."
    A continuation grant.
    Jan.Klein, Ph.D., Department of Microbiology
    February 1, 1976 through January 31, 1977
    \(\$ 39,652.00\)
    Dallas County
    13. Research Grant 5 R01 CA16379-03
    "Experimental Cancer Chemotherapy of Neuroblastoma."
    A continuation grant.
    Roger N. Rosenberg, M.D., Department of Neurology
    February 1, 1976 through January 31, 1977
    \$44,302.00
    Dallas County
    * Original Award Letter Not Received

Department of Health, Education, and Welfare
Public Health Service
14. Development Award - Research Career Program Grant 5 K04 AM70297-04
"Chronic Inflammation Produced by Immune Complexes."
The ability of immune complexes sequestered in collagenous tissues to initiate and maintain a chronic inflammatory reaction is studied.
Hugo E. Jasin, M.D., Department of Internal Medicine
January 1, 1976 through December 31, 1976
$\$ 25,000.00$
Dallas County
15. Research Grant 5 R01 HL14775-05
"Mechanisms of Drug Action Vascular Smooth Muscle." A revised award.
George B. Weiss, Ph.D., Department of Pharmacology
September 1, 1975 through August 31, 1976
$\$ 27,588.00$ (a reduction of $\$ 589$ of the original award of $\$ 28,177$ )
Dallas County
16. Research Grant 5 P50 HL17669-02
"Ischemic Heart Disease Center (SCOR)." A continuation grant.
James T. Willerson, M.D., Department of Internal Medicine
January 1, 1976 through December 31, 1976
\$424,626.00
Dallas County
17. Research Grant 5 R01 HD08360-03
"Placental Function in Normal and Abnormal Pregnancy." A continuation grant.
Norman F. Gant, Jr., M.D., Department of Obstetrics and Gynecology February 1, 1976 through January 31, 1977
\$27,429.00
Dallas County
18. Career Award - Research Career Program Grant 5 K06 AM14155-15
"Clinical and Basic Immunology." Continued support.
Morris Ziff, Ph.D., Department of Internal Medicine
January 1, 1976 through December 31, 1976
\$27,889.00
Dallas County
19. Research Grant 5 P01 HL11662-09
"Regulation of Fluid, Electrolyte, and Acid-Base Balance."
A continuation grant.
Juha P. Kokko, M.D., Department of Internal Medicine
February 1, 1976 through January 31, 1977
\$303,070.00
Dallas County
20. Research Grant 5 R01 GM21650-02
"Kinetics and Chemistry of Allosteric Interactions."
A continuation grant.
Thomas E. Smith, Ph.D., Department of Biochemistry
February 1, 1976 through January 31, 1977
\$20,793.00
Dallas County

DALLAS MEDICAL SCHOOL - continued
Department of Health, Education, and Welfare
Public Health Service
21. Development Award - Research Career Program Grant 5 K04 HL70125-05
"Studies of Fetal Mouse Hearts in Organ Culture." Objective of the project is to evaluate the actions of certain agents on the isolated heart.
S. M. McCann, M.D., Department of Physiology

January 1, 1976 through December 31, 1976
\$25,000.00
Dallas County
22. Training Grant 5 T01 HL05469-15
"Biochemical Orientation of Cardiovascular Investigation." Revised award providing an additional $\$ 1,700$ in the trainee stipends category. This action brings the new direct cost budget up to $\$ 116,956$.
Juha P. Kokko, M.D., Department of Internal Medicine
July 1, 1975 through June 30, 1976
$\$ 120,032.00$ (no additional funds have been awarded)
Dallas County
National Science Foundation
Washington, D.C. 20550
23. Grant No. BNS 76-09348
"Development of Cerebellum." Studies to continue examination of the development of the cerebellum.
Donald J. Woodward, Ph.D., Department of Cell Biology
February 1, 1976 through May 31, 1977
\$15,000.00
Dallas County
Veterans Administration
24. Grant No. 2 B (74) V-44 0071-02A2

Amended award notice to reduce the 02 year award by $\$ 56,397$ in order to provide partial funding for renovation of teaching space at the Dallas Veterans Administration Hospital.
Dallas County
25. Contract No. V549P-805; Addendum of C1ause 23 Clean Air and Water

Certification and Clause 24 Clean Air and Water Clause to the Veterans Administration Hospital Anesthesiology Service Contract. Dallas County

Department of Health, Education, and Welfare
Public Health Service
26. Contract No. N01 AI 22531, Supplemental Agreement, Modification No. 5 "Evaluation of Histocompatibility Matching in Renal Transplantation." Continued evaluation of histocompatibility matching in renal transplantation.
Peter Stastny, M.D., Department of Internal Medicine
December 29, 1975 through December 28, 1976
$\$ 254,950.00$ (an increase of $\$ 40,315$ of the present amount of $\$ 214,635$ ) Dallas County

## FEDERAL CONTRACTS AND GRANTS - continued

## DALLAS MEDTCAL SCHOOL - continued

Department of Health, Education, and Welfare
Public Health Service
27. Contract No. N01-NU-34014, Modification \#4
"Course to Prepare Nurses as Specialists in Burn Care and Research." Modification to change the contract completion date from January 31, 1976 to February 29, 1976.
Charles R. Baxter, M.D., Department of Surgery No additional funds have been awarded by this action. Dallas County

Department of the Army
28. Education Service Agreement No. DAKF-74-A-0092

A No Cost Settlement Agreement - Complete Termination which terminates this contract as of January 27, 1976. The original agreement was docketed October 26, 1973, page HD-10, item 29. Dallas County

## DALLAS ALLIED HEALTH SCIENCES SCHOOL

Veterans Administration

1. Grant No. 2 C (74) V-44 0072-02A2

Amended award notice to reduce the 02 year award by $\$ 8,977$ in order to provide partial funding for renovation of teaching space at the Dallas Veterans Administration Hospital.
Dallas County

## DALLAS HEALTH SCIENCE CENTER

Office of Planning and Resource Analysis

1. Transfer funds in the amount of $\$ 12,172$ from Unallocated Classified Salaries, to Office of Planning and Resource Analysis Classified Salaries. The purpose of these funds is for a new classified position of Senior ClerkTypist and to increase the budgeted salary of the Technical Staff Assistant IV. (RBC No. 306)

Office of the Registrar
2. Transfer funds in the amount of $\$ 2,800$ from Unallocated Classified Salaries to Office of the Registrar, Wages. This money is needed to employ additional personnel. (RBC No. 377)

## Library

3. Accept the resignation of Helen F. Broughton (non-tenure), Faculty Associate Serials Librarian, effective December 31, 1975. Mrs. Broughton is budgeted at an annual compensation rate of $\$ 13,003$ payable from Library budget. (RBC No. 364)

Physical Plant, General Services
4. Change the status and increase the annual compensation rate of Eddie R.

Breedlove, effective January 1, 1976, as follows:
From: Utility Worker II at an annual compensation rate of $\$ 7,140$ payable from Physical Plant, General Services budget
To: Automotive Mechanic at an annual compensation rate of $\$ 9,336$ payable from Physical Plant, General Services Budget. (RBC No. 398)

## Various

5. Transfer funds in the amount of $\$ 69,271.72$ to Dallas Medical School, Unallocated Faculty Salaries, $\$ 1,300$ to Dallas G.S.B.S., Unallocated Faculty Salaries, and $\$ 30,500$ to D.A.H.S., Unallocated Faculty Salaries from the following accounts:

Dallas Medical School

| Biochemistry | Visiting Associate Professor | 6,291.70 |
| :---: | :---: | :---: |
|  | Assistant Professor | 5,182.72 |
| Microbiology | Assistant Professor | 4,106.00 |
| Psychiatry | Clinical Instructor, 56\% | 14,025.00 |
| Surgery | Professor | 39,666.30 |
|  |  | \$69,271.72 |

Dallas G.S.B.S.
Graduate Program in
Biomedical Engineering Assistant Professor \$ 1,300.00
Dallas Allied Health Science School

| Physical Therapy <br> Allied Health Education <br> and Instructional Media | Assistant Professor | $\$ 18,500.00$ |
| :--- | :--- | :--- |
|  | Assistant Professor, $70 \%$ | $\$ 30,500.00$ |
|  |  | $\$ 101,071.72$ |

To comply with Budget Rules and Procedures $1975-76$, paragraph 3d, which states that all unfilled line item faculty salary positions will lapse to the institutional Unallocated Faculty Salaries account as of November 30, 1975. (RBC No. 354)

## DALLAS MEDICAL SCHOOL

Anesthesiology

1. Increase the annual compensation rate of LeRoy W. Krumperman (tenure), Professor and Director of Anesthesiology at Veterans Administration Hospital, effective January 1, 1976, as follows:

From: An annual compensation rate of $\$ 53,500$ payable $\$ 40,000$ from Veterans Administration V 549P 646 and $\$ 13,500$ annual augmentation
To: An annual compensation rate of $\$ 55,400$ payable $\$ 41,900$ from Veterans Administration V 549P 646 and $\$ 13,500$ annual augmentation. (RBC No. 373)
2. Accept the resignation of John E. Forestner (non-tenure), Assistant Professor, effective January 5, 1976. Dr. Forestner is budgeted at an annual compensation rate of $\$ 36,850$ payable $\$ 25,000$ from Department Trust Fund and $\$ 11,850$ annual augmentation. (RBC No. 397)
3. Appoint Mickey W. Via (non-tenure), Assistant Instructor, $20 \%$, effective January 1, 1976, at an annual compensation rate of $\$ 12,000$ payable from Department Trust Fund. (RBC No. 365)
4. Change the percent of time, source of compensation and annual compensation rate of Min-Sheng Wu (non-tenure), Assistant Instructor, effective January 1, 1976, as follows:

From: $29 \%$ at an annual compensation rate of $\$ 15,200$ payable from Department Trust Fund
To: $100 \%$ at an annual compensation rate of $\$ 15,000$ payable from Veterans Administration Hospital V549P-646. (RBC No. 387)

## Biochemistry

5. Transfer funds in the amount of $\$ 4,500$ from Unallocated Faculty Salaries, to Biochemistry Teaching Salaries, and change the status and source of compensation of Richard Ebel (non-tenure), as follows:

From: Research Fellow at an annual compensation rate of $\$ 13,000$ payable from NIH 5 RO1 GM16488
To: Assistant Instructor at an annual compensation rate of $\$ 13,000$ payable $\$ 9,000$ from Biochemistry budget and $\$ 4,000$ from NIH 5 R01 GM16488 for the period January 1, 1976 thru June 30, 1976
To: Assistant Instructor at an annual compensation rate of $\$ 13,000$ payable from NIH 5 RO1 GM16488 for the period July 1, 1976 thru August 31, 1976. (RBC No. 316)

## Biophysics

6. Appoint Andrew P. Lane (non-tenure), Visiting Associate Professor of Physiology and Biophysics, effective January 1, 1976, at an annual compensation rate of $\$ 9,000$ payable from NIH 1 RO1 HL16678. (RBC No. 370)

Cel1 Biology
7. Transfer funds in the amount of $\$ 7,000$ from Unallocated Maintenance and Operations to Cell Biology, Equipment. These funds are needed to aid in purchasing additional anatomy dissecting tables for use in the Ancillary Laboratories. (RBC No. 404)
8. Transfer funds in the amount of $\$ 6,666.64$ from Unallocated Faculty Salaries to Cell Biology Teaching Assistants to be used for additional personnel needed. (RBC No. 389)

Internal Medicine
9. Accept the resignation of Richard Eddy (tenure), Associate Professor, 4\%, effective January 31, 1976. Dr. Eddy is budgeted at an annual compensation rate of $\$ 35,625$ payable from Internal Medicine budget. (RBC No. 362)

DALLAS MEDICAL SCHOOL - continued
Internal Medicine - continued
10. Transfer funds in the amount of $\$ 400$ from Unallocated Faculty Salaries to Health Care Sciences Teaching Salaries and change the percent time and source of compensation of William Shapiro (non-tenure), Associate Professor, for the period January 1, 1976 thru January 31, 1976, as follows:

From: $6 \%$ at an annual compensation rate of $\$ 33,333$ payable from Harry $S$. Moss Estate
To: $\quad 20 \%$ at an annual compensation rate of $\$ 33,333$ payable $\$ 23,333$ from Health Care Sciences budget and $\$ 10,000$ from Harry S. Moss Estate. Dr. Shapiro will revert to original budgeted status and source effective February 1, 1976. (RBC No. 395)
11. Accept the resignation of Alan R. Hull (non-tenure), Assistant Professor, $80 \%$, effective January 31 , 1976. Dr. Hull is budgeted at an annual compensation rate of $\$ 30,292$ payable $\$ 17,792$ from Internal Medicine budget and $\$ 12,500$ from Kidney Transplantation Unit budget. (RBC No. 393)
12. Transfer funds in the amount of $\$ 350$ from Unallocated Faculty Salaries to Health Care Sciences Teaching Salaries and appoint Donald S. Mierzwiak (non-tenure), Assistant Professor of Internal Medicine and Health Care Sciences, $10 \%$, for the period January 1, 1976 thru January 31, 1976, at an annual compensation rate of $\$ 42,000$ payable $\$ 4,200$ from Health Care Sciences budget and $\$ 37,800$ paid direct by the Veterans Administration Hospital. (RBC No. 381)
13. Increase the total compensation rate and change the source of compensation of Charles Richardson (non-tenure), Assistant Professor, effective January 1, 1976, as follows:

From: An annual compensation rate of $\$ 36,591$ payable $\$ 1,357$ from Internal Medicine budget, $\$ 1,706$ from University of California, $\$ 28,000$ from VA 1B 74 V 440071 , $\$ 4,437$ paid direct from Veterans Administration Hospital, and \$1,091 annual augmentation
To: An annual compensation rate of $\$ 36,720$ payable $\$ 1,357$ from Internal Medicine budget, $\$ 1,706$ from University of California, $\$ 28,000$ from VA 1B 74V 440071 , $\$ 4,437$ from 5 R01 AM 16816 and $\$ 1,220$ annual augmentation. (RBC No. 378)
14. Transfer funds in the amount of $\$ 800$ from Unallocated Faculty Salaries to Health Care Sciences Teaching Salaries and appoint Gabriel A. Shapiro (nontenure), Assistant Professor of Internal Medicine and Health Care Sciences, $21 \%$, for the period January 1, 1976 thru January 31, 1976, at an annual compensation rate of $\$ 46,129$ payable $\$ 9,600$ from Health Care Sciences budget and $\$ 36,529$ paid direct by Veterans Administration Hospital. (RBC No. 394)
15. Change the status, percentage and source of Thomas C. Smitherman (nontenure), effective December 1, 1975, as follows:

From: Assistant Professor of Internal Medicine and Health Care Sciences, $12 \%$, at an annual compensation rate of $\$ 34,900$ payable from Harry S. Moss Estate

To: Assistant Professor of Internal Medicine, $100 \%$, at an annual compensation rate of $\$ 34,900$ payable $\$ 4,188$ from Harry S. Moss Estate and $\$ 30,712$ paid direct by Veterans Administration. (RBC No. 317)
16. Appoint Santhirasegaram Balasubramaniam (non-tenure), Visiting Assistant Professor, effective December 1, 1975, at an annual compensation rate of $\$ 10,000$ payable $\$ 5,000$ from Harry $S$. Moss Estate and $\$ 5,000$ paid direct by Medical Research Council of England. (RBC No. 307)

## DALLAS MEDTCAL SCHOOL - continued

Internal Medicine - continued
17. Accept the resignation of Camilo G. Barcenas (non-tenure), Visiting Assistant Professor, effective December 31, 1975. Dr. Barcenas is budgeted at an annual compensation rate of $\$ 39,000$ payable $\$ 4,903$ from Internal Medicine budget, $\$ 28,000$ from VA 1B 74V 440071 and $\$ 6,097$ annual augmentation.
(RBC No. 355)
18. Appoint Kuniomi Yamasaki (non-tenure), Visiting Assistant Professor, effective January 1 , 1976, at an annual compensation rate of $\$ 15,000$ payable from North Texas Chapter Arthritis Foundation. (RBC No. 372)
19. Change the status and increase the annual compensation rate of Elizabeth Dietz (non-tenure), effective January 1, 1976, as follows:

From: Research Associate at an annual compensation rate of $\$ 14,376$ payable from NIH 5 P01 HL11662
To: Faculty Associate at an annual compensation rate of $\$ 18,000$ payable from NIH 5 P01 HL11662. (RBC No. 360)
20. Transfer funds in the amount of $\$ 7,216$ from Unallocated Classified Salaries to Internal Medicine Classified Salaries and change the status and increase the annual compensation rate of Carolyn Wickwire, effective January 1, 1976, as follows:

From: Administrative Assistant $I$ at an annual compensation rate of $\$ 12,576$ payable $\$ 5,076$ from Internal Medicine budget and $\$ 7,500$ from VA $1 B$ 74 V 440071
To: Administrative Services Officer at an annual compensation rate of $\$ 15,900$ payable from Internal Medicine budget. (RBC No. 361)

## Medical Computer Science

21. Transfer funds in the amount of $\$ 16,425$ from Unallocated Maintenance and Operations to Medical Computer Science, Equipment. These funds are needed to purchase additional computer terminals to be used in the instructional activities of Medical Computer Science. (RBC No. 403)

Neurology
22. Accept the resignation of Ralph G. Greenlee, Jr. (non-tenure), Associate Professor of Neurology and Chief of Neurology Service at Presbyterian Hospital, effective December 31, 1975. Dr. Greenlee is budgeted at an annual compensation rate of $\$ 45,795$ payable $\$ 35,624$ from Presbyterian Hospital and $\$ 10,171$ annual augmentation. (RBC No. 384)

Obstetrics and Gynecology
23. Accept the resignation of Mary Nekola (non-tenure), Assistant Professor of Obstetrics and Gynecology and Physiology, effective January 14, 1976. Dr. Nekola is budgeted at an annual compensation rate of $\$ 22,200$ payable from $\mathrm{Ob}-$ stetrics and Gynecology budget. (RBC No. 399)

## Pediatrics

24. Appoint Richard L. Graves (non-tenure), Instructor, effective January 12, 1976, at an annual compensation rate of $\$ 17,000$ payable from Children and Youth Project Operating Fund. (RBC No. 400)

## Pharmacology

25. Transfer funds in the amount of $\$ 1,329.99$ from Unallocated Faculty Salaries to Pharmacology Teaching Salaries and reappoint Geroge W. Read (non-tenure), Visiting Associate Professor, $50 \%$, for the period March 1, 1976 thru April 15, 1976, at an annual compensation rate of $\$ 21,280$ payable from Pharmacology budget. (RBC No. 379)

## DALLAS MEDICAL SCHOOL - continued

Physical Medicine and Rehabilitation
26. Accept the resignation of Robert N. Muckleroy (non-tenure), Assistant Professor, $31 \%$, effective December 31, 1975. Dr. Muckleroy is budgeted at an annual compensation rate of $\$ 35,287$ payable from NIH NO1 CN 45133.
(RBC No. 351)
Physiology
26. Reappoint Hideki Nakano (non-tenure), Visiting Assistant Professor, effective January 1, 1976, at an annual compensation rate of $\$ 16,000$ payable from Ford Foundation. (RBC No. 371)

Psychiatry
28. Increase the compensation rate of Maurice Korman (tenure), Professor of Psychology, Chairman of Division of Psychology, effective December 1, 1975, as follows:

From: An annual compensation rate of $\$ 49,948$ payable $\$ 12,450$ from Psychiatry budget, $\$ 24,910$ from Graduate Program in Clinical Psychology, \$588 from 2 T 02 MH 10208 and $\$ 12,000$ annual augmentation
To: An annual compensation rate of $\$ 50,948$ payable $\$ 12,450$ from Psychiatry budget, $\$ 24,910$ from Graduate Program in Clinical Psychology, $\$ 588$ from 2 T02 MH10208 and $\$ 13,000$ annual augmentation. (RBC No. 340)
29. Decrease the total compensation of Alvin J. North (tenure), Professor of Psychology and Neurology, effective December 1, 1975, as follows:

From: An annual compensation rate of $\$ 34,008$ payable $\$ 16,077$ from Psychiatry budget, $\$ 12,133$ from Graduate Program in Clinical Psychology, $\$ 648$ from NIH 06 S 000174, $\$ 350$ from 2 T02 MH10208 and $\$ 4,800$ annual augmentation
To: An annual compensation rate of $\$ 29,208$ payable $\$ 16,077$ from Psychiatry budget, $\$ 12,133$ from Graduate Program in Clinical Psychology, \$648 from NIH 06 S 000174 and $\$ 350$ from 2 T02 MH 10208. (RBC No. 357)
30. Delete Robert T. Long (non-tenure), Clinical Professor, $8 \%$, from the budget effective December 4, 1975. Dr. Long is budgeted at an annual compensation rate of $\$ 40,000$ payable from NIH 5 TO1 MH06528. Dr. Long is deceased. (RBC No. 356)
31. Change the source of compensation of JoAnne Kimberlin (non-tenure), Assistant Professor, for the period January 1, 1976 thru January 15, 1976, as follows:

From: An annual compensation rate of $\$ 16,031$ payable $\$ 3,700$ from Psychiatry budget, $\$ 12,131$ from Terrell State Hospital and $\$ 200$ annual augmentation
To: An annual compensation rate of $\$ 16,031$ payable $\$ 15,831$ from Psychiatry budget and $\$ 200$ anrual augmentation.
Accept the resignation of Ms. Kimberlin effective January 15, 1976. (RBC No. 392)
32. Appoint Irwin Gadol (non-tenure), Clinical Assistant Professor, 37\%, for the period January 1, 1976 thru May 31, 1976, at an annual compensation rate of $\$ 19,620$ payable from NIH 2 TO2 MH-10208. (RBC No. 388)
33. Reappoint Robert J. Gatchel (non-tenure), Clinical Assistant Professor, $21 \%$, effective January 1, 1976, at an annual compensation rate of $\$ 19,000$ payable from NIH 2 T02 MH10208. (RBC No. 369)

## AMENDMENTS TO THE 1975-76 OPERATJNG BUDCET - continued

## DALLAS MEDICAL SCHOOL - continued

Psychiatry - continued
34. Transfer funds in the amount of $\$ 2,086.64$ from Unallocated Faculty Salaries to Psychiatry Teaching Salaries and in the amount of $\$ 3,746.64$ from Unallocated Faculty Salaries to Graduate Program in Clinical Psychology Teaching Salaries and appoint Kenneth P. Price (non-tenure), Instructor in Psychology, effective January 1, 1976, at an annual compensation rate of $\$ 17,500$ payable $\$ 8,750$ from NIH 5 P17 RL14187, $\$ 3,130$ from Psychiatry budget, and $\$ 5,620$ from Graduate Program in Clinical Psychology budget. (RBC No.368)
35. Reappoint Charles B. Weis (non-tenure), Assistant Instructor, $60 \%$, effective January 1, 1976, at an annual compensation rate of $\$ 14,100$ payable from NIH 2 T02 MH10208. (RBC No. 367)
36. Change the status and increase the annual compensation rate of Barry Rosson (non-tenure), effective January 1, 1976, as follows:

From: Teaching Assistant in Neurology, 14\%, at an annual compensation rate of $\$ 8,571$ payable from Neurology budget
To: Clinical Assistant Instructor in Psychiatry and Teaching Assistant Neurology, $31 \%$, at an annual compensation rate of $\$ 23,600$ payable $\$ 3,870$ from Neurology budget and $\$ 19,730$ from Dallas County Hospital. (RBC No. 363)

## Radiology

37. Increase the annual compensation rate of Robert N. Berk (tenure), Professor and Chairman, effective January 1, 1976, as follows:

From: An annual compensation rate of $\$ 56,592$ payable $\$ 25,059$ from Radiology budget, $\$ 10,625$ from Parkland Hospita1, $\$ 2,600$ from Southwestern Medical Foundation, $\$ 1,900$ from Department Trust Fund and $\$ 16,408$ annual augmentation
To: An annual compensation rate of $\$ 58,492$ payable $\$ 25,059$ from Radiology budget, $\$ 10,625$ from Parkland Hospital, $\$ 2,600$ from Southwestern Medical Foundation, $\$ 3,800$ from Department Trust Fund, and $\$ 16,408$ annual augmentation. (RBC No. 376)
38. Increase the annual compensation rate of Jack Reynolds (tenure), Professor and Vice-Chairman, effective January 1, 1976, as follows:

From: An annual compensation rate of $\$ 53,138$ payable $\$ 19,604$ from Radiology budget, $\$ 2,191$ from NIH 06 S 000174, \$19,165 from Parkland Memorial Hospital and $\$ 12,178$ annual augmentation
To: An annual compensation rate of $\$ 55,038$ payable $\$ 19,604$ from Radiology budget, $\$ 2,191$ from NIH 06 S $000174, \$ 19,165$ from Parkland Memorial Hospital, \$1,900 from Department Trust Fund and \$12,178 annual augmentation. (RBC No. 374)
39. Increase the annual compensation rate of Edward E. Christensen (tenure), Professor, effective January 1, 1976, as follows:

From: An annual compensation rate of $\$ 51,762$ payable $\$ 25,261$ from Radiology budget, $\$ 13,728$ from Parkland Hospital, $\$ 1,900$ from Department Trust Fund and $\$ 10,873$ annual augmentation
To: An annual compensation rate of $\$ 53,662$ payable $\$ 25,261$ from Radiology budget, $\$ 13,728$ from Parkland Hospital, $\$ 3,800$ from Department Trust Fund and $\$ 10,873$ annual augmentation. (RBC No. 375)
40. Transfer funds in the amount of $\$ 24,822.53$ from Unallocated Faculty Salaries to Radiology Teaching Salaries and appoint Harold W. C. Ward (non-tenure), Professor, effective January 6, 1976, at an annual compensation rate of $\$ 50,000$ payable $\$ 38,000$ from Radiology budget, $\$ 7,000$ from Department Trust Fund and $\$ 5,000$ annual augmentation. (RBC No. 383)

## DALLAS MEDICAL SCHOOL - continued

Radiology - continued
41. Increase the annual compensation rate of Thomas S. Curry III (tenure), Associate Professor, effective February 1, 1976, as follows:

From: An annual compensation rate of $\$ 45,872$ payable $\$ 21,392$ from Radiology budget, $\$ 12,130$ from Parkland Hospital and $\$ 12,350$ annual augmentation
To: An annual compensation rate of $\$ 47,772$ payable $\$ 21,392$ from Radiology budget, $\$ 12,130$ from Parkland Hospital, $\$ 1,900$ from Department Trust Fund and $\$ 12,350$ annual augmentation. (RBC No. 401)
42. Increase the annual compensation rate of Robert W. Parkey (tenure), Associate Professor, effective February 1, 1976, as follows:

From: An annual compensation rate of $\$ 44,612$ payable $\$ 9,571$ from Radiology budget, $\$ 1,104$ from NIH $06 \mathrm{~S} 000174, \$ 21,349$ from Parkland Hospital and $\$ 12,588$ annual augmentation
To: An annual compensation rate of $\$ 46,512$ payable $\$ 9,571$ from Radiology budget, $\$ 1,104$ from NIH $06 \mathrm{~S} 000174, \$ 21,349$ from Parkland Hospital, $\$ 1,900$ from Department Trust Fund and $\$ 12,588$ annual augmentation. (RBC No. 402)
43. Accept the resignation of Julio Mata (non-tenure), Assistant Professor of Radiology and Pediatrics, $80 \%$, effective January 31, 1976. Dr. Mata is budgeted at an annual compensation rate of $\$ 34,986$ payable from Childrens Medical Center. (RBC No. 405)
44. Accept the resignation of Robert A. Middleton (non-tenure), Clinical Assistant Professor, $49 \%$, effective January 7, 1976. Dr. Middleton is budgeted at an annual compensation rate of $\$ 34,000$ payable $\$ 21,684$ from Radiology budget and $\$ 12,316$ from Parkland Hospital. (RBC No. 382)
45. Change the status and increase the annual compensation rate of Michael J . Landay (non-tenure), effective January 1, 1976, as follows:

From: Assistant Instructor at an annual compensation rate of $\$ 18,000$ payable $\$ 11,900$ from Radiology budget and $\$ 6,100$ from Department Trust Fund
To: Instructor at an annual compensation rate of $\$ 23,000$ payable $\$ 11,900$ from Radiology budget and $\$ 11,100$ from Department Trust Fund.
(RBC No. 359)
Surgery
46. Accept the resignation of James W. Harrington (non-tenure), Assistant Professor of Otolaryngology, $25 \%$, effective December 31, 1975. Dr. Harrington is budgeted at an annual compensation rate of $\$ 29,704$ payable from NIH 5 T01 NS05600. (RBC No. 352)
47. Accept the resignation of Clark C. Watts (non-tenure), Clinical Associate Professor of Neurosurgery and Pharmacology, 72\%, effective December 31, 1975. Dr. Watts is budgeted at an annual compensation rate of $\$ 33,333$ payable $\$ 8,333$ from Surgery budget and $\$ 25,000$ from Department Trust Fund. (RBC No.318)

Medical Art and Visual Education
48. Change the status and increase the annual compensation rate of Lewis Calver (non-tenure), effective January 1, 1976, as follows:

From: Instructor in Medical Art and Visual Education and Instructional Media Technology at an annual compensation rate of $\$ 16,600$ payable from NIH 06 S 000174
To: Assistant Professor of Medical Art and Visual Education and Instructional Media Technology at an annual compensation rate of $\$ 17,100$ payable from NIH 06 S 000174. (RBC No. 385)

Medical Art and Visual Education - continued
49. Transfer funds in the amount of $\$ 333.28$ from Unallocated Classified Salaries to Instructional Communications Administrative and Professional Salaries and change the status, increase the annual compensation rate and change the source of compensation of Steven J. Harrison (non-tenure), effective January 1 , 1976, as follows:

From: Instructor in Medical Art and Visual Education and Instructional Media Technology at an annual compensation rate of $\$ 16,900$ payable from Medical Art and Visual Education budget
To: Assistant Professor of Medical Art and Visual Education and Instructional Media Technology at an annual compensation rate of $\$ 17,400$ payable $\$ 16,900$ from Medical Art and Visual Education budget and $\$ 500$ from Instructional Communications budget. (RBC No. 386)

## DALLAS ALLIED HEALTH SCIENCES SCHOOL

## Administration

1. Transfer funds in the amount of $\$ 1,950$ from Unallocated Maintenance and Operations to Administration, Equipment. These funds will be used to purchase remaining office furniture for the new leased spaces. (RBC No. 380)

Medical Technology
2. Transfer funds in the amount of $\$ 1,000$ from Unallocated Faculty Salaries to Health Care Sciences Teaching Salaries and change the name, percent of time and source of compensation, for the period January 1, 1976 thru April 30, 1976, as follows:

From: Marcia M. Liston, $50 \%$, at an annual compensation rate of $\$ 10,900$ payable from Medical Technology budget
To: Marcia M.L. Bankhead, $77 \%$, at an annual compensation rate of $\$ 10,900$ payable $\$ 7,000$ from Medical Technology budget and $\$ 3,900$ from Health Care Sciences budget.
Mrs. Marcia M.L. Bankhead will revert to original budgeted percent of time and source of compensation effective May 1, 1976. (RBC No. 396)

Allied Health Education and Instructional Media
3. Transfer funds in the amount of $\$ 8,000$ from Unallocated Faculty Salaries to Allied Health Education and Instructional Media Faculty Salaries and appoint Barbara A. Friedman (non-tenure), Assistant Instructor, effective January 1, 1976, at an annual compensation rate of $\$ 12,000$ payable from Allied Health Education and Instructional Media budget. (RBC No. 366)

Health Care Sciences
4. Transfer funds in the amount of $\$ 900$ from Unallocated Faculty Salaries to Health Care Sciences Teaching Salaries and appoint Lonnie J. Yarbrough (nontenure), Instructor, $15 \%$, for the period January 1, 1976 thru April 30, 1976, at an annual compensation rate of $\$ 18,000$ payable from Health Care Sciences budget. (RBC No. 391)
5. Transfer funds in the amount of $\$ 3,290.64$ from Unallocated Classified Salaries to Health Care Sciences Classified Salaries. These funds are needed to provide support for additional personnel. (RBC No. 390)

THE UNIVERSITY OF TEXAS MEDICAI BRANCH AT GALVESTON
February 24, 1976

Mr. E. D. Walker
Deputy Chancellor
The University of Texas System
601 Colorado Street
Austin, Texas 78701
Dear Mr. Walker:
The docket for the March 26,1976 meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.
Sincerely,


# THE UNIVERSITY OF TEXAS MEDICAL BRANCH AT GALVESTON <br> INSTITUTIONAL DOCKET 

BOARD OF REGENTS' MEETING MARCH 26, 1976


RESIGNATIONS AND CHANGE OF STAFF STATUS ON THE MEDICAL STAFF OF THE UNIVERSITY OF TEXAS MEDICAL BRANCH AT GALVESTON. On the recommendation of the Executive Committee of the Medical Staff, approval of the following recommendations is respectfully requested:

1. Change the staff status of Walter J. Meyer, III, M.D., Associate Professor, Department of Pediatrics, from Full Time Associate Membership on the Medical Staff with private patient restrictions to Full Time Attending Membership on the Medical Staff with private patient privileges.
2. Remove the name of George R. Herman, M.D., Professor, Department of Internal Medicine, from the Medical Staff. Dr. Hermann expired on December 4, 1975.


TRAVEL IN EXCESS OF 29 DAYS. In compliance with Section 13:33 of Chapter III of Part II of the Rules and Regulations of the Board of Regents for the Government of The University of Texas System, I recommend approval of the following travel request:

Dr. H. L. Stone, Chief, Cardiovascular Control Section, the Marine Biomedical Institute, for the period March 28, 1976 through May 15, 1976 to travel to Copenhagen, Denmark to present an original research paper for the Advisory Group for Aerospace Research and Development meeting; to Dusseldorf, Germany to confer with Professor Dr. J. O. Arndt; to Milan, Italy to confer with Dr. Peter J. Schwartz, Istituto Ricerche Cardiovascolari, Universita 'Di Milano; and to Hants, England to confer with Dr. Peter Howard, OBE, Group Captain, RAF, RAF Institute of Aviation Medicine, Farnborough, Hants, England. The conferences in Germany, Italy and England are in regard to future research papers for the USAF AFOSR Grant No. 74-2622. Dr. Stone's expenses are to come from the USAF AFOSR Grant No. 74-2622 account.

GIFTS. In compliance with Section 1, Subsection 1.3, of Chapter I of Part Two of the Rules and Regulations of the Board of Regents for the Government of The University of Texas System, I recommend approval for the acceptance of the following gifts:

## DONOR AND ADDRESS

I. Mr. and Mrs. Roland K. Blumberg P. O. Box 231 Seguing, Texas 78155
2. Pediatric Alumni

Department of Pediatrics
The University of Texas
Medical Branch
Galveston, Texas 77550

| DONOR AND ADDRESS |
| :--- |
| 1. Mr. and Mrs. Roland K. Blumberg |
| P. O. Box 231 |
| Seguin, Texas 78155 |
| 2. Pediatric Alumni |
| Department of Pediatrics |
| The University of Texas |
| Medical Branch |
| Galveston, Texas 77550 |

$\quad$ PURPOSE AND CONDITIONS

| For support of research in |
| :--- |
| internal medicine. | internal medicine.

For bronze sculpture, EARTH
\$6,500.00 MOTHER, which will be placed in the new Child Health Center at the Galveston Medical Branch in memory of Dr. ArrNell Boelsche, deceased.

- continued

DONOR AND ADDRESS
3. The Sealy \& Smith Foundation for the John Sealy Hospital 200 University Boulevard Suite 1006
Gelveston, Texas 77550

## PURPOSE AND CONDITIONS

Contribution to interest and sinking fund requirements on bonds issued by The University of Texas for the purpose of constructing an addition to the John Sealy Hospital.

GRANIS, CONIRACTS \& AGREEMENTSS (NON-GOVERNMENTAL):

1. The Duke-Lab Foundation, Inc.

Cavray Road
East Norwalk, Connecticut 06855
To continue departmental research, training and educational programs. $\$ 800$
January, 1976 until funds are expended.
Dr. J. Fred Mullins
2. *FIorida $A$ and $M$ University

Tallahassee, Florida
Subcontract No. 3 for Research Project - A Study of the Extent of Exposure of Migrant Workers to Pesticides and Pesticide Residues
\$32,512
December 1, 1975 through July 31, 1977
Dr. William J. McGanity
3. Muscular Dystrophy Association, Inc.

810 Seventh Avenue
New York, N.Y. 10019
Continuation of Postdoctoral Fellowship for Research Project - Cholinergic Systems in Cultured Neurons and Glia: Possible Trophic Influences of Normal

## and Dystrophic Muscle

$\$ 500$
January 1, 1976 through June 30, 1976
Dr. Robert L. Suddith, Fellow
Dr. Bernard Haber, Sponsor
This award provides for an institutional allowance in the amount of $\$ 500$. A personal stipend in the amount of $\$ 6,500$ will be paid directly to the Fellow.
4. Pharmaceutical Manufacturers Association Foundation, Inc.

1155 Fifteenth Street, N.W.
Washington, D.C. 20005
Research Grant - An Analysis of the Action of Gymnodinium breve Toxin at the Cell Membrane
\$5,00
January 1, 1976 through December 31, 1976
Dr. Patricia Shinnick-Gallagher
*Originally signed subcontract not received

GRANTS, CONTRACTS \& AGRERMENTS (NON-GOVERNMENTAL) - continued
5. The Regional Medical Program of Texas

Texas Regional Medical Program, Incorporated
4200 North Lamar, Suite 200
Austin, Texas 78756
Amendment No. 5 to RMPT Research Contract No. 75-113B
Pilot Coordinated Arthritis Program
No new funds involved
September 15, 1974 through December 31, 1975
Dr. Frank E. Enery
This amendment provides for a change in budget classification.
6. The Sealy \& Smith Foundation for the John Sealy Hospital

200 University Boulevard, Suite 1006
Galveston, Texas 77550
Grant to the Department of Ophthalmology for a laboratory
improvement project.
\$16,060
January 20, 1976 through (Open)
Dr. Edward C. Ferguson, III
7. E. R. Squibb \& Sons, Inc.

The Squibb Institute for Medical Research
P. O. Box 4000

Princeton, New Jersey 08540
Continued support for Research Grant - Double-blind Comparison of Iopronic Acid and Iopanoic Acid for Oral Cholecystocholangiography (Protocol

## \#10354-5A)

\$4,125
January 21, 1976 through (Open)
Dr. Robert N. Cooley

GRANTS, CONTRACTS \& AGREEMENTS (STATE):

1. Interagency Cooperation Contract No. IAC(76-77)-0876 between The University of Texas Medical Branch at Galveston and The University of Texas at Austin Lyndon B. Johnson School of Public Affairs, wherein The University of Texas at Austin provides $\$ 15,000.00$ for the period January 1, 1976 through August 31, 1976 for The University of Texas Medical Branch at Galveston to provide a medical nutritional team to perform a detailed evaluation of the health and nutritional impact of the Meal System for the Elderly feeding trial that is to be conducted under the direction of The University of Texas at Austin. This is a new contract. The contract was signed on behalf of The University of Texas Medical Branch at Galveston by Mr. J. P. Porretto, Director of Fiscal Services for Mr. V. E. Thompson, Vice-President for Business and Hospital Affairs. The contract was signed by the State Board of Control on January 1, 1976.
2. Interagency Cooperation Contract No. IAC (76-77)-0857 between the Rio Grande State Center of the Texas Department of Mental Health and Mental Retardation and The University of Texas Medical Branch at Galveston, whereby the Rio Grande State Center provides $\$ 2,800.00$ for the period February 1, 1976 through March 31, 1976 for The University of Texas Medical Branch to provide the services of a resident physician to the Rio Grande State Center. This is a new contract. The contract was signed on behalf of The University of Texas Medical Branch at Galveston by Mr. V. E. Thompson, Vice-President for Business and Hospital Affairs. The contract was signed by the State Board of Control on January 23, 1976.
3. Interagency Cooperation Contract NO. IAC(76-77)-0892 between the Texas Department of Health Resources and The University of Texas Medical Branch at Galveston, wherein the Texas Department of Health Resources provides $\$ 11,000.00$ for the period January 1, 1976 through June 30, 1976 to enable the Contractor to participate in the design and implementation of a coordinated statewide perinatal education and outreach program and perform select area-wide activities consistent with the Texas Regional Program Contract No. 75-112E and specifically needed in the Contractor's area of responsibility. This is a replacement for the Texas Regional Program Contract No. $75-112 \mathrm{E}$ which terminated December 31, 1975. The contract was signed on behalf of The University of Texas Medical Branch at Galveston by Mr. J. P. Porretto, Director of Fiscal Services for Mr. V. E. Thompson, Vice-President for Business and Hospital Affairs. The contract was signed by the State Board of Control on January 1, 1976.
4. Interagency Cooperation Contract No. IAC (76-77)-0893 between the Texas Department of Health Resources and The University of Texas Medical Branch at Galveston, wherein the Texas Department of Health Resources provides $\$ 44,800.00$ for the period January 1, 1976 through June 30 , 1976 to continue the development of a statewide program for education and outreach in arthritis and arthritis-related diseases. This is a replacement for the Texas Regional Program Contract No. 75-113B which terminated December 31, 1975. The contract was signed on behalf of The University of Texas Medical Branch at Galveston by Mr. J. P. Porretto, Director of Fiscal Services for Mr. V. E. Thompson, Vice-President for Business and Hospital Affairs. The contract was signed by the State Board of Control on January 1, 1976.

THE UNIVERSITY OF TEXAS MEDICAL BRANCH AT GALVESTON
FEDERAL CONTRACTS AND GRANTS
BOARD OF REGENTS' MEETING MARCH 26, 1976

1. Department of Health, Education, and Welfare

Health Resources Administration
Bureau of Health Resources Development
Modification No. 10 to Contract No. NOI-MB-24391
No new funds involved
September 30, 1972 through September 30, 1977
Contract - Area Health Education Center - This contract establishes cooperative educational programs in the health sciences with several colleges and health facilities in Central and South Texas.
Dr. William Walter Schottstaedt
This modification provides for technical amendment to the contract concerning Article XVI Advance Understanding, Paragraph A.2, Pan American University. The period of performance remains unchanged; cost reduced $\$ 4,500$. Various counties in Texas
2. Department of Health, Education, and Welfare

National Institutes of Health
National Cancer Institute
Research Grant No. 5 ROl CA 14527-03
\$23,322 plus indirect costs
January l, 1976 through December 31, 1976
Enzyme Therapy of Neoplasia. The purpose of this study is to establish new therapeutic agents useful for the treatment of cancer in man.
Dr. Creed W. Abell
This is the third year of an ongoing project. Galveston County
3. Department of Health, Education, and Welfare

National Institutes of Health
National Cancer Institute
Research Grant No. 5 ROI CA 13435-03
No new funds involved
January 1, 1975 through December 31, 1976
Effects of Therapeutic Radiation on Lymphocyte Response. The objectives of this project are to determine whether the immunologic response of human blood cells is adversely affected by radiotherapy.
Dr. Vernon K. Jenkins
The grant period is extended for one year, without additional funds. Galveston County
4. *Department of Health, Education, and Welfare

National Institutes of Health
National Heart and Limg Institute
Research Grant No. 7 ROI HLI9639-01
\$35,132 plus indirect costs
January 1, 1976 through December 31, 1976
Permeability Transients of Carriers, Channels, and Heart. The overall objective of this project is to provide a framework, both theoretical and experimental, for the identification and quantitative analysis of the molecular mechanisms of ion transport in heart and other excitable membranes.
Dr. Gebor Szabo
This is a new two-year grant award.
Galveston County
5. Department of Health, Education, and Welfare

National Institutes of Health
National Institute of Allergy and Infectious Disease
Research Grant No. 5 ROl AI 11871-03
$\$ 16,725$ plus indirect costs
January 1, 1976 through December 31, 1976
Interactions of Brugia Malayi and Microorganisms. This study is to determine the effect which secondary infection with microorganisms has on the filarial parasite.
Dr. Adam Ewert
This is the second year of an ongoing project. Galveston County
6. Department of Health, Education, and Welfare

National Institutes of Health
National Institute of General Medical Sciences
Research Grant No. 5 ROI GM 21433-02
No new funds involved
January 1, 1975 through January 31, 1976
Somatic Cell Genetics of Differentiated Phenotypes. The objective of this
study is to employ the methods of somatic cell genetics to investigate
problems in the area of developmental genetics.
Dr. Robert J. Klebe
The grant period is extended for one month without additional funds.
Galveston County
7. Department of Health, Education, and Welfare

National Institutes of Health
National Institute of General Medical Sciences
Research Grant No. 2 RO1 GM 21433-03
$\$ 42,000$ plus indirect costs
February 1, 1976 through January 31, 1977
Somatic Cell Genetics of Differentiated Phenotypes. The objective of this
project is to study genetic control mechanisms by somatic cell genetic
analysis.
Dr. Robert J. Klebe
This is the first year of a three-year renewal grant. Galveston County

* Originally signed award letter not received.

FEEDERAL CONIRACTS AND GRANTS - continued
8. Department of Health, Education, and Welfare

National Institutes of Health
National Institute of Neurological and Communicative Disorders and Stroke
Research Grant No. 5 ROI NS 11354-03
\$18,539 plus indirect costs
February 1, 1976 through January 31, 1977
Neuron-Glia Interaction in Vitro Cholinergic Systems. The overall objective of this research is to examine the possibility that glial cells and neurons may regulate cholinergic function at the levels of choline uptake.
Dr. Harrol T. Hutchison
This is the third year of an ongoing project.
Galveston County
9. Department of Health, Education, and Welfare

National Institutes of Health
National Institute of Neurological and Communicative Disorders and Stroke
Research Grant No. 5 POI NS 11255-03
$\$ 205,028$ plus indirect costs
February 1, 1976 through January 3l, 1977
Comparative Neurobiology. The research proposed is an analysis of the types of intercellular communication used by the nervous system in the control of behavior.
Dr. William D. Willis, Jr.
This is the third year of an ongoing project. Galveston County
10. Department of Health, Education, and Welfare

National Institutes of Health
National Institute of Arthritis, Metabolism and Digestive Diseases
Grant No. 5 TOI AM 05208-16 (Revised)
\$51,159
July 1, 1975 through June 30, 1977
Hematology Training Grant
Dr. Frank H. Gardner (Formerly Dr. William C. Levin)
This award extends the current budget period for twelve additional months and approves the use of unexpended funds in the stipend category. Galveston County

THE UNIVERSITY OF TEXAS MEDICAL BRANCH AT GALVESTON
AMENDMENTS TO THE 1974-1975, 1975-1976 OPERATING BUDGETS
BOARD OF REGENTS' MEETING MARCH 26, 1976

## AMLNDMENTS TO THE 1974-1975 OPERATING BUDGET

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Transfer of Funds
For: To close departmental balances as of August 31, 1975.
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| 1. From: | Various Accounts (detailed below) <br> Unallocated Appropriations <br> Net Closing Adjustment | $\begin{array}{r} \$ 1,119,326.98 \\ 357,903.58 \\ 128,322.92 \\ \hline \end{array}$ |
| :---: | :---: | :---: |
|  | Total Source of Funds | \$1,605,553.48 |
| To: | Various Accounts (detailed below) | \$1,605,553.48 |
|  | Total Application of Funds | \$1,605,553.48 |


| Source of Funds | Teaching Salaries |  | Other Salaries | M \& 0 Equipment | Travel |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Office of the President | \$ | \$ | 2,445.47 | \$ 832.91 | \$ 2,257.12 |
| Office of the President |  |  |  |  |  |
| Emeritus |  |  | 417.25 | 826.86 | 198.61 |
| Information Office |  |  | 2,408.01 | 1,701.06 | 75.32 |
| Vice President for Business and Hospital Affairs |  |  | 3,952.00 | 1,067.82 | 3,133.45 |
| Budget Office |  |  | 1,543.54 | 13.51 | 3.10 |
| Office of the Director of |  |  |  |  |  |
| Student Personnel Services |  |  | 1,019.33 | 2,965.44 | 1,286.11 |
| Office of Admissions |  |  | 1,257.19 | 5,947.51 | 386.33 |
| Office of Audits and Cost Reimbursements |  |  | 7,364.09 | 345.36 | 64.70 |
| Office of Director of General Services |  |  |  | 1,101.46 | 196.04 |
| Office of Director of Fiscal Services |  |  | 4,699.73 | 2,374.40 | 1,435.62 |
| Office of the Director of Accounting |  |  | 5,984.75 | 326.46 | 712.74 |
| Office of Patient Finance |  |  |  |  | 873.76 |
| Service Computation Center |  |  | 6,115.77 | 89,460.24 | 42.19 |
| Personnel Office |  |  | 2,238.64 |  |  |
| Office of In-Service Education |  |  | 1,465.96 | 1.80 | 11.92 |
| Office of the Purchasing Agent |  |  |  | 650.57 | 245.20 |
| General Stores |  |  | 2,233.68 |  | 200.00 |
| Mail and Telephone Service |  |  | 7,622.16 |  | 551.06 |
| Personnel Clinic |  |  | 4,605.73 |  |  |
| Office of Sponsored Research |  |  |  | 210.62 | 1,327.54 |
| Staff Benefits |  |  |  | 115,872.11 |  |
| Miscellaneous General Expense |  |  |  |  |  |
| Office of the Dean of |  |  |  | 2,350. |  |
| Medicine |  |  | 417.85 | 184.09 |  |
| Institute for the Medical Humanities | 10,448.55 |  |  |  |  |

AMENDMENTS TO THE 1974-1975 OPERATING BUDGET - continued
Transfer of Funds - continued

| Source of Funds | Teaching Salaries | Other Salaries | M \& 0 Equipment | Travel |
| :---: | :---: | :---: | :---: | :---: |
| Anatomy | \$ 386.87 | \$ 1,972.80 | \$ 850.66 | \$ 49.53 |
| Anesthesiology | 0.41 | 18.67 | 640.63 |  |
| Family Medicine | 2,405.60 |  |  |  |
| Human Biological Chemistry and Genetics | 301.28 | 590.80 |  |  |
| Internal Medicine | 9,393.93 | 10,792.32 |  |  |
| Microbiology |  | 580.03 | 791.92 |  |
| Psychiatry | 6,037.41 | 23.86 |  |  |
| Neurology |  | 1,835.81 | 1,225.96 |  |
| Obstetrics and Gynecology | 6,357.59 | 2,450.71 | 178.49 |  |
| Ophthalmology | 10,165.65 |  |  |  |
| Otolaryngology |  | 2,189.10 |  |  |
| Pathology | 5,431.73 | 871.94 |  |  |
| Pediatrics | 2,425.78 | 3,155.26 |  |  |
| Physiology and Biophysics | 9,696.10 |  | 361.07 |  |
| Preventive Medicine and Community Health |  | 125.71 | 233.72 | 243.25 |
| Radiology | 9,354.74 | 521.96 |  |  |
| Surgery |  | 1,343.02 | 520.56 |  |
| Office of the Dean of Allied Health Sciences |  | 2,940.55 |  | 8.60 |
| Core Curriculum - Basic and Clinical Allied Health | 322.59 | 742.35 | 278.64 | 59.16 |
| Health Care Sciences |  |  | 15.78 |  |
| Medical Records |  |  |  |  |
| Administration |  | 746.28 | 199.15 |  |
| Medical Technology | 706.17 | 398.05 |  |  |
| Occupational Therapy | 713.36 |  |  |  |
| Physical Therapy | 214.22 |  |  | 449.75 |
| Associated Health Occupations |  |  | 9.86 | 47.21 |
| Allied Health - Special |  |  |  |  |
| Equipment |  |  | 5.07 |  |
| Office of the Dean of the Graduate School |  | 8,609.82 | 1,063.02 | 35.52 |
| Vice-President for Hospital Affairs |  | 6,055.31 | 324.08 | 373.64 |
| Credit and Collections |  | 23.91 | 1,713.63 |  |
| Unit Management |  |  |  | 1,200.00 |
| Admitting Office - Patients |  |  | 1,468.51 |  |
| Outpatient Department |  |  |  | 839.00 |
| Cervical Screening Laboratory |  | 271.95 | 220.27 |  |
| Patient Charge System |  |  | 3,644.01 |  |
| Staff Development |  | 1,307.65 | 824.45 | 380.61 |
| Nursing Service |  |  | 131.81 | 725.64 |
| Surgical Operating Suite |  | 8,523.86 |  |  |
| Central Supply and Transportation |  | 4,206.61 |  | 224.00 |
| Hospital Distribution |  | 467.63 | 11,212.47 | 523.86 |
| Medical House Staff |  | 58,162.83 |  |  |
| Medical Records Library |  | 4,044.38 | 685.44 |  |
| Social Service |  | 3,449.32 | 0.58 | 0.18 |
| Allergy Clinic |  |  | 46.31 |  |
| Anesthesia |  | 955.56 |  |  |
| Adult Renal Metabolic Laboratory |  |  | 1,613.88 |  |

AMENDMENTS TO THE 1974-1975 OPERATING BUDGET - continued
Transfer of Funds - continued

| Source of Funds | $\begin{aligned} & \text { Teaching } \\ & \text { Salaries } \end{aligned}$ | Other Salaries | M \& 0 <br> Equipment | Traye |
| :---: | :---: | :---: | :---: | :---: |
| Artificial Kidney | \$ | \$ | \$ 2,204.10 | \$ |
| Autopsy Service |  | 1,814.48 |  |  |
| Blood Bank |  |  | 80.97 | 23.07 |
| Cardiac Catheterization |  |  |  |  |
| Laboratory |  | 797.50 | 527.58 |  |
| Clinical Laboratory |  |  |  | 67.60 |
| Clinical Study Center |  |  | 775.33 |  |
| Cyto-Pathology Laboratory |  | 4,280.57 |  |  |
| Dental Clinic |  | 1,288.60 | 1,633.51 |  |
| Echoencephalography Laboratory |  | 105.37 | 447.43 |  |
| Electroencephalography |  |  |  |  |
| Laboratory |  | 153.54 | 142.30 | 113.02 |
| Emergency Room - Medical |  |  |  |  |
| Director |  | 1,128.11 |  | 733.55 |
| Endocrine Metabolic |  |  |  |  |
| Laboratory |  | 170.50 |  |  |
| Family Medicine |  | 279.03 | 37.36 |  |
| Gestroenterology - Endoscopy Room |  |  | 77.76 |  |
| Hearing and Speech Clinic |  | 736.25 |  | 150.84 |
| Vestibular Clinic |  | 56.00 |  |  |
| Heart Station |  | 1,982.89 |  |  |
| Histology Laboratory |  | 1,184.13 |  |  |
| Infectious Disease Laboratory |  |  | 2,519.06 |  |
| Moody State School |  | 2,620.00 |  | 71.79 |
| Nuclear Medicine Service |  | 2,293.20 |  |  |
| $\mathrm{Ob}-\mathrm{Gyn}$ Endocrinology Iaboratory |  | 551.60 | 51.48 |  |
| Pediatric Infectious Disease Laboratory |  |  | 454.04 |  |
| Pediatric Immunology |  |  |  |  |
| Laboratory |  | 760.36 | 427.28 |  |
| Pediatric Hematology Cyto- |  |  |  |  |
| Genetics Laboratory |  |  | 814.73 |  |
| Pediatric Endocrinology |  |  |  |  |
| Laboratory |  | 90.49 | 422.80 |  |
| Pediatric Cardiology |  |  |  |  |
| Laboratory |  | 2,373.00 | 463.79 |  |
| Pharmacy |  |  | 50,712.28 | 3.43 |
| Pulmonary Laboratory |  |  | 3,155.85 |  |
| Pu7monary Therapy Service |  | 13,598.78 | 562.98 |  |
| Rehabilitation Clinic - |  |  |  |  |
| Physical Therapy |  | 7,195.22 | 369.53 | 94.14 |
| Rehabilitation Clinic - |  |  |  |  |
| Occupational Therapy |  | 2,771.31 | 1,313.68 | 12.49 |
| Renal Inmunology Laboratory |  |  | 255.25 |  |
| School Service for Pediatric and Psychiatric Patients |  | 1,369.60 |  | 24.96 |
| Special Hematology Laboratory |  | 447.57 |  |  |
| Special Immunology Laboratory |  | 459.58 |  |  |
| Surgical Serum Gastrin Iaboratory |  |  |  |  |
| Laboratory |  | 59.64 | 33.88 |  |
| Surgical Pathology Laboratory |  | 1,109.21 |  |  |
| Housekeeping |  | 19,445.98 | 531.98 | 4.50 |
| Laundry |  |  | 6,098.65 | 0.16 |

AMENDMENTS TO THE 1974-1975 OPERATING BUDGET - continued
Transfer of Funds - continued

| Source of Funds | Teaching Salaries | Other Salaries | M \& 0 <br> Equipment | Travel |
| :---: | :---: | :---: | :---: | :---: |
| Preventive Fire and Safety Program | \$ | \$ | \$ 362.16 | \$ |
| Chronic Home Dialysis Program |  |  |  | 3,000.02 |
| Renal Transplant |  | 6,468.60 | 6,760.65 | 837.37 |
| Animal Care Center |  |  | 46.95 | 756.57 |
| Educational IV |  | 560.46 |  | 623.62 |
| Medical Electronics |  |  |  |  |
| Service |  | 6.66 |  |  |
| Medical Engineering |  | 207.58 |  |  |
| Office of Educational and Research Services |  | 6,014.76 | 362.55 | 46.48 |
| Publications |  |  | 14.52 | 9.30 |
| Marine Biomedical |  |  |  |  |
| Institute |  | 2,824.49 |  | 4,189.94 |
| Texas Tektite Project |  | 1,089.39 | 1,646.51 | 1,482.82 |
| Environmental Sciences |  | 275,971.00 | 74,045.56 | 10,481.73 |
| Human Biological Chemistry and Genetics |  | 420.80 | 195.04 |  |
| Post-Graduate Education |  | 62.00 | 21.53 | 21.18 |
| Libraries |  | 1,195.90 | 88.61 |  |
| Security Division |  | 18,182.90 |  | 320.69 |
| Building Maintenance |  | 3,967.16 | 10,621.39 |  |
| Grounds Maintenance |  | 988.50 | 518.74 |  |
| Utilities |  | 10,192.96 |  |  |
|  | \$74,361.98 | \$580,444.87 | \$423,290.10 | \$41,230.03 |
| Application of Funds | Teaching Salaries | Other <br> Salaries | M \& 0 <br> Equipment | Travel |
| Office of Patient Finance | \$ | \$ 25,014.80 | 1,106.90 | \$ |
| Personnel Office |  |  | 674.06 | 29.24 |
| Mail and Telephone |  |  |  |  |
| Service |  |  | 228,092.46 |  |
| Office of the Dean of Medicine |  |  |  | 87.52 |
| Office of Research in |  |  |  |  |
| Medical Education |  |  | 113.26 |  |
| Institute for the |  | 136.80 |  |  |
| Dermatology |  |  | 1.09 |  |
| Family Medicine |  |  | 24,068.50 |  |
| Human Biological Chemistry and Genetics |  |  | 1,450.48 |  |
| Internal Medicine |  |  | 1,533.89 |  |
| Microbiology |  |  |  | 0.01 |
| Psychiatry |  |  | 448.11 |  |
| Neurology | 0.01 |  |  |  |
| Ophthalmology |  | 32.31 | 156.58 |  |
| Otolaryngology |  |  | 181.00 |  |
| Pathology |  |  | 162.69 |  |
| Pediatrics |  |  | 380.19 |  |
| Pharmacology |  | 218.26 | 171.58 |  |

AMENDMENTS TO THE 1974-1975 OPERATING BUDGET - continued
Transfer of Funds - continued

(RBC 825)

## GENERAI ADMINISTRATION

Office of the Director of General Services

1. Appoint Mr. James P. Donovan, III, as Planning Coordinator at a salary rate of $\$ 17,000$ for twelve months, effective January 1, 1976. Funds needed are to come from Unallocated Appropriations - General. (RBC 382)

MEDICAL SCHOOL
Office of the Dean of Medicine
2. Accept the resignation of Mr. James K. Newman, Planning Coordinator at a salary rate of $\$ 23,000$ for twelve months, effective December 31, 1975. (RBC 363)

Office of Research in Medical Education
3. Change the source of funds for Dr. Donald A. Bosshart, Associate Director of Research in Medical Education (part-time) at a salary of $\$ 20,500$ for twelve months from \$7,500 from General Budget and \$13,000 from DHEW Grant 06D-000004-06-0 to General Budget only, effective January l, 1976. Additional General Budget funds needed are to come from Unallocated Appropriations - Instructional. Dr. Bosshart also serves as Assistant Professor (part-time), without salary, in the Departments of Psychiatry and Preventive Medicine and Community Health and as Research Associate - Health Care Sciences (part-time) at a salary of \$1,000 in School of Allied Health Sciences - Health Care Sciences. Total salary for twelve months, $\$ 21,500$. (RBC 404)
4. Change the source of funds for Dr. Harold G. Levine, Director of Research in Medical Education at a salary rate of $\$ 32,000$ for twelve months from $\$ 15,000$ from General Budget and \$17,000 from DHEW Grant 06D-000004-06-0 to General Buaget only, effective January 1, 1976. Additional General Budget funds needed are to come from Unallocated Appropriations - Instructional. Dr. Ievine also serves as Associate Professor (part-time), without salary, in the Department of Preventive Medicine and Community Health. (RBC 406)
5. Change the source of funds for Dr. Joyce L. Emery, Senior Associate (one-half time) at a salary rate of $\$ 18,000$ for twelve months, from DHEW Grant 06D-000004-06-0 to General Budget, effective January 1, 1976. Funds needed are to come from Unallocated Appropriations - Instructional. (RBC 417)
6. Appoint Dr. Barbara F. Johnson as Director, Division of Communication and Educational Support Services at a salary rate of $\$ 25,000$ for twelve months, effective January 19, 1976. Funds needed are to come from the departmental non-teaching salaries. Dr. Johnson also serves as Assistant Professor (part-time), without salary, in the Department of Preventive Medicine and Community Health. (RBC 426)

## Anatomy

7. Accept the resignation of Dr. Eugene P. Schoch, III, (Non-Tenure), Instructor at a salary rate of $\$ 12,250$ for twelve months, effective December 12, 1975. (RBC 361)

Anesthesiology
8. Change the status of Dr. Clara G. Phillips (Non-Tenure) from Instructor at a compensation of $\$ 32,600$ ( $\$ 23,400$ salary from General Budget and $\$ 9,200$ permissive augmentation from MSRDP - Anesthesiology) to Assistant Professor at a compensation of $\$ 42,000$ for twelve months ( $\$ 28,000$ salary from General Budget and $\$ 14,000$ permissive augmentation from MSRDP - Anesthesiology), effective January 1, 1976. Additional General Budget funds needed are to come from Unallocated Appropriations - Instructional. (RBC 378)

MEDICAL SCHOOL - continued
Anesthesiology - continued
9. Appoint Dr. Sidney A. Smith (Non-Tenure) as Instructor at a compensation of $\$ 39,000$ for twelve months ( $\$ 26,000$ salary from General Budget and $\$ 13,000$ permissive augmentation from MSRDP - Anesthesiology), effective January 1, 1976. General Budget funds needed are to come from Unallocated Appropriations Instructional. (RBC 397)

Family Medicine
10. Appoint Dr. John R. Hall, Jr. (Non-Tenure) as Clinical Assistant Professor (part-time), without salary, effective January 1, 1976. (RBC 385)
11. Change the source of funds for Dr. Marcel Patterson (Tenure), Professor (one-half time) at a salary of $\$ 18,200$ for twelve months, from $\$ 3,650$ from General Budget and $\$ 14,550$ from DHEW Grant 06D-000004-06-0 to General Budget only, effective January 1, 1976. Additional General Budget funds needed are to come from Unallocated Appropriations - Instructional. Dr. Patterson also serves as Professor (one-half time) at a compensation of $\$ 33,400$ ( $\$ 18,200$ salary from General Budget and $\$ 15,200$ permissive augmentation from MSRDP - Internal Medicine) in the Department of Internal Medicine. Total compensation for twelve months, $\$ 51,600$. (RBC 409)
12. Change the source of funds for Dr. John J. Delany (Non-Tenure), Assistant Professor (part-time) at a compensation of $\$ 18,180$ from $\$ 15,150$ salary from DHEW Grant 06D-000004-06-0 and \$3,030 permissive augmentation from MSRDP Family Medicine to $\$ 15,150$ from General Budget and $\$ 3,030$ permissive augmentation from MSRDP - Family Medicine, effective January l, 1976. General Budget funds needed are to come from Unallocated Appropriations - Instructional. Dr. Delany also serves as Assistant Professor (part-time), at a compensation of $\$ 18,180$ ( $\$ 15,150$ salary and $\$ 3,030$ permissive augmentation) in the Department of Obstetrics and Gynecology. Total compensation for twelve months, $\$ 36,360$. (RBC 410)
13. Change the source of funds for Dr. Alice A. $0^{\prime}$ Donell (Tenure), Assistant Professor (part-time) at a compensation of $\$ 35,160$ for twelve months, ( $\$ 29,100$ salary ( $\$ 4,200$ from General Buaget, $\$ 16,000$ from DHEW Grant 06D-000004-06-0, and $\$ 8,900$ from DHEW Grant 06D-000053-02) and $\$ 6,060$ permissive augmentation from MSRDP - Femily Medicine) to ( $\$ 29,100$ salary ( $\$ 20,200$ from General Budget and $\$ 8,900$ from DHEW Grant 06D-000053-02), and $\$ 6,060$ permissive augmentation from MSRDP - Family Medicine), effective January l, 1976. Additional General Budget funds needed are to come from Unallocated Appropriations - Instructional. Dr. O'Donell also serves as Assistant Professor (part-time), without salary, in the Departments of Pediatrics and Preventive Medicine and Community Health, and as Adjunct Assistant Professor (part-time) at a salary of \$1,200 in School of Allied Health Sciences - Health Care Sciences. Total compensation of $\$ 36,360$ unchanged. (RBC 413)
14. Change the source of funds for Dr. Joseph C. DeWitt (Non-Tenure), Assistant Professor at a compensation of $\$ 36,360$ for twelve months, from $\$ 30,300$ salary from DHEW Grant 06D-000004-06-0 and \$6,060 permissive augmentation from MSRDP Family Medicine to $\$ 30,300$ salary from General Budget and $\$ 6,060$ permissive augmentation from MSRDP - Family Medicine, effective January 1, 1976. General Budget funds needed are to come from Unallocated Appropriations - Instructional. Dr. DeWitt also serves as Assistant Professor (part-time), without salary, in the Department of Preventive Medicine and Community Health. (RBC 416)

## Human Biological Chemistry and Genetics

15. Appoint Dr. John W. Fuseler (Non-Tenure) as Teaching Associate at a salary rate of $\$ 13,536$ for twelve months, effective January 1, 1976. Funds needed are to come from Unallocated Appropriations - Instructional. (RBC 367)

AMENDMENTS TO THE 1975-1976 OPERATING BUDGET - continued

MEDICAL SCHOOL - continued
Human Biological Chemistry and Genetics - continued
16. Change the status of Dr. Charles C. Bowen, III, Visiting Scientist, from part-time, without salary, to full-time at a salary rate of $\$ 14,000$ for twelve months, effective January 1, 1976. Funds needed are to come from Unallocated Appropriations - Instructional. (RBC 390)

Internal Medicine
17. Accept the resignation of Dr. Hideto Sakai (Non-Tenure) Assistant Professor at a compensation of $\$ 27,200$ for twelve months ( $\$ 26,100$ salary from General Budget and $\$ 1,100$ permissive augmentation from MSRDP - Internal Medicine), effective January 31, 1976. (RBC 368)
18. Accept the resignation of Dr. George R. Herrmann (Non-Tenure), Ashbel Smith Professor Emeritus (part-time), without salary, effective December 4, 1975, the date of his death. (RBC 370)

## Microbiology

19. Appoint Dr. Thomas B. Albrecht (Non-Tenure) as Assistant Professor at a salary rate of $\$ 23,000$ for twelve months, effective January 1, 1976. Funds needed are to come from Unallocated Appropriations - Instructional. (RBC 387)

## Psychiatry

20. Change the status of Dr. Harvey S. Ievin (Non-Tenure), Assistant Professor, from full-time at a salary rate of $\$ 21,800$ for twelve months to part-time, without salary, effective December 1, 1975. Dr. Levin also serves as Assistant Professor (part-time), without salary, in the Department of Neurology and full-time at a salary rate of $\$ 21,800$ in the Department of Surgery. (RBC 374)

## Neurology

21. Appoint Dr. Adolph I. Sahs (Non-Tenure) as Visiting Professor at a salary rate of $\$ 36,000$ for twelve months, effective January 1, 1976. Funds needed are to come from Unallocated Appropriations - Instructional. (RBC 388)

Obstetrics and Gynecology
22. Increase the compensation of Dr. Cattamanchi R. Reddi (Non-Tenure), Assistant Professor, from $\$ 30,000$ ( $\$ 24,000$ salary and $\$ 6,000$ permissive augmentation from MSRDP - Obstetrics and Gynecology) to $\$ 31,500$ for twelve months ( $\$ 30,000$ salary ( $\$ 24,000$ from General Budget and $\$ 6,000$ from DHEW Grant 06H-000084-06-0) and $\$ 1,500$ permissive augmentation from MSRDP - Obstetrics and Gynecology), effective January 1, 1976. (RBC 373)
23. Increase the compensation of Dr. Robert E. Girtanner, Jr. (Non-Tenure), Assistant Professor, from $\$ 40,000$ ( $\$ 27,000$ salary from General Budget and $\$ 13,000$ permissive augmentation from MSRDP - Obstetrics and Gynecology) to $\$ 41,000$ for twelve months ( $\$ 27,500$ salary ( $\$ 27,000$ from General Budget, $\$ 500$ from Interagency Contract) and $\$ 13,500$ permissive augmentation from MSRDP - Obstetrics and Gynecology), effective January 1, 1976. Original budget for 1975-76 showed $\$ 13,500$ in permissive augmentation in error. (RBC 379)
24. Change the source of funds for Dr. Earl B. Dawson (Non-Tenure), Research Associate Professor at a compensation of $\$ 28,000$ for twelve months from $\$ 25,000$ salary ( $\$ 15,000$ from General Budget and $\$ 10,000$ from DHEW Grant NO1-HD-2-2728) and $\$ 3,000$ permissive augmentation from MSRDP - Obstetrics and Gynecology) to $\$ 25,000$ salary from General Budget only and $\$ 3,000$ permissive augmentation from MSRDP - Obstetrics and Gynecology, effective January 1, 1976. Additional General Budget funds needed are to come from Unallocated Appropriations Instructional. (RBC 389)

AMENDMENTS TO THE 1975-1976 OFRRATING BUDGET - continued

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MEDICAL SCHOOL - continued
Ophthalmoloey
25. Accept the resignation of Dr. Gerald R. Christensen (Non-Tenure), Clinical Assistant Professor (part-time), without salary, effective December 31, 1975. (RBC 429)
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## Pathology

26. Appoint Dr. Iver Diaz (Non-Tenure) as Instructor at a salary rate of $\$ 27,000$ for twelve months, effective January 1, 1976. Funds needed are to come from Unallocated Appropriations - Instructional. (RBC 403)

## Pediatrics

27. Accept the resignation of Dr. Robert J. Ginn (Non-Tenure), Faculty Associate at a compensation of $\$ 24,100$ for twelve months ( $\$ 22,800$ salary from Interagency Contract and $\$ 1,300$ permissive compensation from MSRDP - Pediatrics), effective December 31, 1975. (RBC 372)
28. Accept the resignation of Dr. Arr N. Boelsche (Tenure), Professor (part-time), without salary, effective December 19, 1975, the date of her death. (RBC 380)
29. Reappoint Dr. Robert J. Ginn (Non-Tenure) as Clinical Assistant Professor (part-time), without salary, effective January 1, 1976. (RBC 396)
30. Increase the salary rate of Mrs. Edna M. Courville, Associate Project Director - Social Service, from $\$ 13,003$ to $\$ 13,908$ for twelve months, effective January 1, 1976. Additional funds needed are to come from Children and Youth Project. (RBC 420)
31. Accept the resignation of Dr. Elton Dupree (Tenure), Associate Professor at a compensation of $\$ 33,200$ for twelve months, ( $\$ 29,500$ from General Budget and $\$ 3,000$ from NO1-MB-24391) and $\$ 3,700$ permissive augmentation from MSRDP Pediatrics), effective December 31, 1975. (RBC 422)

## Pharmacology

32. Accept the resignation of Dr. Alexander D. Kenny (Tenure), Professor at a salary rate of $\$ 35,000$ for twelve months, effective December 31, 1975. (RBC 377)

Physiology and Biophysics
33. Appoint $\frac{\text { Dr }}{}$. Norio Akaike (Non-Tenure) as Visiting Assistant Professor at a salary rate of $\$ 15,900$ for twelve months, effective December 1, 1975. Funds needed are to come from DHEW Grant 2R01-HL-16657-03. (RBC 369)
34. Change the source of funds for Dr. Diana L. Kunze (Non-Tenure), Assistant Professor at a salary rate of $\$ 25,000$ for twelve months, from $\$ 21,000$ from General Budget and $\$ 4,000$ from Grant Funds to General Budget only, effective January 1, 1976. Additional General Budget funds needed are to come from Unallocated Appropriations - Instructional. Dr. Kunze also serves as Adjunct Member (part-time), without salary, in The Marine Biomedical Institute. (RBC 408)
35. Appoint Dr. Gabor Szabo (Tenure) as Associate Professor at a salary rate of $\$ 30,000$ for twelve months, effective January 1, 1976. Funds needed are to come from Unallocated Appropriations - Instructional. (RBC 423)
36. Appoint Dr. Peter J. Schwartz (Non-Tenure) as Visiting Associate Professor at a salary rate of $\$ 27,000$ for twelve months for the period January 1, 1976 through February 29, 1976. Funds needed are to come from DHEW Grant 1RO1-HL-18798-01. (RBC 432)

MEDICAL SCHOOL - continued
Preventive Medicine and Community Health
37. Appoint Dr. Christian U. Oertli (Non-Tenure) as Research Scientist - Faculty at a salary rate of $\$ 18,000$ for twelve months, effective December 1, 1975. Funds needed are to come from Unallocated Appropriations - Instructional. (RBC 360)
38. Change the source of funds for Dr. Patricia A. Buffler (Non-Tenure), Assistant Professor at a salary rate of $\$ 25,000$ for twelve months from $\$ 12,500$ from General Budget and \$12,500 from DHEW Grant 5D04-AH-01109-09 to General Budget only, effective December 1, 1975. Additional General Budget funds needed are to come from Unallocated Appropriations - Instructional. Dr. Buffler also serves as Assistant Professor (part-time), without salary, in Office of the Dean of Graduate School. (RBC 376)
39. Appoint Dr. Marvin S. Legator (Tenure) as Professor at a salary rate of $\$ 38,000$ for twelve months, effective January 1, 1976. Funds needed are to come from Unallocated Appropriations - Instructional. (RBC 393)
40. Appoint Dr. Barbara F. Johnson (Non-Tenure) as Assistant Professor (part-time), without salary, effective January 19, 1976. Dr. Johnson also serves as Director, Division of Communication and Educational Support Services at a salary rate of $\$ 25,000$ in the Office of Research in Medical Education. (RBC 427)

## Radiology

41. Accept the resignation of Dr. Patrick D. Mahoney (Non-Tenure), Instructor at a compensation of $\$ 26,000$ for twelve months ( $\$ 21,000$ salary from General Budget and $\$ 5,000$ permissive augnentation from MSRDP - Radiology), effective December 31, 1975. (RBC 384)
42. Appoint Dr. Joseph G. Bertrand (Non-Tenure) as Instructor at a compensation of $\$ 30,000$ for twelve months ( $\$ 22,000$ salary from General Budget and $\$ 8,000$ permissive augmentation from MSRDP - Radiology), effective January l, 1976. General Buaget funds needed are to come from the departmental teaching salaries budget. (RBC 401)
43. Accept the resignation of Dr. Philip S. Kline, Jr. (Non-Tenure), Assistant Professor at a compensation of $\$ 38,000$ for twelve months ( $\$ 25,500$ salary from General Budget and $\$ 12,500$ permissive augmentation from MSRDP - Radiology), effective Jonuary 6, 1976. (RBC 421)
44. Accept the resignation of Dr. Harry K. Morgan (Non-Tenure), Instructor at a compensation of $\$ 22,600$ for twelve months ( $\$ 19,000$ salary from General Budget and $\$ 3,600$ permissive augmentation from MSRDP - Radiology), effective January 16, 1976. (RBC 431)

## Surgery

45. Change the status of Dr. Harvey S. Levin (Non-Tenure), Assistant Professor, from part-time, without salary, to full-time at a salary rate of $\$ 21,800$ for twelve months, effective December 1, 1975. Funds needed are to come from Unallocated Appropriations - Instructional. Dr. Levin also serves as Assistant Professor (part-time), without salary, in the Departments of Neurology and Psychiatry. (RBC 375)
46. Accept the resignation of Dr. Stanislaw J. Konturek (Non-Tenure) as Visiting Professor (part-time), without salary, effective January 30, 1976. (RBC 428)

ALUIED HEALTH SCIENCES SCHOOL
Office of the Dean of Allied Health Sciences
47. Appoint Mr. James A. Niklebust (Non-Tenure) as Instructor at a salary rate of $\$ 12,000$ for twelve months, effective December 29, 1975. Funds needed are to come from NO1-MB-24391. (RBC 371)

ALLIED HEALTH SCIENCES SCHOOL - continued
Core Curriculum - Basic and Clinical Allied Health
48. Appoint Mr. Zaragoza Gutierrez, Jr. (Non-Tenure) as Instructor at a salary rate of $\$ 15,750$ for twelve months, effective January 5, 1976. Funds needed are to come from NO1-MB-24391. (RBC 392)

Occupational Therapy
49. Appoint Mr. Robert L. Remig (Non-Tenure) as Adjunct Instructor (part-time), without salary, effective January 5, 1976. (RBC 395)
50. Appoint Miss Teresita de Jesus Ramos (Non-Tenure) as Adjunct Instructor (part-time), without salary, effective January 5, 1976. (RBC 398)
51. Appoint Miss Linda D. Veale (Non-Tenure) as Adjunct Instructor (part-time), without salary, effective January 5, 1976. (RBC 399)
52. Change the status of Mrs. Judith M. Grace (Non-Tenure) from Instructor (part-time) at a salary of $\$ 3,323$ to Assistant Professor (part-time) at a salary of $\$ 4,785$ for twelve months, effective January 15, 1976. Funds needed are to come from Unallocated Appropriations - Allied Health Sciences. Mrs. Grace also serves as Assistant Professor (part-time) at a salary of \$9,715 in School of Allied Health Sciences - Associated Health Occupations and as Associate in Occupational Therapy (part-time), without salary, in Rehabilitation Clinic Occupational Therapy. Total salary for twelve months, $\$ 14,500$. (RBC 414)

Physical Therapy
53. Appoint Mrs. Judith E. Robertson (Non-Tenure) as Adjunct Instructor (part-time), without salary, effective December 1, 1975. (RBC 364)

Allied Health Services
54. Reappoint Mrs. Dolores M. Dodd (Non-Tenure) as Instructor (part-time) at the same salary of $\$ 8,000$ for twelve months, effective January 1, 1976. Funds needed are to come from Unallocated Appropriations - Allied Health Sciences. (RBC 400)

Associated Health Occupations
55. Appoint Mrs. Judith M. Grace (Non-Tenure) as Assistant Professor (part-time) at a salary of $\$ 9,715$ for twelve months ( $\$ 4,930$ from General Buaget and \$4,785 from Galveston College Health Occupation Program), effective January 15, 1976. General Budget funds needed are to come from Unallocated Appropriations Allied Health Sciences. Mrs. Grace also serves as Assistant Professor (part-time) at a salary of $\$ 4,785$ in School of Allied Health Sciences - Occupational Therapy and as Associate in Occupational Therapy (part-time), without salary, in Rehabilitation Clinic - Occupational Therapy. Total salary for twelve months, \$14,500. (RBC 405)

UNIVERSITY HOSPITALS
Fmergency Room
56. Increase the salary rate of Mr. Jack 0. Brown, Assistant to the Director, Emergency Room, from \$11,388 to \$11, 772 for twelve months, effective February 1, 1976. Additional funds needed are to come from Unallocated Appropriations Instructional. (RBC 419)

Staff Recruitment
57. Accept the resignation of Mr. James P. Donovan, III, Assistant to the Administrator for Staff Services, at a salary rate of $\$ 15,260$ for twelve months, effective December 31, 1975. Mr. Donovan is transferring to the Office of the Director of General Services. (RBC 381)

UNIVERSITY HOSPITALS - continued
Staff Recruitment - continued
58. Appoint Miss Barbara L. Crane as Assistant to the Administrator for Staff Services at a salary rate of $\$ 13,752$ for twelve months, effective January l, 1976. (RBC 386)

Staff Development
59. Accept the resignation of Mrs. Peggy S. Neas, Director, Staff Development (part-time) at a salary of $\$ 12,030$ for twelve months, effective December 5, 1975. (RBC 357)

Nursing Service - Administration
60. Increase the salary of Miss Anna P. Rains, Director, Nursing Service (part-time), from $\$ 16,556$ to $\$ 17,640$ for twelve months, effective February 1, 1976. Additional General Budget funds needed are to come from Unallocated Appropriations -
Hospitals. Miss Rains also serves as Director, Nursing Service (part-time) at a salary of $\$ 5,880$ in Nursing Service - Sealy and Smith. Total salary for twelve months, \$23,520. (RBC 418)

## Rehabilitation Clinic - Occupational Therapy

61. Appoint Mrs. Judith M. Grace as Associate in Occupational Therapy (part-time), without salary, effective January 15, 1976. Mrs. Grace also serves as Assistant Professor (part-time) at a salary of $\$ 4,785$ in School of Allied Health Sciences Occupational Therapy and a salary of $\$ 9,715$ in School of Allied Health Sciences Associated Health Occupations. Total salary for twelve months, \$14,500. (RBC 415)

## THE MARINE BIOMEDICAL INSTITUTE <br> The Marine Biomedical Institute

62. Increase the salary rate of Mr. Demis W. Bowman, Operations Officer, from $\$ 18,031$ to $\$ 19,257$ for twelve months, effective January 1, 1976. Additional funds needed are to come from the departmental non-teaching salaries budget. (RBC 412)

## SEALY \& SMITH FOUNDATION HOSPITALS

## Staff Development

63. Accept the resignation of Mrs. Peggy S. Neas, Director, Staff Development (part-time) at a salary of $\$ 4,010$ for twelve months, effective December 5, 1975. (RBC SS 7)

Nursing Service
64. Increase the salary of Miss Anna P. Rains, Director, Nursing Service (part-time), from $\$ 5,519$ to $\$ 5,880$ for twelve months, effective February 1, 1976. Additional funds needed are to come from Unallocated Appropriations - Hospitals. Miss Rains also serves as Director (part-time) at a salary of $\$ 17,640$ in Nursing Service - Administration. Total salary for twelve months, \$23,520. (RBC SS 8)

Transfer of Funds
65. From: Unallocated Appropriations - Hospitals

To: Budget Office Classified Salaries
$\$ 6,704.00$
For: This transfer will provide funds for the creation of two (2) new positions of Clerk I, effective January 1, 1976. One is to be paid at the salary rate of $\$ 4,944$ and the other at $\$ 5,112$ for twelve months.
(RBC 383)

| AMENDMENTS TO THE 1975-1976 OPERATING BUDGET - continued |  |  |
| :---: | :---: | :---: |
| Transfer of Funds - continued |  |  |
| 66. From: Office of the Director of Student Personnel Services and Admissions |  |  |
|  | Travel | \$2,000.00 |
|  | Office of the Director of Student Personnel Services and Admissions Equipment | \$2,000.00 |
| For: | This transfer will provide funds for the purchase of heavy duty mimeograph equipment. |  |
| (RBC 424) |  |  |
| 67. From: | Unallocated Appropriations - Instructional | \$12,680.00 |
| To: | Office of Research in Medical Education Classified Salaries | \$12,680.00 |
| For : | This transfer will provide funds for the creation of a new position of Administrative Assistant I at a salary rate of $\$ 11,388$ and a Secretary II at a salary of $\$ 7,632$ for twelve months, effective January 1, 1976. |  |
| (RBC 411) |  |  |
| 68. From: | Unallocated Appropriations - Instructional | \$8,968.00 |
| To: | Institute for the Medical Humanities Classified Salaries | \$8,968.00 |
| For: (RBC 402) | This transfer will provide funds for the creation of a new position of Senior Research Associate at a salary rate of $\$ 13,452$ for twelve months, effective January 1, 1976. |  |
| 69. From: | Unallocated Appropriations - Instructional | \$24,024.00 |
|  | Family Medicine Classified Salaries | \$24,024.00 |
| For: | This transfer will provide funds for the change in source of funds for the following positions, effective January 1, 1976: <br> I) Social Work Assistant at a salary rate of $\$ 10,656$; |  |
|  | 2) Secretary III at a salary rate of \$9,024; <br> 3) Secretary II at a salary of $\$ 7,632$; <br> 4) Clerk-Typist II at a salary rate of $\$ 8,724$ for twelve months. |  |
| (RBC 407) |  |  |

AMENDMENTS TO THE 1975-1976 OPFRATING BUDGET - continued


AMENDMENTS TO THE 1975-1976 OPFRATING BUDGET - continued

| Transfer of Funds - continued |  |  |
| :---: | :---: | :---: |
| 75. From: | Unallocated Appropriations - General | \$71,000.40 |
| To: | Publications |  |
|  | Maintenance and Operation | \$11,000.40 |
| For: | This transfer will provide funds for the use in the Publications budget to publish two (2) issues of Texas Report. |  |

OTHER FISCAL ITEMS

## Schedule of Additional or Changes in <br> Funding of Construction Projects



Legend: HRB - Hospital Revenue Bond Proceeds IOP - Interest on Bond Proceeds

3185

## TheUniversityOfTexas <br> HealthScienceCenterAtHouston

[^51]Charles A. Berry, M.D., M.P.H. (713) 792-4976

Mr. E. D. Walker
Deputy Chancellor
The University of Texas System
601 Colorado Street
Austin, Texas 78701
Dear Deputy Chancellor Walker:
The docket for the March 26,1976 meeting of the Board of
Regents is submitted for your recommendation and presentation to
the Board.
I recommend approval.
Sincerely,
Charles A. Berry B. A
Charles A. Berry, M.D., M.P.H. President

Board of Regents' Meeting March 26, 1976
GIFTS: Approval is respectfully requested for the acceptance of thforing
Donor Purpose and Condition Amount

HOUSTON MEDICAL SCHOOL
$\begin{array}{ll}\text { 1. Mr. W. S. Kilroy } & \text { In support of the Houston } \\ \text { 1908 First City National } & \begin{array}{l}\text { Neurology Symposium Fund. }\end{array}\end{array}$
Bank Building
Houston, Texas 77002

GRANTS, CONTRACTS AND AGREEMENTS (NON-GOVERNMENTAL): requested for the following grants and agreements.

## HOUSTON MEDICAL SCHOOL

1. Grant by which The West Foundation, P. 0. Box 491, Houston, Texas 77001, provides $\$ 5,000$ to support research entitled, "Insulin-Like Growth Peptides". The purpose of this research is to study the effects of growth hormone on insulin and other insulin-like materials in the following three basic areas: (1) the role of insulin and insulin-like materials on the growth of the fetus;
(2) amniotic fluid growth factors; and (3) growth factors produced by cells in tissue culture. Robert N. Marshall, M.D., Department of Pediatrics, is the Principal Investigator.

## HOUSTON DENTAL BRANCH

1. Amendment to agreement between The University of Texas Health Science Center at Houston, Dental Branch, and Texas Children's Hospital whereby Texas Children's Hospital provides an additional $\$ 7,736.00$ for a new contract amount of $\$ 66,860.00$ to cover the services of one additional second-year pedodontic resident for the period January 1, 1976 through August 31, 1976. The amendment was signed on behalf of the Houston Heal th Science Center by Mr. G. C. Franklin, Vice President for Business Affairs. The majority of expenditures from this award will be made in Harris County.
2. Grant by which the International Pharmaceutical Corporation, 9233 Ward Parkway, Kansas City, Missouri, provides $\$ 3,105$ for the period January 1, 1976 through December 31, 1976 to support research entitled, "The Therapeutic Use of Oxygenating Agents in the Control of Gingivitis". In this study, the Plaque Index and Gingival Index will be scored on mesial, lingual, and facial surfaces of six teeth. Willis G. Kilgore, D.D.S., Associate Professor of Periodontics, is Principal Investigator.

## PUBLIC HEALTH SCHOOL

1. Training Grant by which the Eastman Kodak Company, 343 State Street, Rochester, New York 14650, provides a fellowship of $\$ 15,000$ for the period September 1, 1975 through August 31, 1976 for the general support, tuition, fees, books and supplies for a fellowship stipend. The recipient must be a physician pursuing a residency training program in occupational medicine and that the fellow be encouraged to spend a $4-8$ week in-plant clerkship in occupational medicine at the Eastman Kodak Company in Rochester. Marcus M. Key, M.D., Professor of Occupational Medicine, is the Program Director. The grant was made on behalf of the Eastman Kodak Company by Warren R. Lewis, Secretary, Financial Aid Committee.

GRANTS, CONTRACTS AND AGREEMENTS (STATE): Approval is respectfully requested for the following contracts.

1. Amendment to Lease US-6616-L between The University of Texas Health Science Center at Houston and the Holcombe Fannin Corporation whereby the Houston Health Science Center provides an additional \$102.85 per month for the leasing of an additional 187 square feet of office space located at 6900 Fannin, Houston, Harris County, Texas, for the period December 1, 1975 through August 31, 1977 making a total of 2,127 square feet of space at $\$ 1,169.85$ per month. The original lease was signed on behalf of the Houston Health Science Center by Mr. R. L. Anderson, Comptroller, The University of Texas System, and this amendment was approved by the State Board of Control on January 8, 1976.

## HOUSTON MEDICAL SCHOOL

1. Interagency Cooperation Contract IAC (76-77) - 0817 between The University of Texas Health Science Center at Houston, Medical School (Performing Agency) and Texas Department of Health Resources (Receiving Agency) whereby the Performing Agency shall perform specific administrative and clinical services in order to effectuate the special Supplemental Food Program for Women, Infants, and Children of the United States Department of Agriculture. The Receiving Agency will provide a total contract amount not to exceed $\$ 45,000$ for the period December 1, 1975 through June 30, 1976. The contract was signed on behalf of the Houston Health Science Center by Edward J. McLaughlin. Ph. D., Vice President for Operations and Planning and was approved by the State Board of Control on December 1, 1975.
2. Interagency Cooperation Contract IAC (76-77) - 0838 between The University of Texas Health Science Center at Houston, Medical School (Performing Agency) and Texas Department of Health Resources (Receiving Agency) whereby the Performing Agency shall participate in and perform selected areawide activities consistent with the development of a coordinated statewide perinatal education, training, and outreach program. Receiving Agency will provide a total contract amount not to exceed $\$ 11,000$ for the period January 1, 1976 through June 30 , 1976. The contract was signed on behalf of the Houston Health Science Center by Edward J. McLaugh1in, Ph.D. Vice President for Operations and Planning and was approved by the State Board of Control on January 1, 1976.

## DIVISION OF CONTINUING EDUCATION

1. Interagency Cooperation Contract IAC (76-77) - 0839 between The University of Texas Health Science Center at Houston, Division of Continuing Education (Performing Agency) and Texas Department of Health Resources (Receiving Agency) whereby the Performing Agency shall design and develop a model for a health education coordination program in Texas, coordinate program activities, and submit evaluation and progress reports. Receiving Agency will provide a total contract amount not to exceed $\$ 79,128$ for the period January 1, 1976 through August 31, 1976. The contract was signed on behalf of the Houston Health Science Center by Edward J. McLaughlin, Ph.D., Vice President for Operations and Planning and was approved by the State Board of Control on January 1, 1976.

# the university of texas health science center at houston 

GRANTS, CONTRACTS AND AGREEMENTS (FEDERAL)<br>Board of Regents' Meeting March 26, 1976

The following grants and contracts have been approved by the Chief Administrative Officer and are hereby submitted for ratification by the Board of Regents.

## HOUSTON MEDICAL SCHOOL

1. Grant 5 R01 NS-11484-03 by which the Department of Health, Education and Welfare, National Institute of Neurological and Communicative Disorders and Stroke provides $\$ 12,699$, plus applicable indirect costs, for the period February 1, 1976 through January 31, 1977 to continue research entitled, "Effect of Seizure Upon Energy Metabolism in Brain". The long-range objective of this work is to obtain essential information about brain energy metabolism which will form the basis of rational pharmacological studies aimed at modifying the effects of seizure and ameliorating the effects of the post-ictal period. The total project period is February 1, 1974 through January 31, 1977 and Robert W. Guynn, M.D., Assistant Professor in the Medical School, Department of Psychiatry, is Principal Investigator. The majority of expenditures from this award will be made in Harris County.
2. Grant 7 RO1 DA 01498-01 by which the Department of Health, Education and Welfare, National Institute of Drug Abuse, provides $\$ 48,270$ direct costs which is in error. Revised Grant 7 RO1 DA 01498-01 was issued by which the Department of Health, Education and Welfare, National Institute of Drug Abuse, provides $\$ 34,551$ direct costs, plus $\$ 13,719$ indirect costs, making a total amount of $\$ 48,270$ for the period July 1, 1975 through May 31, 1976 to support research entitled, "Physiologic Mechanisms of Narcotic Withdrawal". This research will monitor the neurophysiologic activity of parts of the brain, of the test rats, concerned with pain perception during development of morphine tolerance and during narcotic withdrawal. Philip L. Gildenberg, M.D., Ph.D., Department of Neurosurgery, is Program Director. The majority of expenditures from this award will be made in Harris County.
3. Grant 5 R01 AM 16505-04 by which the Department of Health, Education and Welfare, National Institute of Arthritis, Metabolism and Digestive Diseases provides a revised amount of $\$ 28,424$, plus applicable indirect costs, for the period September 1, 1975 through August 31, 1977 to continue support of research entitled, "GI Hormones on Growth and Metabolism of GI Mucosa". The goal of the project is to determine the role of the gastrointestinal hormones in the regulation of growth and differentiation of the gastrointestinal mucosa. The total project period is September 1, 1973 through August 31, 1977 and Leonard R. Johnson, Ph.D., Professor in the Medical School, Department of Physiology, is Principal Investigator. The majority of expenditures from this award will be made in Harris County.
4. Grant 5 RO1 HL-14340-03 by which the Department of Health, Education and Welfare, National Heart and Lung Institute provides a revised amount of $\$ 45,465$, plus applicable indirect costs, for the period December 1, 1974 through November 30 , 1976 to continue support of research entitled, "Central Registry - Aspirin in Cerebral Ischemia". The total project period is June 1 , 1972 through November 30, 1976. The objective of this research is to determine the effectiveness of the oral administration of aspirin in the reduction or prevention of transient cerebral ischemic attacks and temporary blindness. William S. Fields, M.D., Professor in the Program of Neurology, is Principal Investigator. The majority of expenditures from this award will be made in Harris County.
5. Amendment No. 5 to Grant PCM 72-01774-A05 (formerly GB-31578) by which the National Science Foundation extends the expiration date of this grant for one year without additional funds making the total project period November 15, 1971 through February 28, 1977 for the continued support of the project entitled, "Structure, Function and Assembly of Protein Aggregates in the Tryptophan Pathway". John A. DeMoss, Ph.D., Professor and Chairman of the Department of Biochemistry and Molecular Biology, is Principal Investigator. The majority of expenditures from this grant will be made in Harris County.

## HOUSTON DENTAL BRANCH

1. Modification No. 8 to Contract No. NO1-DE-12377 by which the Department of Health, Education and Welfare, National Institute of Dental Research provides for a six-month, no-cost extension to June 30,1976 in order that additional clinical data may be obtained and a more meaningful evaluation of caries preventive measures carried out in the research entitled, "Studies of the Effects of Zerostomia on the Human Oral Microflora Aimed at Developing a Model System for the Rapid Screening of Caries Control Agents". Samuel Dreizen M.D., and Lee R. Brown, Ph.D., Professors in the Dental Science Institute, are Project Directors. The modification was signed on behalf of the Houston Health Science Center by Edward J. McLaughlin, Ph.D., Vice President for Operations and Planning. The majority of expenditures from this award will be made in Harris County.

## HOUSTON GRADUATE SCHOOL OF BIOMEDICAL SCIENCES

1. Grant 2 R01 GM 20293-04 by which the Department of Health, Education and Welfare, National Institute of General Medical Sciences provides $\$ 25,000$, plus applicable indirect costs, for the period February 1, 1976 through January 31, 1977 for renewal of research entitled, "Population Dynamics of Mutant Genes". The objective of this research is to study four specific problems in connection with the theory that at the molecular level most of the new mutations occurring in a population are different from the alleles preexisting in the population and the classical concept of recurrent mutation is incorrect in the strict sense of the term. The total project period is February 1, 1976 through January 31, 1979. Masatoshi Nei, Ph.D., Professor of Population Genetics, Graduate School of Biomedical Sciences, is Principal Investigator. The majority of expenditures from this award will be made in Harris County.

## PUBLIC HEALTH SCHOOL

1. Grant 5 T01 HL 05988-04 by which the Department of Health, Education and Welfare, National Heart and Lung Institute, provides $\$ 92,663$, including indirect costs, for the period July 1, 1976 through June 30, 1977 for continued support of project entitled, "Biometry Training for Cardiovascular Research". The purpose of this program is to provide students with practical experience in biometric methods. The total project period is July 1, 1972 through June 30, 1977. C. Morton Hawkins, Sc.D., Associate Professor in the Public Health School, Department of Biometry, is Principal Investigator. The majority of expenditures from this award will be made in Harris County.

# THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON 

Amendments to the 1975-76 Operating Budget Board of Regents' Meeting March 26, 1976

Approval is respectfully requested for the following amendments to the 1975-76 Operating Budget.

## President

1. Transfer $\$ 20,000.00$ from "Administrative Charges to Trust Funds" to "Administrative Expense/President's Office". This allocation is requested to cover development expenses, official functions, and other expenses of the Health Science Center Administrative Offices. (RBC-337)

Vice President for Professional and Developmental Affairs
2. Transfer $\$ 31,757.28$ from the Health Science Center - General, Office of the Vice President for Operations and Planning (Administrative and Professional Salaries - \$20,733.28, Classified Salaries - \$6,224.00, Maintenance and Operation - $\$ 1,800.00$, and Travel - $\$ 3,000.00$ ) to Office of the Vice President for Professional and Developmental Affairs (Administrative and Professional Salaries - $\$ 20,733.28$, Classified Salaries - $\$ 6,224.00$, Maintenance and Operation - $\$ 1,800.00$, and Travel - $\$ 3,000.00$ ). This transfer is requested to provide funds for transfer of the Executive Director for Research Affairs and Secretary III positions to the Office of the Vice President for Professional and Developmental Affairs, along with operating and travel funds in support of that department effective January 1, 1976. (RBC-317)

Data Processing
3. Create the position of Accounting Clerk III in the Health Science Center General, Department of Data Processing at an annual salary rate of $\$ 8,724.00$ effective December 15, 1975. Funds needed are to come from the departmental Maintenance and Operation account. (RBC-302)

## Personnel

4. Change the status and increase the salary of Clough Shelton in the Health Science Center - General, Department of Personnel from Assistant Personnel Director at an annual rate of $\$ 20,000.00$ to Personnel Director at an annual rate of $\$ 23,000.00$ effective January 1, 1976. Funds needed are to come from departmental Administrative and Professional Salaries. (RBC-309)

Public Information
5. Transfer $\$ 6,500.00$ from the Health Science Center, Department of Public Information - Maintenance and Operation to Classified Salaries to establish a position for a Radio/TV Film Specialist at an annual salary rate of $\$ 14,868.00$ effective November 1, 1975. The balance of the funds for this position are available in departmental Classified Salaries. (RBC-323)

## Space Rental

6. Transfer $\$ 2,654.00$ from the Division of Continuing Education, Office of the Dean - Maintenance and Operation to the Health Science Center - General, Space Rental, Maintenance and Operation to provide funds for a portion of the space rental in the Houston Siteman Building for the Regional Medical Program. (RBC-311)
7. Transfer $\$ 8,877.60$ from the Graduate School of Biomedical Sciences, Department of General Instruction - Equipment to Health Science Center - Space Rental, Maintenance and Operation to provide additional space rental funds for the Human Cancer Genetics Laboratory in the Hermann Garage during fiscal year 1975-76. (RBC-364)

## HOUSTON MEDICAL SCHOOL

## INSTRUCTIONAL ADMINISTRATION

## Dean

1. Change the status and increase the salary of Robert L. Tuttle, in the Medical School, from Acting Dean and Professor of Microbiology (tenure) at an annual salary rate of $\$ 47,300.00$ to Dean and Professor of Microbiology (tenure) at an annual rate of $\$ 55,000.00$ effective December 2,1975 . Funds needed are to come from departmental Administrative and Professional Salaries ( $\$ 35,347.70$ ) and from Health Science Center Unallocated Administrative and Professional Salaries $(\$ 5,754.23)$. (RBC-338)

## ANALYTIC SCIENCES

## Anatomy

2. Appoint Richard Wiggins (non-tenure) as Assistant Professor in the Medical School, Department of Anatomy at an annual salary rate of $\$ 18,500.00$ effective February 1, 1976. Funds needed are to come from departmental Faculty Salaries. Funds in the amount of $\$ 1,208.38$ are to be transferred to Health Science Center Unallocated Faculty Salaries. (RBC-331)
3. Create the position of Anatomical Embalmer in the Medical School, Department of Anatomy at an annual salary rate of $\$ 8,160.00$ effective December 17, 1975. Funds needed are to come from departmental Faculty Salaries. (RBC-334)

## Biochemistry and Molecular Biology

4. Accept the resignation of Takashi Hirabayashi, Research Associate in the Medical School, Department of Biochemistry and Molecular Biology, at an annual salary rate of $\$ 8,500.00$ effective January 31, 1976. (RBC-307)
5. Appoint Raymond McKee as Research Fellow in the Medical School, Department of Biochemistry and Molecular Biology at an annual salary rate of $\$ 10,000.00$ effective December 15, 1975. Funds needed are to come from HEW Grant 7 R01 GM 22862-01. (RBC-310)

## Neurostructure and Function

6. Reappoint James W. Hayden as Senior Research Scientist part-time (20\%) in the Medical School, Department of Neurostructure and Function at an annual salary rate of $\$ 16,000.00$ effective January 1, 1976 through January 31, 1976. Funds needed are to come from HEW Contract No. 271-75-3067. (RBC-342)
7. Reappoint Randall Matthews (non-tenure) as Senior Research Scientist parttime ( $20 \%$ ) in the Medical School, Department of Neurostructure and Function at an annual salary rate of $\$ 16,000.00$ effective January $i$, 1976 through January 31, 1976. Funds needed are to come from HEW Contract No. 271-75-3067. (RBC-343)

## Pharmacology

8. Transfer $\$ 2,400.44$ from the Medical School, Department of Pharmacology Faculty Salaries to Classified Salaries to provide funds for temporary classified appointments during fiscal year 1975-76. (RBC-314)
9. Change the status of Elizabeth A. Gardner in the Medica? School, Department of Pharmacology from Research Associate at an annual salary rate of $\$ 7,900.00$ to Research Associate on Maternity Leave of Absence Without Pay effective October 10, 1975 through December 31, 1975. (RBC-329)
10. Reappoint and change the status of Elizabeth A. Gardner in the Medical School, Department of Pharmacology from Research Associate on Maternity Leave of Absence Without Pay to Research Associate at an annual salary rate of $\$ 7,900.00$ effective January 1, 1976. Funds needed are to come from departmental Administrative and Professional Salaries. (RBC-330)

## Physiology

11. Accept the resignation of Larry M. Schanbacher, Research Fellow in the Medical School, Department of Physiology at an annual salary rate of $\$ 10,700.00$ effective January 16, 1976. (RBC-316)
12. Increase the salary of Puthezhath Divakaran, Research Associate in the Medical School, Department of Physiology, from an annuai rate of $\$ 9,200.00$ to an annual rate of $\$ 10,208.00$ effective January 1, 1976. Additional funds needed are to come from Health Science Center - Unallocated Administrative and Professional Salaries. (RBC-332)
13. Appoint William A. Weems (non-tenure) as Assistant Professor in the Medical School, Department of Physiology at an annual salary rate of $\$ 20,000.00$ effective June 1, 1976. Funds needed are to come from departmental Faculty Salaries. Faculty Salaries in the amount of $\$ 11,000.02$ are to be transferred to Health Science Center Unallocated Faculty Salaries. (RBC-359)

## CLINICAL SCIENCES

## Anes thes iology

14. Accept the resignation of Henry R. Bradford (non-tenure) Associate Professor in the Medical School, Department of Anesthesiology at an annual total compensation rate of $\$ 54,000.00$ ( $\$ 36,000.00$ General Budget Funds and $\$ 18,000.00$ MSRDP Permissive Augmentation Funds) effective February 24, 1976. (RBC-306)

Internal Medicine - General
15. Appoint Victor R. Lavis (non-tenure) as Associate Professor in the Medical School, Department of Internal Medicine - General at an annual total compensation rate of $\$ 40,000.00$ ( $\$ 34,000.00$ General Budget Funds and $\$ 6,000.00$ Permissive Augmentation) effective March 1, 1976. Funds needed are to come from departmental Faculty Salaries $(\$ 16,999.98)$ and MSRDP - Internal Medicine Permissive Augmentation ( $\$ 3,000.00$ ). Faculty Salaries in the amount of $\$ 3,000.02$ are to be transferred to Health Science Center Unallocated Faculty Salaries. ( $\mathrm{RBC}-360$ )

## Internal Medicine - Gastrointestinal

16. Appoint Larry D. Scott (non-tenure) as Assistant Professor in the Medical School, Department of Internal Medicine - Gastrointestinal at a total compensation rate of $\$ 37,000.00$ ( $\$ 32,000.00$ General Budget Funds and $\$ 5,000.00$ Permissive Augmentation Funds) effective June 1, 1976. Funds needed are to come from departmental Faculty Salaries ( $\$ 7,999.98$ ) and MSRDP - Internal Medicine Gastrointestinal Permissive Augmentation $(\$ 1,249.98)$. Faculty Salaries in the amount of $\$ 7,666.74$ are to be transferred to Health Science Center Unallocated Faculty Salaries. (RBC-358)

## Internal Medicine - Hematology

17. Continue employment of Said A. Assaf in the Medical School, Department of Internal Medicine - Hematology at an annual salary rate of $\$ 31,088.00$ effective September 1, 1975 through January 31, 1976. Funds needed are to come from the Medical School Capitation Grant. This action is recommended for the single purpose of complying with a court order. (RBC-151)
18. Appoint Ronald S. Weinger (non-tenure) as Assistant. Professor in the Medical School, Department of Internal Medicine - Hematology at an annual total compensation rate of $\$ 33,000.00$ ( $\$ 29,000.00$ General Budget Funds and $\$ 4,000.00$ Permissive Augmentation Funds) effective July 1, 1976. Funds needed are to come from departmental Faculty Salaries $(\$ 4,833.34)$ and MSRDP - Internal Medicine - Hematology Permissive Augmentation (\$666.66). Faculty Salaries in the amount of $\$ 13,833.34$ are to be transferred to Health Science Center Unallocated Faculty Salaries. (RBC-356)
19. Continue employment of Said A. Assaf in the Medica; School, Department of Internal Medicine - Hematology at an annual salary rate of $\$ 31,088.00$ effective February 1, 1976 through February 29, 1976. Funds needed are to come from the Medical School Capitation Grant. This action is recommended for the single purpose of complying with a court order. (RBC-361)

## Obstetrics and Gynecology

20. Accept the resignation of Pamela J. Schmidt (non-tenure) Instructor parttime (19\%) in the Medical School, Department of Obstetrics and Gynecology at an annual salary rate of $\$ 16,000.00$ effective November 30,1975 . (RBC-324)

## Pathology

21. Increase the total compensation of Jannie Woo (non-tenure) Assistant Professor in the Medical School, Department of Pathology from an annual rate of $\$ 24,500.00$ (MSRDP Faculty Salaries) to an annual rate of $\$ 25,500.00(\$ 24,500.00$ MSRDP Faculty Salaries and $\$ 1,000.00$ Permissive Augmentation) effective January 1, 1976. Additional funds needed are to come from MSRDP - Pathology Permissive Augmentation. (RBC-327)
22. Accept the resignation of Mitzi Valencia, Clinical Fellow in the Medical School, Department of Pathology at an annual salary rate of $\$ 10,020.00$ effective December 31, 1975. (RBC-333)

## Radiology

23. Appoint Richard G. Lester (non-tenure) as Professor in the Medical School, Department of Radiology at an annual total compensation rate of $\$ 67,500.00$ ( $\$ 45,000.00$ MSRDP Faculty Salaries and $\$ 22,500$. 00 Permissive Augmentation) effective February 1, 1976. Funds needed are to come from MSRDP - Radiology, Faculty Salaries ( $\$ 26,250.00$ ) and MSRDP - Radiology, Permissive Augmentation ( $\$ 13,125.00$ ). (RBC-351)

## Reproductive Biology and Reproductive Endocrinology

24. Change the status of Jason M. Walther from Research Technician (Graduate Assistant) part-time ( $50 \%$ ) in the Graduate School of Biomedical Sciences, Department of General Instruction at an annual salary rate of $\$ 7,896.00$ to Teaching and Research Assistant part-time (50\%) in the Medical School, Department of Reproductive Biology and Reproductive Endocrinology at the same annual rate effective January 1, 1976. Funds needed are to come from HEW Grant 5 R01 HD 07664. (RBC-340)

Surgery - Otolaryngology
25. Transfer $\$ 1,218.00$ from Health Science Center Unallocated Appropriations Classified Salaries to the Medical School, Department of Surgery - Otolaryngology, Classified Salaries to provide funds for reclassifications during fiscal year 1975-76. (RBC-350)

## COMMUNITY HEALTH SCIENCES

## Family Practice

26. Change the status and increase the total compensation of Robert H. Barr (non-tenure) in the Medical School, Department of Family Practice from Clinical Associate Professor part-time (50\%) at an annual rate of $\$ 33,600.00$ (General Budget funds) to Associate Professor at an annual rate of $\$ 45,000.00$ ( $\$ 33,600.00$ Federal Grant funds and $\$ 11,400.00$ Permissive Augmentation funds) effective December 1, 1975. Funds needed are to come from the Medical School Capitation Grant ( $\$ 25,200.00$ ) and MSRDP - Family Practice, Permissive Augmentation $(\$ 8,550.00)$. Dr. Barr will also continue to be appointed as Clinical Associate Professor without salary and without tenure in the Medical School, Department of Obstetrics and Gynecology. (RBC-291)

## HOUSTON DENTAL BRANCH

## SCHOOL OF DENTISTRY

## General Practice

1. Increase the salary of Raymond K. Morrow (non-tenure) Associate Professor in the Dental Branch, Department of General Practice from an annual rate of $\$ 25,300.00$ to an annual rate of $\$ 27,000.00$ effective January 1, 1976. Additional funds needed are to come from Health Science Center - General Unallocated Faculty Salaries. (RBC-299)
2. Accept the resignation of Steven M. Sessom (non-tenure) Clinical Assistant Professor part-time (50\%) in the Dental Branch, Department of General Practice at an annual salary rate of $\$ 16,000.00$ effective February 5, 1976. (RBC-362)

Medicine - Endodontics
3. Accept the resignation of Douglas B. Seabury, Jr., Clinical Associate Professor part-time (10\%) in the Dental Branch, Department of Medicine Endodontics at an annual salary rate of $\$ 37,000.00$ effective September 30, 1975. (RBC-315)

Medicine - Periodontics
4. Terminate the appointment of Lewis F. Townsend (non-tenure) Associate Professor in the Dental Branch, Department of Medicine - Periodontics at an annual salary rate of $\$ 29,600.00$ effective January 5, 197ó. (Dr. Townsend is deceased.) (RBC-339)

Physiology - Pharmacology
5. Accept the resignation of Frank J. Dowd, Jr., (non-tenure) Adjunct Assistant Professor part-time ( $25 \%$ ) in the Dental Brar.ch, Department of Physiology - Pharmacology at an annual salary rate of $\$ 20,800.00$ effective December 31, 1975. (RBC-336)

## Practice Relations and Management

6. Change the status of Henry M. Sorrels (non-tenure) in the Dental Branch, Department of Practice Relations and Management from Clinical Associate Professor part-time (20\%) at an annual salary rate of $\$ 30,000.00$ to Clinical Associate Professor and Chairman part-time (50\%) at the same annual rate effective January 1, 1976. Funds needed are to come from departmental Faculty Salaries. (RBC-312)

## Preventive Dentistry - Orthodontics

7. Accept the resignation of Dona1d R. Gee (non-tenure) Clinical Assistant Professor part-time (10\%) in the Dental Branch, Department of Orthodontics at an annual salary rate of $\$ 28,000.00$ effective September 30, 1975. (RBC-305)

## Preventive Dentistry - Pedodontics

8. Change the status and increase the salary of Frank R. Faunce (non-tenure) in the Dental Branch, Department of Preventive Dentistry - Pedodontics from Clinical Assistant Professor part-time (20\%) at an annual rate of $\$ 12,000.00$ to Assistant Professor at an annual rate of $\$ 28,500.00$ effective December 1, 1975. Funds needed are to come from departmental Faculty Salaries. (RBC-292)

SCHOOL OF DENTAL HYGIENE
9. Change the status and increase the salary of Sue L. Rumsey (non-tenure) in the Dental Branch, School of Dental Hygiene from Instructor at an annual salary rate of $\$ 11,000.00$ to Assistant Professor and Clinical Coordinator at an annual rate of $\$ 13,000.00$ effective January 1, 1976. Additional funds needed are to come from departmental Faculty Salaries. (RBC-328)
10. Reappoint and change the status of Ilena B. McBurnette (tenure) in the Dental Branch, School of Dental Hygiene from Associate Professor at an annual salary rate of $\$ 14,368.00$ to Associate Professor on leave without pay for the period September 1, 1975 through September 14, 1975. (RBC-335)
11. Change the status of Ilena B. McBurnette (tenure) in the Dental Branch, School of Dental Hygiene from Associate Professor at an annual salary rate of $\$ 14,368.00$ to Associate Professor on leave without pay for the period December 18, 1975 through March 28, 1976. (RBC-355)
12. Appoint Paula H. Sharman (non-tenure) as Instructor in the Dental Branch, School of Dental Hygiene at an annual salary rate of $\$ 10,000.00$ effective February 1, 1976. Funds needed are to come from departmental Faculty Salaries. Faculty Salaries in the amount of $\$ 4,166.69$ are to be transferred to Health Science Center Unallocated Faculty Salaries. (RBC-35\%)

## HOUSTON GRADUATE SCHOOL OF BIOMEDICAL SCIENCES

## INSTRUCTION

## General Instruction

1. Transfer $\$ 1,814.20$ from the Graduate School of Biomedical Sciences, Medical Genetics Center - Faculty Salaries to the Department of General Instruction Classified Salaries to provide funds for temporary classified appointments during fiscal year 1975-76. (RBC-308)

## SCHOOL OF PUBLIC HEALTH

## INSTRUCTION

## Administrative Sciences

1. Terminate the appointment of Charles W. Boes, M.P.H., Assistant Research Community Health Planner in the School of Public Health, Department of Administrative Sciences at an annual salary rate of $\$ 18,400.00$ effective December 31, 1975. (RBC-363)

## Behavioral Sciences

2. Accept the resignation of Virginia C. Kennedy, Ph.D., (non-tenure) Assistant Professor in the School of Public Health, Department of Behavioral Sciences at an annual rate of $\$ 20,600.00$ effective January 1, 1976. (RBC-320)

## Epidemiology

3. Appoint Darwin R. Labarthe, M.D., as Professor of Epidemiology (tenure) in the School of Public Health, Department of Epidemiology at an annual salary rate of $\$ 40,000.00$ effective December 1, 1975. Funds needed are to come from departmental Faculty Salaries ( $\$ 22,500.00$ ) and Health Science Center - General, Unallocated Faculty Salaries $(\$ 7,499.97)$. (RBC-313)
4. Transfer $\$ 1,300.00$ from the School of Public Health, Department of Student Records - Classified Salaries to Epidemiology - Classified Salaries to provide funds for temporary classified appointments during fiscal year 1975-76. (RBC-325)

## Human Ecology

5. Change the status of Carl S. Hacker, Ph.D., in the School of Public Health, Department of Human Ecology from Assistant Professor (non-tenure) at an annual salary rate of $\$ 24,000.00$ to Associate Professor (tenure) at the same annual rate effective January 1, 1976. (RBC-321)
6. Appoint Ruth S. Marcondes, Dr.P.H., (non-tenure) as Visiting Associate Professor of Health Education in the School of Public Heaith, Department of Human Ecology at an annual salary rate of $\$ 25,000.00$ effective January 1, 1976 through June 30, 1976. Funds needed are to come from Administrative Sciences Faculty Salaries $(\$ 12,499.98)$. Funds in the amount of $\$ 2,250.00$ are to be transferred to Health Science Center Unallocated Faculty Salaries. (RBC-341)

## DIVISION OF CONTINUING EDUCATION

## INSTRUCTION

General Instruction

1. Create the position of Secretary II in the Division of Continuing Education, Department of General Instruction at an annual salary rate of $\$ 7,380.00$ effective November 1, 1975. Funds needed are to come from Health Science Center General, Unallocated Classified Salaries. (RBC-303)
2. Appoint Alberta Anderson as Health Educator in the Division of Continuing Education, Department of General Instruction at an annual salary rate of $\$ 14,100.00$ effective December 1, 1975. Funds needed are to come from RMPT Contract No. 75-108-0. (RBC-304)
3. Accept the resignation of Thelma L. Pierre as Health Educator in the Division of Continuing Education, Department of General instruction at an annual salary rate of $\$ 14,100.00$ effective December 31, 1975. (RBC-318)
4. Appoint Kay S. Murray as Health Educator in the Division of Continuing Education, Department of General Instruction at an annual rate of $\$ 9,336.00$ effective January 20, 1976. Funds needed are to come from RMPT/TDHR Contract No. 75-108-0. (RBC-352)
5. Change the status and increase the salary of Alberta Anderson in the Division of Continuing Education, Department of General Instruction from Health Educator at an annual rate of $\$ 14,100.00$ to Coordinator at an annual rate of $\$ 16,500.00$ effective February 1, 1976. Funds needed are to come from RMPT/TDHR Contract No. 75-108-0. (RBC-353)

## ORGANIZED ACTIVITIES RELATED TO INSTRUCTION

## MEDICAL SCHOOL ANIMAL CARE CENTER

1. Appoint Dennis F. Kohn as Director of the Animal Care Center in the Medical School Animal Care Center at an annual salary rate of $\$ 35,500.00$ and as Associate Professor and Chairman of the Department of Comparative Medicine without salary and without tenure effective January 9, 1976. Funds needed are to come from Animal Care Center, Administrative and Professional Salaries ( $\$ 21,450.01$ ) and Health Science Center - General, Unallocated Administrative and Professional Salaries ( $\$ 1,397.27$ ). (RBC-322)

## MEDICAL SCHOOL EDUCATION AND RESEARCH COMPUTER SERVICES

2. Change the status of Joe W. Snyder in the Medical School from Systems Analyst in the Department of Education and Research Computer Services at an annual salary rate of $\$ 18,804.00$ to Systems Analyst in the Department of Education and Research Computer Services at the same annual rate and Lecturer in the Department of Biomedical Commications without salary and without tenure effective October 1 , 1975. (RBC-319)

## SUMMARY OF AUXILIARY ENTERPRISES

## MEDICAL SCHOOL BOOKSTORE

1. Appoint Larry Clemens as Bookstore Manager in the Medical School Bookstore at an annual salary rate of $\$ 14,000.00$ effective November 1, 1975. Funds needed are to come from departmental Administrative and Professional Salaries. (RBC-295)

Mr. E. D. Walker
Deputy Chancellor
The University of Texas
System
601 Colorado Street
Austin, Texas 78701

## Dear Mr. Walker:

The docket for the March 26,1976 meeting of the Board of Regents
is submitted for your recommendation and presentation to the Board.
I recommend approval.
$\mathrm{FH}: \mathrm{sh}$

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO

GIFTS: Acceptance is recommended for the following gifts which have been received:

San Antonio Health Science Center
Donor

1. Mrs. Thomas A. Pressly

165 A Treasure Way
San Antonio, Texas 78209
2. Ms. Miranda Leonard

Work in the area of population Miranda Leonard Foundation control directed by Dr. Joseph c/o Garrett, Stahala \& Horger Seitchik.
Suite 1705, Commerce Bldg.
Fort Worth, Texas 76102

TRAVEL FOR FACULTY AND STAFF: The following travel is reported in accordance with Section 13.33 of Chapter III, Part Two of the Regents Rules and Regulations of the Board of Regents for government of The University of Texas system:

San Antonio Health Science Center

1. George Steven Coronado, University Police Officer, February 1, 1976 to April 16, 1976, to Austin, Texas, to attend the 22 nd Basic Training School to be held at The University of Texas System Police Academy. Funds for this trip are made available from account 614-8605-8075.
2. James V. Benedick, Medical Student MS-IV, April 12, 1976 through May 29, 1976, to Floresville, Texas, to function under the guidelines of Special Project Grant for Preceptorship Training, Grant 06-D-000025-01. Funds for this preceptee support have been made available through the before mentioned grant. Account 626-1608-9274.

GRANTS, CONTRACTS AND AGREEMENTS (NON-GOVERNMENTAL): Approval is requested for the following:

San Antonio Health Science Center
National Child Day Care Association
1200 North Capitol Street, Suite 113
Washington, D. C. 20002

1. Agreement

Evaluation of Early and Periodic Screening Diagnosis and Treatment Demonstration Project
Dr. Harold Dickson, Department of Psychiatry
\$88,326.00
October 1, 1975 - September 30, 1976
The Deafness Research Foundation
366 Madison Avenue
New York, New York 10017
Change in Grant Previously Approved:
2. Grant

Inner Ear Pathophysiology in Hypothyroidism
$\overline{\text { Dr. William L. Meyerhoff, Department of Surgery }}$
No additional funds
Extension of Time to February 29, 1976

GRANTS, CONTRACTS AND AGREEMENTS (NON-GOVERNMENTAL) (continued) :

Parke-Davis and Company
2800 Plymouth Road
Ann Arbor, Michigan 48106
3. Drug study 808-9

A Clinical Pharmacology and Local Tolerance Study of Ocular Vidarabine $-5^{\prime}$-Phosphate (CI-808) in Patients with Cataracts and Specified Ocular Disorders
Dr. Robert Poirier, Department of Surgery
\$3,385.00
No dates specified

The Robert A. Welch Foundation
2010 Bank of the Southwest Building
Houston, Texas
4. Grant AQ-465

Compact Configuration of Nucleohistone
Dr. Allan W. Rees, Department of Biochemistry
$\$ 14,000.00$
June 1, 1976 - May 31, 1977
5. Grant AQ-541

Chemical Studies on the Spatial Arrangement of Ribosomal Components
Dr. John C. Lee, Department of Biochemistry
\$15,000.00
June 1, 1976 - May 31, 1977
6. Grant $A Q-458$

Activation by Succinate of Acetokinase in Micrococcus lactilyticus
Dr. Jonathan S. Nishimura, Department of Biochemistry
\$45,000.00
June 1, 1976 - May 31, 1979
7. Grant AQ-456

Purification and Functional Characterization of Progesterone Binding Protein
Dr. William L. McGuire, Department of Medicine
\$45,000.00
June 1, 1976 - May 31, 1979

GRANTS, CONTRACTS AND AGREEMENTS (STATE): Approval is requested for the following:

San Antonio Health Science Center
The University of Texas System Cancer Center
Texas Medical Center
Houston, Texas 77025
Change in Contract Previously Approved:

1. Modification \#4 to Subcontract to Contract NO1-CN-45150

Cancer Control Radiologic Physics Subcenters
Dr. Robert G. Waggener, Department of Radiology
\$24,871.00
Extension of time to October 30, 1976

GRANTS, CONTRACTS AND AGREEMENTS (STATE) (continued):

## Texas Department of Health Resources

 Austin, Texas2. Interagency Contract (76-77)-0853

Statewide Perinatal Program
Note - Replaces RMP Contract No. 76-212J terminated December 31, 1975
Dr. Charles Gibbs, Department of Obstetrics and Gynecology
\$31,000.00
January 1, 1976 - June 30, 1976
3. Interagency Contract (76-77)-0849

Pilot Coordinated Arthritis Program
Note - Replaces RMP Contract No. 76-213C terminated December 31, 1975
Dr. Robert H. Persellin, Department of Medicine
\$14,000.00
January 1, 1976 - June 30, 1976

THE UNIVERSITY OF TEXAS
HEALTH SCIENCE CENTER AT SAN ANTONIO
FEDERAL CONTRACTS AND GRANTS
March 26, 1976 Meeting

GRANTS, CONTRACTS AND AGREEMENTS (FEDERAL): Approval is requested for the following:

San Antonio Health Science Center
Department of Health, Education and Welfare
Public Health Service

1. Research Grant 5 ROI MH25168-03

Study of Brain Metabolism Through Microwave Heating
Study of neurotransmitters and rapidly metabolized compounds
in the central nervous system of mice and rats through use of rapid microwave inactivation
Dr. William B. Stavinoha, Department of Pharmacology
February 1, 1976 - January 31, 1977
$\$ 50,216.00$
Bexar County, Texas
2. Research Grant 5 RO1 HLl2415-08

Evaluation of Left Ventricular Function
To evaluate in the conscious dog the adaptation of the left ventricle in producing a given stroke volume under a variety of laboratory stresses
Dr. Vernon S. Bishop, Department of Pharmacology
February 1, 1976 - January 31, 1977
\$53,385.00
Bexar County, Texas
3. Research Grant 5 R01 HL17783-02

Complex Carbohydrates; Structure, Function, Synthesis
Study of the biosynthesis of the oligosaccharide side chain of aorta glycoproteins
Dr. Alan D. Elbein, Department of Biochemistry
February 1, 1976 - January 31, 1977
\$21,951.00
Bexar County, Texas
Change in Grant Previously Approved:
4. Grant 5 RO1 DAOO729-02

Analysis of Pharmacologic Agents in Biologic Specimens
Dr. Jack E. Wallace, Department of Pathology
Extension of time to February 29, 1976
No additional funds
5. Research Grant 2 R01 DA 00729-03

Analysis of Pharmacologic Agents in Biologic Specimens
To develop new and innovative analytical methods for determin-
ing pharmacologically and toxicologically active compounds
in biologic specimens
Dr. Jack E. Wallace, Department of Pathology
March 1, 1976 - February 28, 1977
$\$ 42,602.00$
New Money: $\$ 41,991.00$
Bexar County, Texas

San Antonio Health Science Center

GRANTS, CONTRACTS AND AGREEMENTS (FEDERAL) (continued)
6. Contract NO1 CP 43353, Modification No. 4

Continue Development of In Vitro Methods for the Detection of Cell Mediated Immunologic Reactivity to Chemical
Carcinogens
Modification of contract to extend for one year and increase
funding to a total of $\$ 245,176.00$
Dr. Daniel E. Thor, Department of Microbiology
Extension of time to February 15, 1977
New Money: $\quad \$ 85,310.00$
Bexar County, Texas
Change in Grant Previously Approved:
7. Research Grant 3 RlO CAl2275-05Sl

Central Oncology Group
Dr. J. Bradley Aust, Department of Surgery
Extension of time to May 31, 1976
Increase Award: $\$ 6,807.00$
New Money: $\$ 1,834.00$
Bexar County, Texas

THE UNIVERSITY OF TEXAS
HEALTH SCIENCE CENTER AT SAN ANTONIO
AMENDMENTS TO THE 1975-76 OPERATING BUDGET
March 26,1976 Meeting

REQUESTS FOR BUDGET CHANGE: Approval is requested for the following:
San Antonio Health Science Center
Anesthesiology

1. Accept the resignation of Dr. William S. Gegg (non tenure) as Assistant Professor, at an annual salary rate of $\$ 28,000.00$ and an annual permissive augmentation rate of $\$ 15,800.00$, effective the close of business December 12, 1976. Transfer unused teaching salaries in the amount of $\$ 20,096.78$ to Unallocated Resident
Instruction. (RBC 203)
2. Accept the resignation of Dr. Oscar E. Ramirez (non tenure) as Assistant Professor at an annual salary rate of $\$ 30,000$ (Paid from the V.A. Contract) and at an annual permissive augmentation rate of $\$ 13,500$ (Paid from the V.A. Contract) effective the close of business October 14, 1975. (RBC 212)
3. Appoint Dr. Eduardo R. Molina-Lamas (non tenure) as Assistant Professor at an annual salary rate of $\$ 30,000$ and an annual permissive augmentation rate of $\$ 10,000$ effective January 22 , 1976. Dr. Molina-Lamas will be paid from the V. A. Contract. (RBC 231)

Medicine
4. Appoint Dr. Francisco B. Garcia (non tenure) as Clinical Instructor ( $10 \%$ time) at an annual salary rate of $\$ 29,500$ effective September 1,1975 . Funds needed for this appointment in the amount of $\$ 2,950$ will be transferred from Unallocated Resident Instruction. (RBC 197)
5. Increase the annual salary rate of Dr. Meyer D. Lifschitz (non tenure) as Assistant Professor paid $50 \%$ time from Teaching Salaries and 50\% time from a DHEW Grant from an annual rate of $\$ 32,200$ to an annual rate of $\$ 32,700$ effective January 1, 1976. Funds needed for this increase in the amount of $\$ 187.47$ will be transferred from Unallocated Resident Instruction. (RBC 198)
6. Accept the resignation of Dr. Robert C. Talley (tenure) as Freeman Heart Association Associate Professor (37.5\% time) and as staff member (62.5\% time) at the Veterans Administration Hospital effective October 10 , 1975 as shown below:

|  | Amount <br> Base Salary <br> American Heart Association <br> V. A. Salary |
| :--- | ---: |
| (Paid Direct) | $\frac{15,000}{113}$ |
| Total Salary | $\frac{22,360}{38,473}$ |
| Permissive Augmentation | $\underline{4,000}$ |
| Total Compensation | 42,473 |
| Medicine Rate | $37,100 \#$ |
| V. A. Rate | $35,782 \#$ |

Transfer unused teaching salaries in the amount of $\$ 990.33$ to Unallocated Resident Instruction. (RBC 202)
7. Accept the resignation of Dr. William S. Blumenthal (tenure) as

Associate Professor at an annual salary rate of $\$ 30,400$ and an annual permissive augmentation rate of $\$ 9,500$ effective the close of business December 31, 1975. Transfer unused teaching salaries in the amount of $\$ 20,266.68$ to Unallocated Resident Instruction. (RBC 214)
8. Change the status of Dr. Shirley A. Levine (non tenure) as Instructor paid $37.5 \%$ time by the Health Science Center and $62.5 \%$ time by the Veterans Administration to paid 100\% time by the Veterans Administration Hospital and without salary at the Health Science Center effective January 5, 1976. Dr. Levine was paid for $37.5 \%$ time at an annual salary rate of $\$ 25,300$. Transfer unused teaching salaries in the amount of $\$ 6,223.32$ to Unallocated Resident Instruction. (RBC 227)

Obstetrics and Gynecology
9. Appoint Dr. Carol G. Smith (non tenure) as Assistant Professor (without salary) effective December 1, 1975. Dr. Smith will continue to serve as Assistant Professor (non tenure) in the Department of Pharmacology ( $80 \%$ time) and in Graduate School Instruction (20\% time) at an annual salary rate of $\$ 20,400$. ( RBC 230 )
10. Accept the resignation of Dr. Bruce H. Thompson (non tenure) as Assistant Professor at an annual salary rate of $\$ 31,000$ and an annual permissive augmentation rate of $\$ 7,500$ effective the close of business January 31, 1976. Transfer unused teaching salaries in the amount of $\$ 18,083.35$ to Unallocated Resident Instruction. (RBC 242)

Physical Medicine and Rehabilitation
11. Appoint Dr. Ronal $\bar{d}$. Dennie (non tenure) as Clinical Assistant Professor (50\% time) at an annual salary rate of $\$ 34,000$ effective January 1, 1976. Funds needed for this appointment in the amount of $\$ 11,333.36$ will be transferred from Unallocated Resident Instruction. (RBC 221)

Psychiatry
12. Accept the resignation of Ms. Jennie L. Mocniak (non tenure) as Instructor at an annual salary rate of $\$ 15,400$ (Paid from a DHEW Grant) effective the close of business January 15, 1976. (RBC 218)

Radiology
13. Reappoint Dr. Wassel H. Beal (non tenure) as Assistant Professor at an annual salary rate of $\$ 22,000$ and at an annual permissive augmentation rate of $\$ 10,000$ for the period January 1,1976 through August 31,1976 . Funds needed for this reappointment in the amount of $\$ 14,666.64$ will be transferred from Unallocated Resident Instruction. (RBC 211)
14. Appoint Dr. Jose M. Pacheco-Gil (non tenure) as Instructor at an annual salary rate of $\$ 29,500$ and at an annual permissive augmentation rate of $\$ 3,500$ effective December 15, 1975. Funds needed for this appointment in the amount of $\$ 21,014.79$ will be transferred from Unallocated Resident Instruction. (RBC 222)
15. Appoint Dr. Tuhin K. Chaudhuri (tenure) as Associate Professor ( $12.5 \%$ time) and as staff member ( $87.5 \%$ time) at the Veterans Administration Hospital effective December 22 , 1975 as shown below: $\frac{\text { Amount }}{5,000}$

Base Salary
V. A. Salary

Total Salary
$\$ 5,000$
$\frac{38,937}{43,937}$
Permissive Augmentation
Total Compensation
$\frac{3,700}{47,637}$
Radiology Rate
40,000\#
V. A. Rate

Funds needed for this appointment in the amount of $\$ 3,467.78$ will be transferred from Unallocated Resident Instruction. (RBC 226)
16. Appoint Dr. Joaquin G. Mira (non tenure) as Assistant Professor at an annual salary rate of $\$ 35,500$ (Paid from the V. A. Contract) and at an annual permissive augmentation rate of $\$ 11,500$ effective January l, 1976. (RBC 232)
17. Appoint Dr. Cynthia A. Brown (non tenure) as Instructor at an annual salary rate of $\$ 28,000$ effective January 1, 1976. Funds needed for this appointment in the amount of $\$ 18,666.64$ will be transferred from Unallocated Resident Instruction. (RBC 233)
18. Appoint Dr. Robert D. Peterson (non tenure) as Instructor (62.5\% time) and as staff member ( $37.5 \%$ time) at the Veterans Administration Hospital effective January l, 1976 as shown below:

| Base Salary | $\$ \frac{\text { Amount }}{18,300}$ |
| :--- | ---: |
| V. A. Salary | $\frac{10,744}{29,044}$ |
| Total Salary | $29,280 \#$ |
| Radiology Rate | $28,650 \#$ |
| V. A. Rate |  |

Funds needed for this appointment in the amount of $\$ 12,200$ will be transferred from Unallocated Resident Instruction. (RBC 235)

## Surgery

19. Cancel the appointment due to the death of Dr. Jack R. Robison (tenure) as Associate Professor (25\% time) and as staff member (75\% time) at the Veterans Administration Hospital effective the close of business October 24, 1975 as shown below:

| Base Salary | $\$ \frac{\text { Amount }}{9,000}$ |
| :--- | ---: |
| V. A. Salary | $\frac{27,004}{36,004}$ |
| Total Salary | $\underline{7,000}$ |
| Permissive Augmentation | 33,004 |
| Total Compensation | $36,000 \#$ |
| Surgery Rate | $36,000 \#$ |

Transfer unused teaching salaries in the amount of $\$ 7,669.35$ to Unallocated Resident Instruction. (RBC 204)
20. Accept the resignation of Dr. George N. Armstrong, Jr. (non tenure) as Instructor (37.5\% time) and as staff member (62.5\% time) at the Veterans Administration Hospital effective the close of business December 31, 1975 as shown below:

| Base Salary | $\$ \frac{\text { Anount }}{11,362}$ |
| :--- | ---: |
| V. A. Salary | $\underline{18,655}$ |
| Total Salary | 30,017 |
| Surgery Rate | $30,300 \#$ |
| V. A. Rate | $29,846 \#$ |

Transfer unused teaching salaries in the amount of $\$ 7,574.68$ to Unallocated Resident Instruction. ( RBC 213)
21. Appoint Dr. William P. Fitch (non tenure) as Instructor (37.5\% time) and as staff member ( $62.5 \%$ time) at the Veterans Administration Hospital effective January 1, 1976 as shown below:

| Base Salary | $\$ \frac{\text { Amount }}{11,062}$ |
| :--- | :--- |
| V. A. Salary | $\frac{21,778}{32,840}$ |
| Total Salary | $29,500 \#$ |
| Surgery Rate | $34,845 \#$ |
| V. A. Rate |  |

Funds needed for this appointment in the amount of $\$ 7,374.72$ will be transferred from Unallocated Resident Instruction. (RBC 234)
22. Appoint Dr. Francisco J. Bajandas (non tenure) as Assistant Professor ( $37.5 \%$ time) and as staff member (62.5\% time) at the Veterans Administration Hospital effective January 1,1976 as shown below:

Amount
Base Salary
$\$ \overline{13,312}$
V. A. Salary

Total Salary
$\frac{23,003}{36,315}$
Permissive Augmentation
Total Compensation
$\frac{1,476}{37,791}$
Surgery Rate 35,500\#
V. A. Rate 36,805\#

Funds needed for this appointment in the amount of $\$ 8,874.64$ will be transferred from Unallocated Resident Instruction. (RBC 236)

## Anatomy

23. Accept the resignation of Dr. William H. Knisely (tenure) as Professor (without salary) effective the close of business October 31, 1975. Dr. Knisely also served as Vice Chancellor for Health Affairs with The University of Texas System Office. (RBC 195)
24. Appoint Dr. Rodger F. Sisca (tenure) as Professor (50\% time) at an annual salary rate of $\$ 36,000$ effective January 1, 1976. Dr. Sisca will also serve as Associate Dean for Student Affairs ( $50 \%$ time) in the Office of the Dean of the Dental School at an annual salary rate of $\$ 36,000$ and as Professor (without tenure) (without salary) in the Department of Operative Dentistry. Funds needed for this appointment in the amount of $\$ 12,000$ will be transferred from Unallocated Resident Instruction. (RBC 219)
25. Appoint Dr. George A. Gates as Professor (without salary) effective November 1, 1975. Cancel the appointment of Dr. Gates as Professor (without salary) in the Department of Physical Medicine and Rehabilitation. Dr. Gates will continue to serve as Professor (with tenure) at an annual salary rate of $\$ 30,000$ and an annual permissive augmentation rate of $\$ 21,000$ in the Department of Surgery. (RBC 229)

Biochemistry
26. Appoint Dr. Donald James Hanahan (tenure) as Professor and Chairman of Biochemistry at an annual salary rate of $\$ 44,000$ effective January 1 , 1976. Funds needed for this appointment in the amount of $\$ 29,333.36$ will be transferred from Unallocated Resident Instruction. (RBC 224)
27. Accept the resignation of Dr. Armand J. Guarino as Chairman of the Department of Biochemistry effective the close of business December 31, 1975. Dr. Guarino will continue to serve as Professor (with tenure) ( $10 \%$ time) in the Department of Biochemistry and as Dean ( $90 \%$ time) in the Office of the Dean of the Graduate School of Biomedical Sciences at an annual salary rate of $\$ 53,000$ and as Acting Dean (without salary) in the Office of the Dean of Allied Health Sciences. (RBC 225)
28. Accept the resignation of Dr. James P. Chambers (non tenure) as Assistant Instructor at an annual salary rate of $\$ 10,000$ effective the close of business January 21, 1976. Transfer unused teaching salaries in the amount of $\$ 268.83$ to Unallocated Resident Instruction. (RBC 241)

## Microbiology

29. Appoint Dr. Wendell D. Winters (tenure) as Associate Professor a: an annual salary rate of $\$ 24,800$ effective December 1, 1975. Funds needed for this appointment in the amount of $\$ 18,600.03$ will be transferred from Unallocated Resident Instruction. (RBC 196)
30. Change the effective appointment date of Dr. Wendell D. Winters (tenure) as Associate Professor at an annual salary rate of $\$ 24,800$ from December 1, 1975 to January 24, 1976. Transfer unused teaching salaries in the amount of $\$ 3,599.93$ to Unallocated Resident Instruction. (RBC 240)

Pathology
31. Appoint Dr. Ju-Chin Lee (non tenure) as Assistant Professor at an annual salary rate of $\$ 35,500$ and at an annual permissive augmentation rate of $\$ 4,500$ effective December 1 , 1975. Funds needed for this appointment in the amount of $\$ 26,624.97$ will be transferred from Unallocated Resident Instruction. (RBC 201)
32. Appoint Dr. Arthur W. Kruski (non tenure) as Assistant Professor (Paid $12.5 \%$ time from Teaching Salaries and 87.5\% time from the Southwest Texas Foundation for Research and Education Grant) at an annual salary rate of $\$ 17,500$ effective January 1,1976 . Funds needed for this appointment in the amount of $\$ 1,458.32$ will be transferred from Unallocated Resident Instruction. (RBC 220)
33. Appoint Dr. Samuel D. Balk (non tenure) as Assistant Professor
(37.5\% time) and as staff member (62.5\% time) at the Veterans

Administration Hospital effective January 1, 1976 as shown below:
Amount
Base Salary
V. A. Salary

Total Salary
Permissive Augmentation
Total Compensation
Pathology Rate
V. A. Rate
$\$ \overline{13,312}$
19,568
32,880
$\frac{5,138}{38,018}$ 35,500\# 31,309\#
Funds needed for this appointment in the amount of $\$ 8,874.96$ will be transferred from Unallocated Resident Instruction. (RBC 238)
34. Appoint Dr. Sandra H. Preissig (non tenure) as Assistant Professor ( $62.5 \%$ time) and as staff member ( $37.5 \%$ time) at the Veterans Administration Hospital effective January l, 1976 as shown below:

Amount
Base Salary
$\$ \overline{22,188}$
V. A. Salary

Total Salary
$\frac{11,741}{33,929}$
Permissive Augmentation
Total Compensation
$\frac{1,162}{35,091}$
Pathology Rate 35,500\#
V. A. Rate

31,309\#
Funds needed for this appointment in the amount of $\$ 14,792$ will be transferred from Unallocated Resident Instruction. (RBC 239)
35. Accept the resignation of Dr. Samuel J. Corman (non tenure) as Assistant Professor at an annual salary rate of $\$ 30,000$ and an annual permissive augmentation rate of $\$ 10,000$ effective the close of business January 31, 1976. Transfer unused teaching salaries in the amount of $\$ 17,500$ to Unallocated Resident Instruction. (RBC 243)

Office of the Dean of the Dental School
36. Change the title of Dr. Charles T. Smith from Acting Associate Dean for Student Affairs to Associate Dean for Academic Affairs (50\% time) at an annual salary rate of $\$ 38,000$ effective January l, 1976. Dr. Smith will continue to serve as Professor (with tenure) ( $50 \%$ time) in the Department of Community Dentistry at an annual salary rate of $\$ 38,000$. (RBC 210)
37. Cancel the appointment of Dr. Julius D. Robertson as Associate Dean for Administrative Affairs (60\% time) in the Office of the Dean of the Dental School at an annual salary rate of $\$ 42,800$ effective the close of business December 31, 1975. Dr. Robertson will serve as Professor (with tenure) (l00\% time) in the Department of Dental Anatomy at an annual salary rate of $\$ 42,800$ effective January $1,1976$. Funds needed for this change in the amount of $\$ 17,120.04$ will be transferred to Dental Anatomy Teaching Salaries from Unallocated Resident Instruction. (RBC 207)

General Practice
38. Appoint Dr. Harbans L. Bhatia (tenure) as Associate Professor at an annual salary rate of $\$ 30,000$ effective January 1,1976 .
Dr. Bhatia will also serve as Associate Professor (without tenure) (without salary) in the Department of Periodontics. Funds needed for this appointment in the amount of $\$ 20,000$ will be transferred from Unallocated Resident Instruction. (RBC 237)

## Oral Surgery

39. Change the per cent time of Dr. Lowell E. McKelvey (non tenure) as Clinical Professor from $20 \%$ time to $40 \%$ time at an annual salary rate of $\$ 39,600$ effective January 1,1976 . Funds needed for this change in the amount of $\$ 5,280$ will be transferred from Unallocated Resident Instruction. (RBC 209)

Orthodontics
40. Change the per cent time of Dr. John B. Halet (non tenure) as Clinical Associate Professor from 20\% time to $30 \%$ time at an annual salary rate of $\$ 30,000$ effective January 1 , 1976. Funds needed for this change in the amount of $\$ 2,000$ will be transferred from Unallocated Resident Instruction. (RBC 208)

Dental Out-Patient Clinic
41. Transfer, promote, and increase the annual salary rate of Mr. John S. Miller (non tenure) from the Department of General Services as Stores Clerk I at an annual salary rate of $\$ 6,900$ to the Dental Out-Patient Clinic as Dental Equipment Mechanic at an annual salary rate of $\$ 9,336$ effective January $1,1976 . \quad$ (RBC 206)

Prosthodontics
42. Appoint Dr. Harry Eugene Mayo (non tenure) as Clinical Associate Professor ( $20 \%$ time) at an annual salary rate of $\$ 28,000$ effective January 1, 1976. Funds needed for this appointment in the amount of $\$ 3,733.36$ will be transferred from Unallocated Resident Instruction. (RBC 223)

Educational Communications
43. Accept the resignation of Mr. Lewis W. Koster (non tenure) as Coordinator of Photographic Services at an annual salary rate of $\$ 21,200$ effective the close of business January 31, 1976. (RBC 217)

## Library

44. Appoint Ms. Evelyn M. Olivier (non tenure) as Interlibrary Loan Librarian at an annual salary rate of $\$ 11,000$ effective January $1,1976$. (RBC 228)

AMENDMENTS TO THE 1975-76 OPERATING BUDGET (Continued)

## TRANSFER OF FUNDS

| 1. | Amount of Adjustment (Bioengineering Services) |  | \$17,794.00 |
| :---: | :---: | :---: | :---: |
| To: |  | Salaries | \$ 576.00 |
|  |  | Staff Benefits | 2,218.00 |
|  |  | Maintenance, Operation and Equipment | 4,000.00 |
|  |  | Purchases for Resale | 11,000.00 |
| From: |  | Sales and Services | \$15,520.00 |
|  |  | Unallocated | 2,274.00 |
| For: |  | To increase original estimated income to ac as a result of an unanticipated sales volum and to budget the same as expenditures need to meet that sales volume. <br> (RBC 199) |  |
|  | Amount of Transfer (Educational Communications) |  | \$43,393.93 |
|  | To: | Equipment | \$28,000.00 |
|  |  | Salaries | 10,000.00 |
|  |  | Unallocated | 5,393.93 |
|  | From: | Balance Forward | \$43,393.93 |
| For: |  | To rebudget balance forward for the purchas of an additional print shop duplicator and cover the cost of hiring an individual to operate the same. <br> (RBC 200) |  |


| Amount of Transfer (Various) |  | \$294,051.45 |
| :---: | :---: | :---: |
| To: | Business Manager - Administrative and Professional Salaries | \$ 12,916.66 |
|  | Director of Procedures and Audits Classified Salaries | 216.00 |
|  | Payroll - Classified Salaries | 5,000.00 |
|  | Payroll - Wages | 1,200.00 |
|  | Personnel - Classified Salaries | 1,838.60 |
|  | General Services - Classified Salaries | 5,800.00 |
|  | General Services - Maintenance and Operation | 2,750.00 |
|  | Dean of the Medical School - Administrative and Professional Salaries | 18,470.80 |
|  | Anesthesiology - Classified Salaries | 113,560.00 |
|  | Family Practice - Maintenance and Operation | 7,000.00 |
|  | Psychiatry - Classified Salaries | 24,180.00 |
|  | Surgery-Classified Salaries | 54,708.98 |
|  | Surgery - Wages | 1,000.00 |
|  | Pathology - Classified Salaries | 16,648.61 |
|  | Physiology - Classified Salaries | 1,702.43 |
|  | Community Dentistry - Classified Salaries | 8,763.77 |
|  | Orthodontics - Classified Salaries | 321.60 |
|  | Pedodontics - Wages | 4,800.00 |
|  | Pedodontics - Maintenance and Operation | 3.000 .00 |
|  | Multidiscipline Teaching Laboratories Classified Salaries | 374.00 |
|  | Dental Clinic Anesthesiology Service Equipment | 6,800.00 |
|  | Physical Plant Utilities - Wages | 3,000.00 |
| From: | Unallocated General Administration | \$ 21,171.26 |
|  | Unallocated Resident Instruction | 269,880.19 |
|  | Physical Plant Building Maintenance - |  |
|  | Classified Salaries | 3,000.00 |

For: This transfer of funds is to cover (1) New classified positions, merit increases for selected classified employees, and temporary changes of funding for several classified employees; (2) Additional maintenance and operation costs for projects not previously budgeted; and (3) Additional equipment purchases necessary for the Dental Clinic Anesthesiology Service. (RBC 205)

# THE UNIVERSITY OF TEXAS SYSTEM CANCER CENTER 

Texas Medical Center Houston. Texas 77025
R. Lee Clark, M.D. President

February 27, 1976

Mr. E. D. Walker
Deputy Chancellor
The University of Texas System
601 Colorado
Austin, Texas 78701
Dear Mr. Walker:
The docket for the March 26, 1976 meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.

Sincerely yours,


RLC: dem

THE UNIVERSITY OF TEXAS SYSTEM CANCER CENTER
DOCKET
BOARD OF REGENTS MEETING MARCH 26, 1976

GIFTS: The following gifts have been received and are submitted for formal approval of the Board of Regents.

## Donor

1. *Mr. Max E. Banks

Baker \& Taylor Drilling Company
712 First National Bank Bldg.
Amarillo, Texas 79101
2. *Bodcaw Company

Mr. James D. Heldt,
President
1300 Mercantile Dallas
Bldg.
Dallas, Texas 75201
3. The Brown Foundation, Incorporated
Mr. Meritt Warner, Executive Administrator P. O. Box 13646

Houston, Texas 77019
4. Mr. Joe Brown, President
Brown Oil Tools, Inc.
P. O. Box 19236

Houston, Texas 77024
5. Cook Incorporated

Mr. William A. Cook,
President
George Alfred Cook
Memorial Fund
P. 0. Box 489

Bloomington, Indiana
47401
6. *Ms. Hannah Seeger Davis
5356 Drane Drive Dallas, Texas 75209
7. Mr. R. P. Doherty, Jr. P. 0. Box 2004

Houston, Texas 77001

Purpose and Explanation Amount
Expansion of M. D. Anderson $\$ 25,000.00$ Hospital

Expansion of M. D. Anderson $\$ 25,000.00$ Hospital

Expansion of M. D. Anderson \$295,673.03 Hospital. Final payment on $\$ 1,500,000.00$ Pledge. Cash $\$ 13,125.00$ and $\$ 282,548.03$ proceeds from Sale of Stock.

Expansion of M. D. Anderson
$\$ 5,000.00$ Hospital. First payment on Pledge of $\$ 25,000.00$.

For Research in Diagnostic $\$ 10,000.00$ Radiology

Expansion of M. D. Anderson \$5,000.00 Hospital

Expansion of M. D. Anderson $\$ 5,000.00$

The University of Texas System Cancer Center Regents Meeting March 26, 1976-Gifts (Cont'd)
8. First City National

Bank
Mr. Eugene F. Oncken, Vice President
P. O. Box 2557

Houston, Texas 77001
9. The Paul \& Mary Haas Foundation
Mr. Paul R. Haas P. 0. Box 779

Corpus Christi, Texas 78403
10. Estate of Beulah B. Harding
Mr. Roy B. Neisler Route 3, Box 342 Fort Smith, Arkansas 72901
11. Mr. B. Calhoun Hipp \% Liberty Life Insurance Company
P. 0. Box 789 Greenville, South Carolina 29602
12. Houston Endowment, Inc. Mr. J. H. Creekmore, Trustee
P. O. Box 52338

Houston, Texas 77052
13. *Mr. R. L. Kesseler Dow Chemical U.S.A. Texas Division Freeport, Texas 77541
14. *Mead Johnson and Company
Evansville, Indiana 47721
15. Mr. Robert Legendre Janssen Research and Development, Inc. 501 George Street New Brunswick, New Jersey 08903
16. Pennzoil Company Mr. Hunter L. Martin, Jr., Vice President 900 Southwest Tower Houston, Texas 77002

Expansion of M. D. Anderson
Hospital. Payment on
Pledge of $\$ 50,000.00$

Expansion of M. D. Anderson Hospital

For use in Therapeutic Research

Expansion of M. D. Anderson $\$ 5,563.85$ Hospital

Expansion of M. D. Anderson $\$ 250,000.00$ Hospital. Final payment on Pledge of $\$ 500,000.00$

Expansion of M. D. Anderson $\$ 5,000.00$ Hospital

For use by the Develop- $\$ 7,500.00$ mental Therapeutics Dept.

For use in Immunotherapy
\$ 8,000.00
Research

Expansion of M. D. Anderson
\$ 5,000.00

The University of Texas System Cancer Center Regents Meeting March 26, 1976-Gifts (Cont'd)
17. *Dr. Alberto Barrera

Associate Director Pfizer Central Research Eastern Point Road Groton, Connecticut 06340
18. The Proler Foundation

Izzie Proler
P. 0. Box 286

Houston, Texas 77001
19. *Mr. and Mrs. Dudley C. Sharp

109 North Post Oak
Lane
Houston, Texas 77024
20. Houston Lighting \& Power Company
Mr. W. B. Thornton, Consultant
Land \& Right of Way Department
P. O. Box 1700

Houston, Texas 77001
21. *Mr. J. A. Whittenburg, III
P. O. Box 2411

Amarillo, Texas 79105
22. Mr. J. A. Whittenburg, Jr.
Box 2411
Amarillo, Texas 79105
23. Mrs. Jean Owings

The Towers, Apt. 32-G
Waldorf Astoria Hotel
Park Avenue and
50th Street
New York, New York
10022

For use by the Develop-
\$ 6,500.00
mental Therapeutics Dept.

Expansion of M. D. Anderson
\$ 5,000.00
Hospital. First payment on Pledge of $\$ 10,000.00$

Expansion of M. D. Anderson \$ 18,339.62
Hospital. Proceeds from sale of 700 shares Common Stock TRW, Inc. Payment on Pledge of \$ 25,000.00

Expansion of M. D. Anderson
\$ 14,931.78
Hospital. Final payment on Pledge of $\$ 25,000.00$

Expansion of M. D. Anderson $\$ 5,000.00$ Hospital

Expansion of M. D. Anderson \$ 8,000.00 Hospital

Cancer Research
Steinway Grand Piano, Cadillac Automobile, Paintings and other items of property valued at $\$ 21,652.50$

The University of Texas System Cancer Center - Docket Board of Regents Meeting March 26, 1976

## BUSINESS AGREEMENTS

The following agreements have been negotiated by the Business Manager and have been approved by the Deputy Chancellor. I recommend your approval and ratification of signatures.

1. Lease Agreement between Center Pavilion Hospital, Inc., Lessor and The University of Texas System Cancer Center, Lessee for 2,800 square feet of space located in Houston, Texas in the Center Pavilion Building at 1700 Holcombe Blvd. The period of this lease shall be from February 1, 1976 through January 31, 1978. The cost of this space is $\$ .55$ per square foot per month for a total of $\$ 1,540.00$ per month to be paid from Federal Grant funds.
2. Lease Agreement between Center Pavilion Hospital, Inc., Lessor and The University of Texas System Cancer Center, Lessee for 150 square feet of space located in Houston, Texas in the Center Pavilion Building at 1700 Holcombe Blvd. The period of this lease shall be from January 16, 1976 through December 31, 1977. The cost of this space is $\$ .51$ per square foot per month for a total of $\$ 76.50$ per month to be paid from Federal Grant funds.
3. Amendment to existing Lease Agreement between Holcombe-Fannin Corporation, Lessor and The University of Texas System Cancer Center, Lessee to provide an additional 367 square feet of space located in Houston, Texas in the Houston Siteman Building at 6900 Fannin Street. The period of this amended lease shall be from February 1, 1976 through July 31, 1977. Source of funds for rental payment are Federal Contract funds.
4. Agreement between The University of Texas M. D. Anderson Hospital and Tumor Institute and the International Business Machines Corporation for the joint evaluation of an experimental blood processing machine known as the IBM Apheresor for a period of approximately one year. This evaluation will be performed in the Department of Developmental Therapeutics of M. D. Anderson Hospital. This department presently uses several Blood Cell Circulator machines previously developed by IBM and is interested in evaluation of the improved developments in blood processing that have been included in the Apheresor. IBM will be responsible for all cost of transporting and installation of the Apheresor in M. D. Anderson Hospital and will provide processing set assemblies for use with the machine during the period of evaluation. The agreement also provides that IBM will provide funds in an amount not to exceed $\$ 24,000.00$ for costs relating to the evaluation.

## BUSINESS CONTRACT

The following interagency contract has been negotiated by the Vice President for Business and Hospital Affairs and has been approved by the Deputy Chancellor and the State Board of Control. I recommend your approval and ratification of signatures.

1. Interagency Contract NO 1 AC (76-77) - 847, between The University of Texas System Cancer Center, Performing Agency, and the Kerrville State Hospital of the Texas Department of Mental Health and Mental Retardation, Receiving Agency, whereby the Performing Agency will provide for the sale of video tapes, concerning medical treatment to the Receiving Agency at a cost not to exceed $\$ 600.00$ for the period of January 1, 1976 through August 31, 1976.
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THE UNIVERSITY OF TEXAS SYSTEM CANCER CENTER GRANTS AND CONTRACTS (NON-GOVERNMENTAL) BOARD OF REGENTS MEETING MARCH 26, 1976
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The following Grants and Contracts have been awarded and are submitted for formal approval of the Board of Regents.
M. D. Anderson

| 1. Agency: | National Science Foundation |
| :---: | :---: |
| Proposal/Grant No.: | ENV76-02003 |
| Project Title: | Mammalian Screening Tests for Mutagenic Chemicals and Chromosome Instabilities |
| Principal Investigator: | T. C. Hsu, Ph.D. |
| New Funds: | \$ 68,100.00 |
| Grant Period: | January 1, 1976 through June 30, 1977 |
| Description: | To explore the possibilities of using cytogenetic characteristics to measure the effects of environmental mutagens on the genetic system of mammals (including human) and the intrinsic genetic instability of different individuals within a population. |
| County of Expenditure: | Harris |
| 2. Agency: | American Cancer Society, Inc. |
| Grant No. : | R-80 |
| Project Title: | The Pharmacology of Continuous ara-C Administration in Leukemia Patients |
| Principal Investigator: | Dah Hsi Wang Ho, Ph.D. |
| New Funds: | None |
| Total Project Period: | January 1, 1975 through December 31, 1976 |
| Description: | Extension of time without additional funds. |
| County of Expenditure: | Harris |

The University of Texas System Cancer Center Board of Regents Meeting March 26, 1976
Grants and Contracts (Non-Governmental) Cont'd
3. Agency:

Contract No.:
Project Title:

Principal Investigator:
New Funds:
Period of Performance:
Description:

County of Expenditure:
4. Agency:

Grant No.:
Project Title:
Principal Investigator:
New Funds:
Period of Performance:
Description:
County of Expenditure:
5. Agency:

Grant No.:
Project Title:

Principal Investigator:
New Funds:
Period of Performance
Description:
County of Expenditure:

University of Kansas Medical Center Southwest Oncology Group

167
Subcontract with Southwest Oncology Group Operations Office - Kansas City, Kansas

Lillian M. Fuller, M. D.
\$ 9,300.00
July 1, 1975 through December 31, 1975
Contract agreement by and between the M. D. Anderson Hospital and Tumor Institute University of Texas at Houston and the University of Kansas Medical Center for the Southwest Oncology Group.

Harris

The Robert A. Welch Foundation
G-441 Renewal
In Vitro Interactions between Bleomycin and DNA
Charles W. Haidle, Ph.D.
\$45,000.00
June 1, 1976 through May 31, 1979
To continue research project
Harris

The Robert A. Welch Foundation
G-487 Renewal
Mammalian Enzymes Converting N-Hydroxy-2Acetylaminofluorene to a Mutagenic Derivative

James N. Baptist, Ph.D.
$\$ 45,000.00$
June 1, 1976 through May 31, 1979
To continue research project
Harris

The University of Texas System Cancer Center Board of Regents Meeting March 26, 1976
Grants and Contracts (Non-Governmental) Cont'd
6. Agency:

Grant No.:
Project Title:

Principal Investigator:
New Funds:
Period of Performance:
Description:
County of Expenditure:
7. Agency:

Grant No.:
Project Title:

Principal Investigator:
New Funds:
Period of Performance:
Description:
County of Expenditure:
8. Agency:

Grant No.:
Project Title:
Principal Investigator:
New Funds:
Period of Performance:
Description:
County of Expenditure:

The Robert A. Welch Foundation
G-429 Renewal
The Biochemistry, Chemistry, Chemical Structure and Function of Mengovirus Ribonucleic Acids

Ralph Bernard Arlinghaus, Ph.D.
\$ 45,000.00
June 1, 1976 through May 31, 1979
To continue research project.
Harris

The Robert A. Welch Foundation
G-120 Renewal
The Associations of Polymerases and Ligases in DNA Biosynthesis Mammalian Cells
N. Burr Furlong, Ph.D.
\$ 54,000.00
June 1, 1976 through May 31, 1979
To continue research project.
Harris

The Robert A. Welch Foundation
G-147 Renewal
The Chemistry of Lutropin
Darrell N. Ward, Ph.D.
\$ $54,000.00$
June 1, 1976 through May 31, 1979
To continue research project.
Harris

The University of Texas System Cancer Center
Board of Regents Meeting March 26, 1976
Grants and Contracts (Non-Governmental) Cont'd

| 9. Agency: | The Robert A. Welch Foundation |
| :--- | :--- |
| Grant No.: | G-267 Renewal |
| Project Title: | Biosynthesis of RNA |
| Principal Investigator: | Grady F. Saunders, Ph.D. |
| New Funds: | $\$ 18,000.00$ |
| Period of Performance: | June 1, 1976 through May 31, 1977 |
| Description: | To continue research project. |
| County of Expenditure: | Harris |

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THE UNIVERSITY OF TEXAS SYSTEM CANCER CENTER
            GRANTS AND CONTRACTS (FEDERAL)
BOARD OF REGENTS MEETING MARCH 26, 1976
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The following Grants and Contracts have been awarded and are submitted for formal approval of the Board of Regents.
M. D. Anderson

1. Agency:

Grant No.:
Project Title:
Principal Investigator:
New Funds:
Current Budget Period:
Total Project Period:
Description:

County of Expenditure:
2. Agency:

Grant No.:

Project Title:
Principal Investigator:
New Funds:
Current Budget Period:
Total Project Period:
Description:
County of Expenditure:

Department of Health, Education, and Welfare Division of Cancer Treatment National Cancer Institute

5 R10 CA10379-08 CCI
Southwest Oncology Group
Eugene M. McKelvey, M. D.
\$ 62,343.00
January 1, 1976 through December 31, 1976
January 1, 1975 through December 31, 1977
For continuation of research of this grant of which the major objective is the improvement of therapy for patients with metastatic cancer and lymphoma.

Harris

Department of Health, Education, and Welfare Division of Cancer Treatment National Cancer Institute

5 R10 CA12014-07 CCI
Southwest Oncology Group - Statistical Group
Edmund A. Gehan, Ph.D.
\$258,539.00
January 1, 1976 through December 31, 1976
January 1, 1975 through December 31, 1977
Support for the continuation of Research Project Harris

The University of Texas System Cancer Center
Board of Regents Meeting March 26, 1976
Grants and Contracts (Federal) Cont'd

| 3. Agency: | Department of Health, Education, and Welfare Division of Cancer Research Resources and Centers National Cancer Institute |
| :---: | :---: |
| Grant No.: | 5 R01 CA12687-05 PTHA |
| Project Title: | Cytological Studies in Human Leukemia |
| Principal Investigator: | Jose M. Trujillo, M. D. |
| New Funds: | \$ 94,741.00 |
| Current Budget Period: | January 1, 1976 through December 31, 1976 |
| Total Project Period: | January 1, 1975 through December 31, 1979 |
| Description: | To continue and expand the cytological studies of the leukemic patient. |
| County of Expenditure: | Harris |
| 4. Agency: | Department of Health, Education, and Welfare National Institute of Arthritis, Metabolism and Digestive Diseases |
| Grant No.: | 2 R01 AM09801-11 END |
| Project Title: | Chemistry of Luteinizing and Related Hormones |
| Principal Investigator: | Darrell N. Ward, Ph. D. |
| New Funds: | \$ 37,991.00 (Revised Award of \$ 75,982.00) |
| Current Budget Period: | September 1, 1975 through August 31, 1976 |
| Total Project Period: | September 1, 1975 through August 31, 1980 |
| Description: | The continuation of a study of the chemistry of luteinizing hormone (LH). |
| County of Expenditure: | Harris |
| 5. Agency: | Department of Health, Education, and Welfare Division of Cancer Research Resources and Centers National Cancer Institute |
| Grant No. : | 5 R01 CA16781-02 PTHB |
| Project Title: | Relatedness of RNA Tumor Viruses and Human Neoplasia |
| Principal Investigator: | James L. East, Ph.D. |
| New Funds: | \$ 44,574.00 |
| Current Budget Period: | November 1, 1975 through October 31, 1976 |


| The University of Texas System Board of Regents Meeting March Grants and Contracts (Federal) | $\begin{aligned} & \text { Cancer Center } \\ & 26,1976 \\ & \text { Cont'd } \end{aligned}$ |
| :---: | :---: |
| Total Project Period: | November 1, 1974 through October 31, 1977 |
| Description: | To measure nucleotide sequence relationships of manmalian RNA tumor viruses and to search for RNA tumor virus-related nucleotide sequence in human neoplastic cells using molecular hybridization techniques. |
| County of Expenditure: | Harris |
| 6. Agency: | Department of Health, Education, and Welfare National Cancer Institute |
| Contract No.: | N01-CM-43801, Modification No. 6 |
| Project Title: | Phase I Studies of New Anti-Cancer Agents |
| Principal Investigator: | Gerald P. Bodey, M. D. |
| New Funds: | None |
| Period of Performance: | June 24, 1974 through December 23, 1976 |
| Description: | To amend the Project Officer provision to reflect a new Assistant Project Officer. |
| County of Expenditure: | Harris |
| 7. Agency: | Department of Health, Education, and Welfare National Cancer Institute |
| Contract No.: | N01-CM-57042, Modification No. 2 |
| Project Title: | Phase II \& III Studies in Patients with Solid Disseminated Tumors |
| Principal Investigator: | Gerald P. Bodey, M. D. |
| New Funds: | None |
| Period of Performance: | June 30, 1975 through June 29, 1980 |
| Description: | To amend Project Officer provision to reflect a new Assistant Project Officer. |
| County of Expenditure: | Harris |
| 8. Agency: | Department of Health, Education, and Welfare National Cancer Institute |
| Contract No.: | N01-CM-33737, Modification No. 9 |
| Project Title: | Therapy of Patients with Bronchogenic Carcinoma |

The University of TExas System Cancer Center Board of Regents Meeting March 26, 1976
Grants and Contracts (Federal) Cont'd

| Principal Investigator: | Clifton F. Mountain, M. D. |
| :--- | :--- |
| New Funds: | None |
| Period of Performance: | April 2, 1973 through March 31, 1976 |
| Description: | To amend Project Officer provision to reflect a <br> new Assistant Project Officer |
| County of Expenditure: | Harris |

9. Agency: Department of Health, Education, and Welfare Division of Cancer Research Resources and Centers National Cancer Institute

Grant No.:
5 R26 CA15107-02 SRC
Project Title:
Principal Investigator:
New Funds:
Current Budget Period:
Total Project Period:
Description:
Chemotherapy For National Prostatic Cancer Project
Douglas E. Johnson, M. D.
$\$ 98,818.00$
June 1, 1974 through May 31, 1976
June 1, 1973 through May 31, 1976
For continuation of research project to conclude the current evaluation of the investigation of cyclophosphamide and 5-fluoroaracil and initiate the second part of the study evaluating the efficacy of Estraycst and Streptozotocin in advanced prostatic carcinoma.

County of Expenditure: Harris
10. Agency:

Grant No.:
Project Title:
Principal Investigator:
New Funds:
Current Budget Period:
Total Project Period:
Description:
Department of Health, Education, and Welfare Division of Cancer Research Resources and Centers National Cancer Institute

5 R01 CAll138-08 SSS
The Radiobiology of Normal Tissues
H. Rodney Withers, M. D.
$\$ 56,826.00$
January 1, 1976 through December 31, 1976
January 1, 1974 through December 31, 1978
To continue Research into the radiation response of normal tissues.

| The University of Texas Sys Board of Regents Meeting Ma Grants and Contracts (Feder | $\begin{aligned} & \text { Cancer Center } \\ & 26,1976 \\ & \text { Cont'd } \end{aligned}$ |
| :---: | :---: |
| County of Expenditure: | Harris |
| 11. Agency: | Department of Health, Education, and Welfare Division of Cancer Research Resources and Centers National Cancer Institute |
| Grant No.: | 5 R26 CA 15969-03 SRC |
| Project Title: | Hydrocarbon Metabolizing Enzymes and Colon Cancer |
| Principal Investigator: | Charles R. Shaw, M.D. |
| New Funds: | \$ 31,339.00 |
| Current Budget Period: | January 1, 1976 through December 31, 1976 |
| Total Project Period: | January 1, 1974 through December 31, 1976 |
| Description: | For the continuation of this research project. |
| County of Expenditure: | Harris |
| 12. Agency: | Department of Health, Education, and Welfare Carcinogenesis Contracts Section National Cancer Institute |
| Contract No.: | N01 CP 55604, Modification No. 3 |
| Project Title: | Studies of Microsomal Enzyme Systems Metabolizing Polycyclic Hydrocarbons in Experimental Animals and Humans |
| Principal Investigator: | Charles R. Shaw, M.D. |
| New Funds: | \$75,000.00 |
| Basic Contract: | \$ 95,400.00 |
| Total Estimated Cost: | \$170,400.00 |
| Period of Modification: | November 1, 1975 through September 30, 1976 |
| Period of Performance: | August 15, 1974 through September 30, 1976 |
| Description: | For the continuation of the study of aryl hydrocarbon hydroxylase (AHH) in cultured human lymphocytes. |
| County of Expenditure: | Harris |



| The University of Texas Sys Board of Regents Meeting Mar Grants and Contracts (Federal) | $\begin{aligned} & \text { Cancer Center } \\ & 26,1976 \\ & \text { Cont'd } \end{aligned}$ |
| :---: | :---: |
| Principal Investigator: | Ralph B. Arlinghaus, Ph.D. |
| New Funds: | \$277,426.00 |
| Period of Performance: | January 1, 1976 through December 31, 1978 |
| Description: | To prepare specific antiserum to murine RNA tumor virus-induced transforming protein(s) for the purpose of studying the molecular mechanism of transformation. |
| County of Expenditure: | Harris |
| 16. Agency: | Department of Health, Education, and Welfare Center for Disease Control |
| Contract No.: | 200-76-0607 |
| Project Title: | Health and Smoking Education Program for HighRisk Groups Exposed to Asbestos |
| Principal Investigator: | Vincent F. Guinee, M. D. |
| New Funds: | \$ 76,451.00 |
| Period of Performance: | December 29, 1975 through December 28, 1976 |
| Description: | To develop techniques and approaches (1) to alter behavioral patterns of cigarette smoking and induce smoking cessation and (2) to promote through educational programs sound individual health practices. |
| County of Expenditure: | Harris |

## THE UNIVERSITY OF TEXAS SYSTEM CANCER CENTER

AMENDMENTS TO THE 1975-76 OPERATING BUDGET
BOARD OF REGENTS MEETING MARCH 26, 1976

## General Administration

Office of the Director of Extramural Programs

## 1. Appointment

Robert J. Miller, Other Staff
Assistant to the Program Director
\$20,000.00 per annum, Grant 1 R18-CA-16413
Effective January 19, 1976
Available Grant Funds
RBC 158 revised
The Tumor Institute

## Medical Staff

Medicine
2. Appointment

James E. Seabold, M.D., Without Tenure
Assistant Internist and Assistant Professor of Medicine
$\$ 25,000.00$ per annum, General Funds and
$\$ 6,000.00$ per annum, Permissive Augmentation - Physicians Referral Service
( $\$ 31,000.00$ total compensation)
Effective December 15, 1975
Reserve for Professional Salaries and
Physicians Referral Service Reserve for Augmentation Account
RBC 148
3. Change in Title, Source of Funds and Increase in Salary

Liam E. Boyle, M.D., Without Tenure
From: Faculty Associate in Medicine - Junior Staff
To: Assistant Internist and Instructor in Medicine - Senior Staff
From: $\$ 20,000.00$ per annum, PRS-Faculty Associate Account
To: $\$ 24,000.00$ per annum, General Funds and
$\$ 4,000.00$ per annum, Permissive Augmentation - Physicians Referral Service
( $\$ 48,000.00$ total compensation)
Effective January 1, 1976
Additional duties and responsibilities were assumed.
Reserve for Professional Salaries and
Physicians Referral Service Reserve for Augmentation Account
RBC 156
4. Appointment

Gary L. Nicholson, M.D., Without Tenure
To: Faculty Associate in Medicine
$\$ 20,000.00$ per annum, PRS-Faculty Associate Fund
Effective January 1, 1976
Physicians Referral Service - Faculty Associate Fund RBC 157

Pathology
5. Appointment

William D. Clark, M.D., Without Tenure
Faculty Associate in Pathology

The University of Texas System Cancer Center
Regents Meeting March 26, 1976-Amendments to the 1975-76 Budget-Cont'd
$\$ 20,000.00$ per annum, PRS-Faculty Associate Account Effective January 1, 1976
Physicians Referral Service-Faculty Associate Account RBC 152

Laboratory Medicine
6. Appointment

Ehsan L. Youness, M.D., Without Tenure
Assistant Pathologist and Assistant Professor of Pathology
$\$ 24,000.00$ per annum, General Funds and
$\$ 4,000.00$ per annum, Permissive Augmentation Physicians Referral Service ( $\$ 28,000.00$ total compensation)
Effective January 1, 1976
Reserve for Professional Salaries and
Physicians Referral Service Reserve for Augmentation Account RBC 155

Diagnostic Radiology
7. Appointment

Marvin M. Lindell, Jr., M.D., Without Tenure
Associate Radiologist and Assistant Professor of Radiology
$\$ 35,000.00$ per annum, General Funds and
$\$ 15,000.00$ per annum, Permissive Augmentation Physicians Referral Service ( $\$ 50,000.00$ total compensation)
Effective December 19, 1975
Reserve for Professional Salaries and Physicians Referral Service Reserve for Augmentation Account RBC 147

Surgery
8. Appointment

Ariyadasa Udagama, D.D.S., Without Tenure
Assistant Surgeon (Maxillofacial Prosthetics)
$\$ 23,750.00$ per annum, Contract N01-CN-45114
Effective January 1, 1976
Available Contract Funds
RBC 161
The Tumor Institute
Research
Office of Research
9. Appointment

Stuart R. Hostetter, Other Staff Assistant for Research Administration $\$ 20,500.00$ per annum, General Funds Effective January 12, 1976
Reserve for Professional Salaries
RBC 151
Biochemistry
10. Reappointment

Kathleen Hillman, Ph.D., Without Tenure
Research Associate

The University of Texas System Cancer Center
Regents Meeting March 26, 1976-Amendments to the 1975-76 Budget-Cont'd

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$12,268.00 per annum, Grant 5 R01-HD-7752
Effective January 1, 1976
Availalble Grant Funds
RBC }15
```

Developmental Therapeutics
11. Appointment

Stephen W. Hall, M.D., Without Tenure
Faculty Associate in Developmental Therapeutics
$\$ 21,000.00$ per annum, Contract NO1-CM-57042
Effective January 1, 1976
Available Contract Funds
RBC 154
Virology
12. Reappointment and Change in Source of Funds

Elizabeth S. Priori, Ph.D., Without Tenure
Associate Virologist and Assistant Professor of Virology
From: $\$ 23,976.00$ per annum, General Funds
To: $\$ 23,976.00$ per annum, Grant 5 S01-RR-5511
Effective for the period September 1, 1975 through August 31, 1976
Available Grant Funds
RBC 106 revised

## Education

## Office of Education

13. Transfer of Funds
$\$ 200,000.00$
From: Various Vacant budgeted Positions for Residents and Fellows
Office of Education, Professional Salaries appropriation
To: Office of Education, Maintenance and Operation appropriation to fund cost of combined residency program.
Stipends for trainees in the combined residency program are paid by The
University of Texas System Medical Foundation and The University of Texas
System Cancer Center is billed monthly for its share of the costs
RBC 142
Patient Care Activities
Admissions
14. Resignation

Gerald C. Tillman, Other Staff
Chief of Admissions
$\$ 15,500.00$ per annum, General Funds
Effective the last working day of December 31, 1975
Mr. Tillman has been paid from Admissions
RBC 145
Anatomical Pathology Service
15. Place on Extended Leave Without Pay

Ruby F. Samuel, Other Staff
Education and Laboratory Manager (Cytology)
$\$ 15,000.00$ per annum, General Funds
Effective for the period of November 19, 1975 through January 18, 1976
RBC 103 revised

The University of Texas System Cancer Center Regents Meeting March 26, 1976-Amendments to the 1975-76 Budget-Cont'd

## Diagnostic Radiology Service

16. Increase in Salary

Anthony L. Colyandro, Other Staff
Chief Technologist
From: \$19,000.00 per annum, General Funds
To: $\$ 20,500.00$ per annum, General Funds
Effective January 1, 1976
Budgeted position for Mr. Colyandro and
Reserve for Professional Salaries
RBC 149
Nursing Service - Hospital
17. Place on Extended Leave Without Pay

Patricia A. Tedder, Other Staff
Associate Director of Nursing
$\$ 22,000.00$ per annum, General Funds
Effective for the period January 2, 1976 through January 4, 1976
RBC 146

## General Services

Development Office
18. Appointment

Theresa G. Pfau, Classified
Secretary II
$\$ 8,160.00$ per annum, General Funds
Effective February 9, 1976
Reserve for Classified Salaries
RBC 160
Systems Engineering
19. Appointment

Wayne E. Beeson, Other Staff
Systems Engineer
$\$ 15,000.00$ per annum, General Funds
Effective December 1, 1975
Budgeted position for Systems Engineer RBC 140

Infection Control Service
20. Appointment

Bessie M. Winfield, Classified
Clerk Typist I
$\$ 5,640.00$ per annum, General Funds
Effective January 1, 1976
Reserve for Classified Salaries
RBC 153
21. Transfer of Funds

Transfer funds as indicated from Various Vacant Professional and Other Staff positions as of November 30, 1975 to the Reserve for Professional Salaries Account, Reserve for Classified Personnel Account and various Maintenance and Operation Accounts in accordance with Budget Rules and Procedures.

The University of Texas System Cancer Center Regents Meeting March 26, 1976-Amendments to the 1975-76 Budget-Cont'd TRANSFER FROM:

| Department | Appropriation Item |  Page <br> Position No. | Amount |  |
| :---: | :---: | :---: | :---: | :---: |
| Office of the Director | Professional Salaries | Assistant to the Director 001 | \$ | 25,000 |
| Office of the Vice-President for Business and Hospital Affairs | Other Staff Salaries | Resident in Hospital Administration 001 |  | 7,000 |
| " | " | Senior Systems Analyst 001 |  | 15,000 |
| Medicine | Professional Salaries | Internist and Associate 33 Professor of Medicine 001 |  | 30,000 |
| " | " | Internist and Associate 33 Professor of Medicine 002 |  | 29,500 |
| " | " | Internist and Associate 33 Professor of Medicine 003 |  | 29,500 |
| " | " | Internist 00233 |  | 8,500 |
| " | " | Assistant Internist 00134 |  | 27,000 |
| " | " | Assistant Internist 00234 |  | 26,500 |
| " | " | Assistant Internist 00334 |  | 25,000 |
| " | " | Assistant Internist 00434 |  | 25,000 |
| " | " | Assistant Internist 00534 |  | 26,500 |
| " | " | Clinical Associate Internist 001 |  | 6,000 |
| Laboratory Medici | ne | Pathologist and Professor of Pathology 00140 |  | 34,000 |
| " | " | Assistant Clinical <br> Pathologist 001 |  | 29,000 |
| " | " | Assistant Clinical <br> Pathologist 002 |  | 30,000 |
| Pediatrics | " | Assistant Pediatrician and Assistant Professor of Pediatrics 002 |  | 26,000 |
| " | " | Assistant Pediatrician and Assistant Professor of Pediatrics 003 |  | 28,000 |
| Diagnostic Radiol | ogy | Assistant Radiologist and Assistant Professor of Radiology 004 |  | 30,000 |

The University of Texas System Cancer Center Regents Meeting March 26, 1976-Amendments to the 1975-76 Budget-Cont'd


The University of Texas System Cancer Center Regents Meeting March 26, 1976-Amendments to the 1975-76 Budget-Cont'd

| Department | Appropriation Item | $\begin{array}{ll}\text { Position } & \text { Page } \\ & \text { No. }\end{array}$ | Amount |  |
| :---: | :---: | :---: | :---: | :---: |
| Surgery | Professional Salaries | Assistant Surgeon (Head and Neck Surgery) <br> Section of Head and Neck Surgery and Assistant Professor of Surgery 002 | \$ | 30,000 |
| " | " | Assistant Surgeon (Head and Neck Surgery) <br> Section of Head and <br> Neck Surgery and Assistant <br> Professor of <br> Surgery 003 |  | 30,000 |
| " | " | Assistant Surgeon (Urology) Section of Urology and Assistant Professor of Urology 003 |  | 28,000 |
| " | " | Associate Surgeon (Neurosurgery) Neurosurgery Service 002 |  | 30,000 |
| " | " | ```Clinical Associate Surgeon (Neurosurgery) Neurosurgery Service 001``` |  | 2,000 |
| " | " | ```Clinical Associate Surgeon (Neurosurgery) Neurosurgery Service 002``` |  | 1,100 |
| Anesthesiology | " | Anesthesiologist and Assistant Professor of Anesthesiology 003 |  | 35,000 |
| " | " | Assistant Anesthesiologist 002 $59$ |  | 30,000 |
| Gynecology | " | Assistant Surgeon <br> (Gynecology) and Assistant <br> Professor of <br> Gynecology 001 |  | 26,500 |
| " | " | Assistant Surgeon (Gynecology) and Assistant Professor of Gynecology 002 |  | 29,000 |
| " | " | Assistant Surgeon <br> (Gynecology) and Assistant <br> Professor of <br> Gynecology 003 |  | 29,000 |

The University of Texas System Cancer Center Regents Meeting March 26, 1976-Amendments to the 1975-76 Budget-Cont'd

| Department | Appropriation Item |  Page <br> Position No. | Amount |
| :---: | :---: | :---: | :---: |
| Office of Research | Professional Salaries | Surgeon (Thoracic <br> Surgery) Thoracic <br> Service and Professor <br> of Surgery 001 | \$ 35,500 |
| Biochemistry | " | Biochemist and Professor of Biochemistry 00266 | 16,588 |
| Molecular Biology | 1 | Assistant Biologist and Assistant Professor of Biology 001 | 23,000 |
| Research Physics | " | Associate Biophysicist and Assistant Professor of Radiology (Biophysics) 001 | 5,400 |
| Experimental Medicine | " | Assistant Biochemist and Assistant Professor of Biochemistry 001 | 17,000 |
| Experimental <br> Pathology | 1 | Pathologist and Professor of Pathology 001 | 31,000 |
| Experimental <br> Radiotherapy | " | Associate Radiotherapist and Associate Professor of Radiotherapy 001 | 28,000 |
| " | 11 | Assistant Radiotherapist and Assistant Professor of Radiotherapy 001 | 26,000 |
| Experimental Surgery | " | Assistant Biologist, Section of Experimental <br> Surgery and Assistant <br> Professor of Surgery <br> (Biology) 001 | 17,000 |
| " | " | Associate Experimental <br> Surgeon and Professor of Anatomy 001 | 27,000 |
| Experimental Anesthesiology | " | Clinical Physiologist and Associate Professor of Clinical Physiology 001100 | 21,000 |
| Developmental Therapeutics | " | Assistant Internist and Assistant Professor of Medicine 003 | 9,300 |
| " | " | Associate Biologist and Associate Professor of Developmental Therapeutics (Cell Biology) 002104 | 12,500 |

The University of Texas System Cancer Center
Regents Meeting March 26, 1976-Amendments to the 1975-76 Budget-Cont'd

| Department | Appropriation Item | Position | Page No. | Amount |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Epidemiology | Professional Salaries | Assistant Epidemiologist 001 | 107 | \$ | 20,300 |
| " | " | Assistant <br> Epidemiologist 002 | 108 |  | 30,000 |
| " | Other Staff Salaries | Supervisor of Patient Data Management 001 | 108 |  | 20,500 |
| Experimental <br> Animals | Professional Salaries | Assistant Veterinarian and Assistant Professor of Veterinary Medicine and Surgery 001 | 110 |  | 23,700 |
| " | " | Research Associate 001 | 110 |  | 16,000 |
| Computer Science Institute of Bioma | Laboratory thematics | Associate Biomathematician and Associate Professor of Biomathematics and Biochemistry 001113 |  |  | 26,000 |
| Virology | " | Associate Virologist and Associate Professor of Virology 001 | $117$ |  | 18,868 |
| " | " | Assistant Virologist and Assistant Professor of Virology 001 | d <br> 117 |  | 25,000 |
| Office of Education | " | Assistant to the Director 001 | 121 |  | 26,000 |
| Research Medical Library | " | Research Medical Librarian and Associate Professor of Library Sciences 001132 |  |  | 13,000 |
| Office of Associa Director - Clinic | e | Assistant Director Clinic 001 | $136$ |  | 30,000 |
| Respiratory Therapy | y | Assistant Anesthesiologist 001 |  |  | 30,000 |
| Medical Social | Other Staff | Director - Medical |  |  |  |
| Service | Salaries | Social Service 001 | 161 |  | 23,000 |
| Clinical Physics | Professional Salaries | Assistant Physicist 001 |  |  | 27,000 |
| Volunteer | Other Staff | Assistant Director of |  |  |  |
| Services | Salaries | Volunteer Service 001 | 182 |  | 12,000 |
| Director of Nursing Office | " | Associate Director of Nursing 002 | 183 |  | 19,000 |
| Nursing Service Education | " | Associate Director of Nursing - Education 001 | $185$ |  | 18,000 |

The University of Texas System Cancer Center
Regents Meeting March 26, 1976-Amendments to the 1975-76 Budget-Cont'd

| Department | Appropriation Item | Position | Page <br> No. | Amount |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Systems Engineerin | Other Staff Salaries | Industrial <br> Engineer 001 | 219 | \$ | 14,000 |
| Infection Control Service | Professional Salaries | Assistant Internist and Assistant Professor of Medicine 001 | 221 |  | 30,000 |
| Information Office | 0ther Staff Salaries | Science Writer 001 | 222 |  | 16,000 |
| Science Park - <br> Veterinary <br> Service | Professional Salaries | Biologist 001 | 237 |  | 32,000 |
| Science Park Veterinary Service |  | Assistant Veterinarian and Assistant Professor of Veterinary Medicine and Surgery 002 | 237 |  | 27,000 |
| Physical Plant | Other Staff Salaries TOTAL | Engineer 003 | 242 |  | $\begin{array}{r}7,689 \\ \hline 837,885\end{array}$ |

TRANSFER T0:

| Department | Appropriation Item | Page No. | Amount |
| :---: | :---: | :---: | :---: |
| Biology | Maintenance and Operation | 69 | \$ 10,000 |
| Research Medical Library | " | 132 | 25,000 |
| Communications | " " " | 217 | 75,000 |
| Equipment | 11 | 245 | 500,000 |
| Reserves | Reserve for Professional Salaries | 246 | 1,127,885 |
| Reserves | Reserve for Classified Personnel | 246 | 100,000 |
|  | TOTAL |  | \$1,837,885 |

RBC 141

| Other Fi | THE UNIVERSITY OF TEXAS SYS <br> Items: | CAN | CENTER |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Schedule of Additional or Changes in |  |  |  |  |  |
| Funding of Construction Projects |  |  |  |  |  |
| Project |  | Sourc | Funds |  |  |
| Number | Project Title | From | To |  | Amount |
| 703-78 | Expansion at M.D: Anderson Hospital |  | Other <br> Sources(a) | \$ | 250,000.00 |
|  |  |  | Private <br> Gifts |  | 722,414.54 |
|  |  |  | Other <br> Sources |  | 100,000.00 |
| 703-235 | Central Food Service Facility (Transferred from Galveston Medical Branch - source: Interest on Bond Proceeds) |  | Other Sources |  | 2,500,000.00 |

(a) UCC account 106751

OFFICE OF THE PRESIDENT
THE UNIVERSITY OF TEXAS

## SYSTEM SCHOOL OF NURSING

aUstin, texas 78712

February 24, 1976

Deputy Chancellor E. D. Walker
The University of Texas System
601 Colorado Street
Austin, Texas 78701
Dear Deputy Chancellor Walker:
The docket for the March 26,1976 meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.
Sincerely yours,
Mawelpond: shipman
Marilyn D. Willman
President

THE UNIVERSITY OF TEXAS SYSTEM SCHOOL OF NURSING
Austin - E1 Paso - Fort Worth - Galveston - Houston - San Antonio

March 26, 1976

GRANTS, CONTRACTS AND AGREEMENTS (State)

## System Nursing School

1. IAC(76-77)-826 between The University of Texas System School of Nursing and The Texas Department of Community Affairs for the period January 1, 1976 through March 1, 1976 whereby The University of Texas System School of Nursing provides various documents for developing guidelines for a Primary Prevention Program. The amount of the contract will not exceed $\$ 3,600.00$
2. IAC(76-77)-851 between The University of Texas System School of Nursing and The Texas Department of H ?alth Resources for the period January 1, 1976 through June 30, 1976 which is a continuation of the previous Texas Regional Medical Program, Incorporated, Contract No. 76211I. The amount of this contract will not exceed $\$ 4,800.00$.
3. IAC(76-77)-852 between The University of Texas System School of Nursing and the Texas Department of Health Resources for the period January 1, 1976 through March 31, 1976 which is a continuation of the previous Texas Regional Medical Program, Incorporated, Contract No. 76211F. The amount of this contract will not exceed $\$ 10,000.00$.

San Antonio Nursing School
4. Modification No. 1 to Subcontract UTMB74-1 between The University of Texas System School of Nursing and The University of Texas Medical Branch at Galveston. This modification approves the 04 year budget of $\$ 63,738$. The amount allotted is increased by $\$ 167,163$ to a total of $\$ 190,480$.
The additional funds allotted include the actual amount expended during the 02 and 03 years, 7-1-73 through 6-30-75, and are to fund the contract through 6-30-76.

THE UNIVERSITY OF TEXAS SYSTEM SCHOOL OF NURSING
Austin - E1 Paso - Fort Worth - Galveston - Houston - San Antonio

March 26, 1976

CLINICAL FACULTY APPOINTMENTS
JANUARY 1, 1976 THROUGH MAY 31, 1976

San Antonio Nursing School

Clinical Instructor -- without salary, without tenure

1. Captain Constance G. Shaw

THE UNIVERSITY OF TEXAS SYSTEM SCHOOL OF NURSING

Austin－El Paso－Fort Worth－Galveston－Houston－San Antonio

March 26， 1976

## RECOMMENDED AMENDMENTS TO THE 1975－76 BUDGET

Austin Nursing School
1．Change the appointment of Karen 0 ．Kincaid，Instructor（non－ tenure），at a nine months rate of $\$ 12,700$ from $50 \%$ to $100 \%$ time for the period January 16， 1976 through May 31，1976．Source of Funds： Teaching Salaries．（RBC 非 $\mathrm{N}-93$ ）

2．Change the appointment of Bruce A．Rouse，Assistant Professor （non－tenure），at a nine months rate of $\$ 14,400$ from $50 \%$ to $75 \%$ time for the period January 16， 1976 through May 31，1976．Source of Funds：Capitation Grant．（ RBC 非－94）

## El Paso Nursing School

3．Appoint Mary M．Castillo，Assistant Instructor（non－tenure）， at a nine months rate of $\$ 10,026$ for the period January 1,1976 through May 31，1976．Source of Funds：Teaching Salaries．（RBC 非 N －91）

4．Appoint Nancy P．Pool，Assistant Instructor（non－tenure），at a nine months rate of $\$ 10,026$ for the period January 1， 1976 through May 31，1976．Source of Funds：Teaching Salaries．（RBC 非－92）

## Fort Worth Nursing School

5．Promote Carolyn C．Margraf from Assistant Instructor（non－tenure）， $50 \%$ time at a nine months rate of $\$ 10,600$ to Instructor（non－tenure）， $100 \%$ time at a nine months rate of $\$ 12,700$ for the period January 16， 1976 to May 31，1976．Source of Funds：Teaching Salaries．（RBC 非 （RBC 非N－104）

6．Appoint Patricia S．McLean，Assistant Instructor（non－tenure）， $50 \%$ time at a nine months rate of $\$ 10,600$ for the period January 16， 1976 through February 15， 1976 and $80 \%$ time at a nine months rate of $\$ 10,600$ for the period February 16， 1976 through May 31，1976．Source of Funds： Teaching Salaries．（ $\mathrm{RBC} \| \mathrm{N}$－102）（ RBC 非－107）

7．Accept the resignation of Carolyn Oliphant，Instructor（non－tenure）， at a nine months rate of $\$ 12,700$ effective December 31 ， 1975 ．Source of Funds：Teaching Salaries．（RBC 非 $\mathrm{N}-96$ ）

8．Appoint Bobbie S．Ster1ing，Program Specialist， $50 \%$ time at a 12 months rate of $\$ 17,600$ for the period January 16,1976 through May 31 ， 1976．Source of Funds：Family Nurse Practitioner Program．（RBC 非N－106）

Galveston Nursing School
9．Transfer of Funds：
From：Lease of Facilities $\$ 22,566$
To：Maintenance，Operation and Equipment \＄2，520

Unallocated Account $\quad 20,046$
Total
\＄22，566
For：This reduces the appropriation for Lease of Facilities to the amount of the Inter－ agency Contract with the Galveston Medical Branch and provides $\$ 2,520.00$ for the purchase of replacement equipment．（RBC 非－108）

THE UNIVERSITY OF TEXAS SYSTEM SCHOOL OF NURSING

Austin－E1 Paso－Fort Worth－Galveston－Houston－San Antonio

March 26， 1976

RECOMMENDED AMENDMENTS TO THE 1975－76 BUDGET
（Continued）
Galveston Nursing School（Continued）
10．Appoint Vicki C．Patrick，Assistant Instructor（non－tenure），at a nine months rate of $\$ 12,000$ for the period January 16， 1976 through May 31，1976．Source of Funds：Teaching Salaries．（RBC 非N－87）

11．Appoint Barbara A．Russol，Instructor（non－tenure），at a nine months rate of $\$ 12,700$ for the period January 16,1976 through May 31 ， 1976．Source of Funds：Teaching Salaries．（RBC 非N－95）

Houston Nursing School
12．Appoint Diana B．Graumlich，Assistant Professor（non－tenure），at a nine months rate of $\$ 14,900$ for the period January 16,1976 through May 31，1976．Source of Funds：Capitation Grant．（RBC 非N－100）

13．Appoint Carole M．McKenzie，Assistant Professor（non－tenure）， at a nine months rate of $\$ 14,400$ for the period December 15,1976 through May 31，1976．Source of Funds：Teaching Salaries．（RBC 非N－89）

14．Accept the resignation of Doreen J．Wise，Assistant Professor （non－tenure），at a nine months rate of $\$ 14,800$ effective December 31， 1975．Source of Funds：Teaching Salaries．（RBC 非N－88）

## San Antonio Nursing School

15．Appoint Bette A．Baker，Instructor（non－tenure）， $80 \%$ time at a nine months rate of $\$ 12,700$ for the period January 16,1976 through May 31， 1976．Source of Funds：Teaching Salaries．（RBC 非N－98）

16．Appoint Judith M．Costello，Instructor（non－tenure），at a nine months rate of $\$ 12,700$ for the period February 15， 1976 through March 31， 1976．Source of Funds：Teaching Salaries．（RBC 非N－103）．

17．Appoint Billie T．Lott，Instructor（non－tenure），at a nine months rate of $\$ 12,700$ for the period January 16,1976 through May $31,1976$. Source of Funds：Teaching Salaries．（RBC 非 N －90）

18．Appoint Jacqueline M．Mickley，Instructor（non－tenure），at a nine months rate of $\$ 12,700$ for the period January 5， 1976 through February 20，1976．Source of Funds：Teaching Salaries．（RBC 非N－101）

19．Change the appointment of Linda A．Molinaro，Assistant Project Director，at a twelve months rate of $\$ 20,056$ from $75 \%$ to $100 \%$ time for the period March 1， 1976 through March 31，1976．Source of Funds：Texas Department of Health Resources Contract．（RBC 非N－105）

20．Appoint Elizabeth M．Swafford，Instructor（non－tenure），at a nine months rate of $\$ 12,700$ for the period January 16,1976 through May 31 ， 1976．Source of Funds：Teaching Salaries．（RBC 非－99）

21．Appoint Lt．Co1．Naldean Borg，Assistant Professor（non－tenure）， without compensation for the period January 1， 1976 through May 31， 1976. （Approved letter dated January 30，1976）

THE UNIVERSITY OF TEXAS SYSTEM SCHOOL OF NURSING
Austin - E1 Paso - Fort Worth - Galveston - Houston - San Antonio

March 26, 1976

RECOMMENDED AMENDMENTS TO THE 1975-76 BUDGET
(Continued)
San Antonio Nursing School (Continued)
22. Appoint Major Calvin C. Pugh, Instructor (non-tenure), without compensation for the period January 1, 1976 through May 31, 1976
(Approved letter dated January 30, 1976)
23. Appoint Captain Donna M. Bovard, Instructor (non-tenure), without compensation for the period February 16, 1976 through May 31, 1976. (Approved letter dated February 16, 1976)
24. Appoint Major Carolyn B. Resko, Instructor (non-tenure), without compensation for the period February 16, 1976 through May 31, 1976. (Approved letter dated February 16, 1976)

LAND AND INVESTMENT REPORT
Meeting of March 26, 1976

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## LAND AND INVESTMENT REPORT

## For Month Ended December 31, 1975

I. PERMANENT UNIVERSITY FUND

PERMANENT UNIVERSITY FUND - INVESTMENT MATTERS.--
REPORT ON SECURITIES TRANSACTIONS.--The following securities transactions have been made for the Permanent University Fund in December, 1975. The Associate Deputy Chancellor for Investments, Trusts and Lands recommends approval by the Board of Regents of these transactions.

COMPARISON
SUMMARY OF ASSETS

| SECURITY | BOOK VALUE $12 / 31 / 74$ | $\begin{aligned} & \text { BOOK YIELD } \\ & 12 / 31 / 74 \\ & \hline \end{aligned}$ | $\begin{gathered} \text { B00K VALUE } \\ 12 / 31 / 75 \\ \hline \end{gathered}$ | $\begin{aligned} & \text { B00K YIELD } \\ & 12 / 31 / 75 \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| DEBT SECURITIES: |  |  |  |  |
| U. S. Government Obligations-- |  |  |  |  |
| Treasury Bonds | \$ 87,938,551.05 | 5.39\% | \$116,264,989.32 | 6.44\% |
| Various Government Guaranteed Bonds | 79,540,660.97 | 7.88 | 94,118,039.00 | 8.06 |
| FHA Mortgages | 12,534,912.22 | 7.01 | 11,537,270.78 | 7.07 |
| TOTAL - U. S. Government Obligations | 180,014,124.24 | $\underline{6.60}$ | 221,920,299.10 | 7.16 |
| Other Government Agencies (Non-Guaranteed) | 1,000,000.00 | 9.10 | 1,000,000.00 | 9.10 |
| Corporate Bonds | 261,948,640.57 | 5.38 | 282,309,166.64 | 5.60 |
| TOTAL - DEBT SECURITIES | 442,962,764.81 | $\underline{5.88}$ | 505,229,465.74 | 6.29 |
| EQUITY SECURITIES: |  |  |  |  |
| Convertible Debentures | 9,437,290.00 | 5.47 | 10,097,290.00 | 5.72 |
| Convertible Preferred Stocks | 6,342,900.64 | 3.80 | 6,342,900.64 | 3.80 |
| Common Stocks | 254,171,620.75 | $\underline{5.16}$ | 259,824,678.92 | 4.92 |
| TOTAL - EQUITY SECURITIES | 269,951,811.39 | 5.14 | 276,264,869.56 | 4.92 |
| $\begin{aligned} & \text { TOTAL } \text { LONG TERM } \\ & \text { INVESTMENTS }\end{aligned}$ | 712,914,576.20 | $\underline{5.60}$ | 781,494,335.30 | 5.81 |

CASH \& EQUIVALENT:

| Short Term U. S. Government Obligations | 7,134,341.74 | 8.66 | 2,847,814.24 | 6.55 |
| :---: | :---: | :---: | :---: | :---: |
| Short Term Government |  |  |  |  |
| Agencies (Non-Guaranteed) | 2,034,436.25 | 9.14 | -0- |  |
| Short Term Corporate Bonds | -0- | -- | 5,844,054.16 | 7.33 |
| Commercial Paper | 19,034,000.00 | $\underline{9.00}$ | 23,013,000.00 | 6.35 |
| Cash | 862,915.49) |  | 976,911.76 |  |
| TOTAL - CASH \& EQUIVALENT | 27,339,862.50 | 8.92 | 32,681,780.16 | 6.35 |
| TOTAL - SECURITIES, CASH \& EQUIVALENT | \$740,254,438.70* | 5.73\% | \$814,176,115.46* | 5.83\% |
| Indicated Annual Income for Ensuing 12 Months | \$ 42,416,579.00 |  | 47,466,467,00 |  |

[^52]SUMMARY OF TRANSACTIONS
(December, 1975)

|  | Cost |  | Yield at Cost |
| :---: | :---: | :---: | :---: |
| Purchases: |  |  |  |
| U. S. Government Obligations Guaranteed | \$2,104,138.00 |  | 8.61\% |
| Corporate Bonds | 794,988.03 |  | 9.30 |
| Common Stocks | 793,990.00 |  | 2.17 |
| TOTAL. | 3,693,116.00 |  | $\underline{\underline{7.37 \%}}$ |
| Net Commercial Paper | 4,785,000.00 |  |  |
| TOTAL PURCHASES | \$8,478,116.00 |  |  |
|  | Proceeds | $\begin{gathered} \text { Gain } \\ \text { or } \\ \text { (Loss) } \end{gathered}$ | Yield at Sale Price |
| Sales: |  |  |  |
| Common Stocks (TOTAL SALES) | \$ 523,537.64 | (\$547,642.46) | 7.205\% |
| Bond Maturities and Prepayments: |  |  |  |
| U. S. Government Obligations Guaranteed-GNMA Pools FHA Mortgages Farmers Home Notes | $\begin{array}{r} 107,421.97 \\ 63,879.21 \\ 48,430.66 \\ \hline \end{array}$ | $\begin{gathered} \$ 1,438.73 \\ \binom{8-}{827.61} \\ \hline \end{gathered}$ |  |
| TOTAL - U. S. Government Obligations | 219,731.84 | 611.12 |  |
| Corporate Bonds | 231,500.00 | 3,819.97 |  |
| TOTAL BOND MATURITIES AND PREPAYMENTS | \$ 451,231.84 | \$ 4,431.09 |  |

## BOND EXCHANGES

| Par Exchanged |  |
| :---: | :---: |
| $\$ 500,000$ | Increase in <br> Annual Income |
| $\$ 406.98$ |  |

## PERMANENT UNIVERSITY FUND BOOK VALUE

November 30, 1975 Balance
$\$ 808,113,265.41$
Additions (December, 1975)
Realized Net Gain or (Loss)
on Security Transactions (\$543,211.37)
From General Land Office $\quad \underline{6,606,061.42}$
6,062,850.05
December 31, 1975 Balance
$\$ 814,176,115.46$

INVESTMENTS ACQUIRED
(December, 1975)

Par Value
or
No. Shares
五 U. S. GOVERNMENT OBLIGATIONS (Guaranteed):

Various Long Term
\$ 104,138 Cochise County Hospital Association (Hill-Burton Loan) 9.60\% Note, due $1 / 1 / 2000$
(Eleventh drawdown on total purchase of $\$ 1,983,800.00$ )
$2,000,000$
Moore-McCormack Bulk Transport, Inc. Ship Financing Bonds, 9\% SF Bonds, Series B, due 6/30/90

TOTAL - U. S. Government Obligations (Guaranteed)

CORPORATE BONDS:
900,000 Houston Lighting \& Power Co.
8-1/8\% 1st Mtge., due 2/1/2004
$88.332 \quad \$ 794,988.00 \quad 9.30 \%$

COMMON STOCKS:

| 7,000 Shs. | Merck \& Company, Inc. | 71.827 | $\$ 502,790.00$ | $1.949 \%$ |
| :--- | :--- | :--- | :--- | :--- |
| 6,400 " | J. C. Penney Company, Inc. | 45.50 | $\underline{291,200.00}$ | $\underline{2.549}$ |
|  | TOTAL - Common Stocks | $\underline{\$ 793,990.00}$ | $\underline{2.169 \%}$ |  |

BONDS EXCHANGED IN:
\$500,000
See Bond Exchange Schedule for Detail
$\underline{\$ 494,897.92 \quad 6.58 \%}$

NET INCREASE IN COMMERCIAL PAPER

COMMERCIAL PAPER HOLDINGS 12/31/75:
C.I.T. Financial Corp.

Ford Motor Credit Co.
General Motors Acceptance Corp.
Montgomery Ward Credit Corp.
J. C. Penney Financial Corp.

Sears Roebuck Acceptance Corp.

Book Value
\$ 2,190,000.00
645,000.00
6,065,000.00
3,605,000.00
3,688,000.00
6,820,000.00
$\$ 23,013,000.00$

INVESTMENTS DISPOSED OF
(December, 1975)


| SALES <br> COMMON STOCKS: | Yield <br> at Sale <br> Price |  |
| :--- | :--- | :--- |
| Westinghouse Electric Corp. $13.49 ~ \$ 523,537.64$ | $\$ 547,642.46)$ | $7.205 \%$ |

BONDS EXCHANGED OUT
$\$ 500,000$ See Bond Exchange Schedule for Detail
$\$ 495,679.17$

*Total Income Improvement represents improvement with takeout (payup) considered at current investment rates.

CASH STATEMENT
December 31, 1975

## Permanent <br> Fund

Available Fund

## RECEIPTS:

| From General Land Office | \$6,606,061.42 |  |
| :---: | :---: | :---: |
| From Disposition of Securities: |  |  |
| U. S. Government Obligations |  |  |
| Various Guaranteed Bonds | 48,430.66 |  |
| GNMA Principal Payments | 107,421.97 |  |
| FHA Mortgages | 63,879.21 |  |
| Corporate Bonds | 231,500.00 |  |
| Common Stocks | 523,537.64 |  |
| Bonds Exchanged Out - Net Receipts | 781.25 |  |
| Interest Collected: |  |  |
| U. S. Government Obligations |  |  |
| Treasury Securities |  | \$ 84.44 |
| GNMA Interest Payments |  | 131,894.57 |
| Various Guaranteed Bonds |  | 164,467.71 |
| FHA Mortgages |  | 64,401.85 |
| Corporate Bonds |  | 1,556,824.24 |
| Convertible Debentures |  | 12,500.00 |
| Commercial Paper |  | 76,576.45 |
| Dividends Collected: |  |  |
| Common Stocks |  | 1,743,693.32 |
| Amortization of Premium | 1,823.31 |  |
| TOTAL RECEIPTS | 7,583,435.46 | \$3,750,442.58 |
| Cash on Hand 12/1/75 | 1,932,251.40 |  |
| TOTAL RECEIPTS AND CASH | \$9,515,686.86 |  |

CASH STATEMENT December 31, 1975 (Continued)

| Permanent <br> Fund$\quad$Available <br> Fund |
| :---: |

DISBURSEMENTS:
Securities Acquired:

| U. S. Government Obligations |  |
| :--- | ---: |
| Various Guaranteed Bonds | $\$ 2,104,138.00$ |
| Corporate Bonds | $794,988.00$ |
| Common Stocks | $793,990.00$ |
| Commercial Paper (Net) | $4,785,000.00$ |
| tization of Discount | $60,659.10$ |

To Clear Out Available Fund
TOTAL DISBURSEMENTS
Cash on Hand 12/31/75
8,538,775.10
$\$ 3,750,442.58$

976,911.76

TOTAL DISBURSEMENTS AND CASH
$\$ 9,515,686.86$

For Month Ended January 31, 1976

## I. PERMANENT UNIVERSITY FUND

## PERMANENT UNIVERSITY FUND - INVESTMENT MATTERS.--

REPORT ON SECURITIES TRANSACTIONS.--The following securities transactions have been made for the Permanent University Fund in January, 1976. The Associate Deputy Chancellor for Investments, Trusts and Lands recommends approval by the Board of Regents of these transactions.

COMPARISON
SUMMARY OF ASSETS

| SECURITY | $\begin{gathered} \text { BOOK VALUE } \\ 1 / 31 / 75 \\ \hline \end{gathered}$ | $\begin{gathered} \text { B00K YIELD } \\ 1 / 31 / 75 \\ \hline \end{gathered}$ | $\begin{gathered} \text { BOOK VALUE } \\ 1 / 31 / 76 \\ \hline \end{gathered}$ | $\begin{gathered} \text { B00K YIELD } \\ 1 / 31 / 76 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| DEBT SECURITIES: |  |  |  |  |
| U. S. Government Obligations-- |  |  |  |  |
| Treasury Bonds | \$ 87,938,551.05 | 5.39\% | \$116,264,989.32 | 6.44\% |
| Various Government |  |  |  |  |
| Guaranteed Bonds FHA Mortgages | $\begin{aligned} & 81,549,033.49 \\ & 12,517,662.30 \end{aligned}$ | $\begin{aligned} & 7.90 \\ & 7.01 \\ & \hline \end{aligned}$ | $\begin{aligned} & 94,135,319.40 \\ & 11,412,819.33 \end{aligned}$ | $\begin{aligned} & 8.07 \\ & 7.01 \\ & \hline \end{aligned}$ |
| TOTAL - U. S. Government Obligations | 182,005,246.84 | $\underline{6.63}$ | 221,813,128.05 | 7.16 |
| Other Government Agencies (Non-Guaranteed) | 1,000,000.00 | 9.10 | 1,000,000.00 | 9.10 |
| Corporate Bonds | 263,921,891.35 | 5.42 | 286,325,983.25 | 5.64 |
| TOTAL - DEBT SECURITIES | 446,927,138.19 | $\underline{5.92}$ | 509,139,111.30 | 6.31 |
| EQUITY SECURITIES: |  |  |  |  |
| Convertible Debentures | 9,037,290.00 | 5.50 | 10,097,290.00 | 5.72 |
| Convertible Preferred Stocks | 6,342,900.64 | 3.80 | 6,342,900.64 | 3.80 |
| Common Stocks | 254,320,598.86 | $\underline{5.14}$ | 256,549,714.18 | 4.91 |
| TOTAL - EQUITY SECURITIES | 269,700,789.50 | $\underline{5.12}$ | 272,989,904.82 | 4.91 |
| $\begin{aligned} & \text { TOTAL - LONG TERM } \\ & \text { INVESTMENTS } \end{aligned}$ | 716,627,927.69 | 5.62 | 782,129,016.12 | 5.82 |

CASH \& EQUIVALENT:

| Short Term U. S. Government Obligations | 7,134,341.74 | 8.66 | 2,847,814.24 | 6.55 |
| :---: | :---: | :---: | :---: | :---: |
| Short Term Government |  |  |  |  |
| Agencies (Non-Guaranteed) | 2,034,436.25 | 9.14 | -0- | -- |
| Short Term Corporate Bonds | -0- | -- | 5,844,054.16 | 7.33 |
| Commercial Paper | 18,996,000.00 | 7.95 | 27,558,000.00 | 5.86 |
| Investment Transactions-Accounts Receivable Cash | $\begin{gathered} -0- \\ 1,715,984.15 \end{gathered}$ |  | $\begin{aligned} & 767,924.36 \\ & 771,744.42 \end{aligned}$ |  |
| TOTAL - CASH \& EQUIVALENT | 29,880,762.14 | 7.74 | 37,789,537.18 | 5.90 |
| TOTAL - SECURITIES, <br> CASH \& EQUIVALENT | \$746,508,689.83* | 5.70\% | \$819,918,553.30* | 5.82\% |
| Indicated Annual Income for Ensuing 12 Months | \$ 42,550,995.00 |  | \$ 47,719,260.00 |  |

[^53]
## SUMMARY OF TRANSACTIONS

 (January: 1976)|  | Cost |  | Yield at Cost |
| :---: | :---: | :---: | :---: |
| Purchases: |  |  |  |
| U. S. Government Obligations |  |  |  |
| Corporate Bonds | 4,000,000.00 |  | 8.50 |
| Common Stocks | 239,359.00 |  | $\underline{2.47}$ |
| TOTAL | 4,369,392.53 |  | 8.37\% |
| Net Commercial Paper | 4,545,000.00 |  |  |
| TOTAL PURCHASES | \$8,914,392.53 |  |  |
|  | Proceeds | $\begin{gathered} \text { Gain } \\ \text { or } \\ \text { (Loss) } \\ \hline \end{gathered}$ | Yield at Sale Price |
| Sales: |  |  |  |
| Common Stocks (TOTAL SALES) | \$3,740,772.79 | \$226,449.05 | 5.45\% |
| Bond Maturities and Prepayments: |  |  |  |
| U. S. Government Obligations Guaranteed-GNMA Pools FHA Mortgages Farmers Home Notes Other | $\begin{array}{r} 98,027.39 \\ 124,451.45 \\ 19,241.13 \\ 3,000.00 \\ \hline \end{array}$ | $\begin{array}{ll} \$ \quad 788.01 \\ & -0- \\ & 431.75 \\ & 11.89 \\ \hline \end{array}$ |  |
| TOTAL - U. S. Government Obligations | 244,719.97 | 1,207.87 |  |
| Corporate Bonds | 20,000.00 | 97.73 |  |
| TOTAL BOND MATURITIES AND PREPAYMENTS | \$ 264,719.97 | \$ 1,305.60 |  |

BOND EXCHANGES

| Par Exchanged |  |
| :--- | :---: |
| $\$ 25,000$ | Increase in <br> Annual Income |
| $\$ 128.81$ |  |

## PERMANENT UNIVERSITY FUND BOOK VALUE

December 31, 1975 Balance
$\$ 814,176,115.46$
Additions (January, 1976)
Realized Net Gain or (Loss) on Security Transactions
From General Land Office
From Sulphur Royalties
\$ 227,754.65

January 31, 1976 Balance
$\$ 879,918,553.30$
(January, 1976)


NET INCREASE IN COMMERCIAL PAPER

COMMERCIAL PAPER HOLDINGS 1/31/76:
C.I.T. Financial Corp.

Ford Motor Credit Co.
General Motors Acceptance Corp. Montgomery Ward Credit Corp. J. C. Penney Financial Corp. Sears Roebuck Acceptance Corp.

Book Value
\$ 2,840,000.00 645,000.00
6,665,000.00
6,438,000.00
4,235,000.00
$6,735,000.00$
$\$ 27,558,000.00$


BONDS EXCHANGED OUT
$\$ 25,000.00$ See Bond Exchange Schedule for Detail
$\$ \quad 19,166.79$

|  |  | PERMANENT UNIVERSITY FUND |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\frac{\text { BOND EXCHANGES }}{\text { (January, } 1976 \text { ) }}$ |  |  |  |  |  |
|  | DESCR | TION | BOO |  | $\frac{\text { MKT }}{\mathrm{YIELD}}$ | $\frac{\text { BOOK }}{\text { YIELD }}$ | NEW |
| PAR | ISSUE | ISSUE | ISSUE | ISSUE | IN- | IN- | $\overline{\mathrm{BOOK}}$ |
| VALUE | EXCHANGED | RECEIVED | EXCHANGED | RECEIVED | CREASE | CREASE | YIELD |
|  |  | Corporate Bonds for Corporate | Bonds |  |  |  |  |
| \$25,000 | Dallas Power \& Light Co. 4-1/4\% 1st Mtge., due 2/1/86 | Southwestern Public Serv. Co. 4-1/2\% Ist Mtge., due 2/1/94 | \$19,166.79 | \$16,623.54 | . $60 \%$ | .68\% $\$ 128$ | $.8 .06 \%$ |
|  |  |  |  |  |  | (Total Impro | Income ement) |

*Total Income Improvement represents improvement with takeout (payup) considered at current investment rates.

CASH STATEMENT
January 31, 1976

## Permanent

Fund
Available
Fund

## RECEIPTS:

| From General Land Office | $\$ 5,508,135.69$ |
| :--- | ---: |
| From Sulphur Royalties | $6,547.50$ |
| From Disposition of Securities: |  |
| U. S. Government 0bligations |  |
| Various Guaranteed Bonds | $22,241.13$ |
| GNMA Principal Payments | $98,027.39$ |
| FHA Mortgages | $124,451.45$ |
| Corporate Bonds | $20,000.00$ |
| Common Stocks | $3,740,772.79$ |
| Bonds Exchanged Out - Net Receipts | $2,543.25$ |

Interest Collected:
U. S. Government Obligations Treasury Securities GNMA Interest Payments Various Guaranteed Bonds FHA Mortgages

Corporate Bonds
Convertible Debentures
Commercial Paper
\$ 36,854.62
131,282.17
250,892.42
61,986.48
$1,436,259.34$
162,729. 20
198,370.87
Dividends Collected:
Common Stocks
918,134.08
Convertible Preferred Stocks
$44,879.75$
Amortization of Premium
TOTAL RECEIPTS
9,526,573.48
$\$ 3,241,388.93$
Cash on Hand 1/1/76
976,911.76

TOTAL RECEIPTS AND CASH
$\$ 10,503,485.24$

CASH STATEMENT
January 31, 1976 (Continued)
$\qquad$
Permanent
und
Available Fund

## DISBURSEMENTS:

Securities Acquired:
U. S. Government Obligations Various Guaranteed Bonds
\$ 130,033.53
Corporate Bonds
4,000,000.00
Common Stocks
239,359.00
Commercial Paper (Net)
4,545,000.00
Amortization of Discount
49,423.93
To Clear Out Available Fund
$\$ 3,241,388.93$
TOTAL DISBURSEMENTS
8,963,816.46
$\$ 3,241,388.93$
Cash and Receivables 1/31/76:
Cash on Hand
771,744.42
Accounts Receivable
767,924.36
TOTAL CASH AND RECEIVABLES
1,539,668.78

TOTAL DISBURSEMENTS, CASH AND
RECEIVABLES
$\$ 10,503,485.24$

For Month Ended December 31, 1975
II. TRUST AND SPECIAL FUNDS

TRUST AND SPECIAL FUNDS - INVESTMENT MATTERS.--
REPORT ON SECURITIES TRANSACTIONS.--The following securities
transactions have been made for the Trust and Special Funds in December, 1975. The Associate Deputy Chancellor for Investments, Trusts and Lands recommends approval by the Board of Regents of these transactions.

INVESTMENTS ACQUIRED

| Par Value | Description and Fund | Total Net Cost | Yield at Cost |
| :---: | :---: | :---: | :---: |
|  | U. S. GOVERNMENT OBLIGATIONS (Direct): See Bond Purchase Schedule for Detail | Cotal |  |
| \$500,000 | U.T. System - General Tuition Revenue Bonds, New Series 1974 - Reserve Fund | \$500,000.00 | 8.200\% |
|  | CORPORATE BONDS: <br> See Bond Purchase Schedule for Detail |  |  |
| 200,000 | Ima Hogg Foundation | 174,050.00 | 9.447\% |
|  | COMMON STOCKS: <br> See Stock Purchase Schedule for Detail |  |  |
|  | GMB - Cecil H. and Ida M. Green Chair Marine Biomedical Institute | 142,493.99 |  |
|  | TOTAL - LONG TERM INVESTMENTS | \$816,543.99 |  |
|  | SHORT TERM PAPER: |  |  |
| 28,400 | FMC 5\% Note, due 12/17/75 (Common Trust Fund) | \$ 28,400.00 | 5.006\% |
| 283,000 | Montgomery Ward 5-1/4\% Note, due 12/17/75 (Ima Hogg Foundation) | 283,000.00 | 5.259 |
| 200,000 | Montgomery Ward 5-1/4\% Note, due 12/22/75 (Common Trust Fund) | 200,000.00 | 5.259 |
| 284,000 | Montgomery Ward 5-1/4\% Note, due 12/22/75 (Ima Hogg Foundation) | 284,000.00 | 5.263 |
| 12,600 | FMC 5-1/4\% Note, due 12/23/75 <br> (\$10,000 - Common Trust Fund Undistributed Receipts <br> 2,600 - AH - Anderson-Mayfair Mortgage Retirement Fund) | 12,600.00 | 5.262 |
| 142,000 | Montgomery Ward 5-3/8\% Note, due 12/31/75 (GMB - Cecil H. and Ida M. Green Chair Marine Biomedical Institute) | 142,000.00 | 5.390 |
| 176,000 | Montgomery Ward 5-3/4\% Note, due 2/26/76 (\$50,000 - Common Trust Fund <br> 126,000 - Common Trust Fund Undistributed Receipts) | 176,000.00 | 5.822 |
| 131,000 | SRAC 5-3/4\% Note, due 2/27/76 (Common Trust Fund - Undistributed Receipts) | 131,000.00 | 5.818 |
| 87,000 | FMC 5-1/2\% Note, due 2/27/76 (Common Trust Fund - Undistributed Receipts) | 87,000.00 | 5.550 |

```
INVESTMENTS ACQUIRED (Continued)
```

(December, 1975)

| Par Value | Description and Fund | Total Net Cost | Yield at Cost |
| :---: | :---: | :---: | :---: |
|  | SHORT TERM PAPER: (Continued) |  |  |
| \$315,000 | FMC 5-7/8\% Note, due 3/10/76 | \$315,000.00 | 5.972\% |
|  | (Common Trust Fund) |  |  |
| 100,000 | FMC 6\% Note, due 3/15/76 | 100,000.00 | 6.091 |
|  | (Common Trust Fund) |  |  |
| 10,000 | City National Bank 7-1/4\% CD, due 6/15/76 (CTF purchased from GMB - Edgar H. \& | 10,000.00 | 7.250 |
|  | Lillie Mae Vaughn Lectureship in Medical Philosophy and Morality on 12/1/75) |  |  |
| 2,000 | GMAC 6-1/4\% Note, due 8/26/76 | 2,000.00 | 6.522 |
|  | (\$700-Common Trust Fund |  |  |
|  | 1,300-AH - Anderson-Mayfair Mortgage |  |  |
|  | Retirement Fund) |  |  |

INVESTMENTS DISPOSED OF (December, 1975)

| Par Value | Description and Fund $\quad \begin{gathered}\text { Total Net } \\ \text { Proceeds }\end{gathered}$ | Gain or (Loss) |
| :---: | :---: | :---: |
|  | U. S. GOVERNMENT OBLIGATIONS (Direct): |  |
| \$ 8,000 | Wilhelmina Pegram Robertson Scholarship Fund $\$ 8,000.00$ | \$ -0- |
|  | U. S. GOVERNMENT OBLIGATIONS (Guaranteed) : GNMA Prepayments-- |  |
| 7,934.31 | Common Trust Fund 7,934.31 | 243.61 |
| 545.03 | DMS - The William Buchanan Chair in Internal Medicine $545.03$ | 23.90 |
| 430.28 | Reserve for Possible Fire Losses Temporary Student Housing Units $430.28$ | 4.78 |
| 875.09 | Texas Union Building Fund 875.09 | 71.84 |
| 1,557.84 | Student Property Deposit <br> Scholarship Fund $1,557.84$ | 14.58 |
| 3,973.82 | Student Property Deposit <br> Scholarship Fund - Temporary 3,973.82 | 95.51 |
| 29,427.45 | Retirement of Indebtedness <br> Accounts $29,427.45$ | 376.48 |
|  | $\begin{aligned} & \text { TOTAL - U. S. Government } \\ & \text { Obligations (Guaranteed) } \quad 44,743.82 \end{aligned}$ | 830.70 |
|  | TOTAL - U. S. Government Obligations <br> (Direct and Guaranteed) \$52,743.82 | \$ 830.70 |

COUNTY AND MUNICIPAL BONDS:
See Bond Sales Schedule for Detail
540,000
Ima Hogg Foundation
$\$ 558,876.00 \$ 4,773.53$

Yield at Sale Price
4. $382 \%$

INVESTMENTS DISPOSED OF (Continued)
(December, 1975)

| Par Value | Description and Fund | Total Net Proceeds | Gain or (Loss) | Yield at Sale Price |
| :---: | :---: | :---: | :---: | :---: |
| COMMON STOCKS: <br> See Stock Sales Schedule for Detail |  |  |  |  |
|  | Common Trust Fund | \$ 67,414.26 | (\$130,343.73) | 7.211\% |
|  | Littlefield Fund for Southern History | 8,800.00 | 4,136.87 | 5.000 |
|  | DMS - Cancer Research Under the Direction of Dr. P. Montgomery | 14.50 | -0- | .- |
|  | TOTAL - Stocks Sold (Except Gifts) | 76,228.76 | (\$126,206.86) |  |


| Stocks Received by Gift or Bequest-- |  |
| :--- | ---: |
| Chancellor's Counci1- |  |
| Unrestricted Accounts | $1,922.49$ |
| U. T. Austin - | $2,891.02$ |
| President's Associates <br> Engineering Foundation - <br> $\quad$ Various Donors | $2,389.23$ |
| Engineering Foundation - |  |
| Chair of Free Enterprise | $16,034.64$ |
| T. U. Taylor Professorship |  |
| in Engineering | 475.61 |

Wilhelmina Pegram Robertson Scholarship Fund 1,520.00
U. T. Dallas 29,653.56

GMB - Cecil H. and Ida M. Green
Chair for the Benefit of the
Marine Biomedical Institute 142,493.99
GMB - Paul R. Stalnaker Fund 33,081.44
Houston Health Science Center -
Jack L. Bangs Memorial Fund 4,755.06
Mrs. P. E. Turner Newborn Baby Nursery 98,991.85
San Antonio Health Science Center 12,794.01
U. T. System Cancer Center 17,390.37

TOTAL - Stock Gifts Sold 364,393.27

TOTAL - Al1 Common Stocks \$440,622.03

## SHORT TERM PAPER:



THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND (December, 1975)

| $\begin{aligned} & \frac{\text { NO. OF }}{\text { SHARSS SOLD }} \\ & \hline \end{aligned}$ | STOCK SALES |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | ISSUE ST- |  |  | $\frac{\text { YIELD }}{A T \text { SALE }}$ |
|  | ISSUE | NET SALES PROCEEDS | PROFIT OR (LOSS) | PRICE |
| 5,000 Shs. | Westinghouse Electric Corporation Common Stock | \$67,414.26 | (\$130,343.73) | $\underline{\underline{7.211 \%}}$ |
| BOND MATURITIES AND PREPAYMENTS |  |  |  |  |
| $\frac{\text { PAR }}{\text { VALUE }}$ | ISSUE | PROCEEDS | PROFIT OR (LOSS) |  |
| \$7,934.31 | Various GNMA Pass-Through Pools | \$7,934.31 | \$243.61 |  |

WILHELMINA PEGRAM ROBERTSON SCHOLARSHIP FUND
(December, 1975)
BOND MATURITIES AND PREPAYMENTS
\$8,000 U.S. $7 \%$ Treasury Notes, Series $\mathrm{H}-1975$, due 12/31/75 $\$ 8,000.00$

CECIL H. AND IDA M. GREEN CHAIR - MARINE BIOMEDICAL INSTITUTE - GALVESTON MEDICAL BRANCH (December, 1975)

STOCK PURCHASES


## IMA HOGG FOUNDATION

(December, 1975)
$\frac{\text { PAR }}{\text { VALUE }}$
$\$ 100,000 \quad$ City of Austin Electric, Water \& Sewer Revenue Bonds, Series 1968, 4-1/2\%, due 10/1/80
100,000
50,000
90,000
50,000
50,000
100,000
$\$ 540,000$

| BOND SALES |  |  |  |
| :---: | :---: | :---: | :---: |
| ISSUE | PROCEEDS | PROFIT OR (LOSS) | $\frac{\frac{\text { YIELD }}{}}{\frac{A T \text { SALE }}{\text { PRICE }}}$ |
| City of Austin Electric, Water \& Sewer Revenue Bonds, Series 1968, 4-1/2\%, due 10/1/80 | \$ 99,791.00 | \$1,439.47 | 4.547\% |
| Austin Independent School District Unlimited Tax Bonds, Series 1969, $5 \%$, due 1/1/78 | 101,462.00 | ( 1,740.94) | 4.256 |
| Brazosport Junior College District School Building Bonds, Series 1969, 5\%, due 2/1/79 | 50,933.50 | 343.40 | 4.360 |
| City of Dallas General Obligation Bonds, Series $441,5 \%$, due $4 / 1 / 81$ | 92,200.50 | 4,996.45 | 4.478 |
| Fort Worth Independent School District Unlimited Tax Bonds, Series 1969, 6-1/2\%, due 8/1/79 | 53,652.50 | ( 38.22) | 4.319 |
| Fort Worth Independent School District Unlimited Tax Bonds, Series 1969, 6-1/2\%, due 8/1/80 | 54,433.50 | 377.92 | 4.375 |
| City of Lubbock General Obligation Bonds, Series 1969, 6-7/2\%, due 2/1/79 | 106,403.00 | ( 604.55) | 4.309 |
|  | \$558,876.00 | \$4,773.53 | 4.382\% |
| BOND PURCHASES |  |  |  |
|  |  |  | YIELD |
| ISSUE | UNIT | TOTAL | AT COST |
| Houston Lighting \& Power Company 8-1/8\% lst Mtge., due 2/1/2004 | 87.025 | \$174,050.00 | 9.447\% |

## U. T. SYSTEM - GENERAL TUITION REVENUE BONDS, NEW SERIES 1974 - RESERVE FUND (December, 1975)

BOND PURCHASES

| PAR | ISSUE | COST |  | YIELD |
| :---: | :---: | :---: | :---: | :---: |
| V/ $\overline{\text { ALUE }}$ |  | UNIT | TOTAL | AT COST |
| \$200,000 | U. S. $8-1 / 8 \%$ Treasury Notes, due 8/15/82 | 100.00 | \$200,000.00 | 8.125\% |
| 300,000 | U. S. 8-1/4\% Treasury Bonds, due 5/15/90 | 100.00 | 300,000.00 | 8.250 |
| \$500,000 |  |  | \$500,000.00 | 8.200\% |



CANCER RESEARCH UNDER THE DIRECTION OF DR. P. MONTGOMERY - DALLAS MEDICAL SCHOOL (December, 1975)

STOCK RECEIVED

NO. OF SHS.
1 Sh. Sun Oil Company Common Stock
NO. OF
SHARES SOLD
1/2 Sh.
Sun Oil Company Common Stock

NET SALES PROCEEDS
$\$ 14.50$

STOCK SALES
(December, 1975)

NO. OF
SHAREES SOLD
ISSUE
NET SALES PROCEEDS
STOCK RECEIVED BY GIFT OR BEQUEST:
CHANCELLOR'S COUNCIL - UNRESTRICTED ACCOUNTS:
104 Shs. Pennzoil Company Common Stock
$\$ 1,922.49$
U. T. AUSTIN - PRESIDENT'S ASSOCIATES:

1,000 Shs. Affiliated Computer Systems, Inc. Common Stock (now ACS Investors, Inc.) \$2,000.00
Teledyne, Inc. Common Stock
U. T. AUSTIN - ENGINEERING FOUNDATION - VARIOUS DONORS:

## 20 Shs. <br> 25

Crane cations Satell
Crane Company Common Stock
U. T. AUSTIN - ENGINEERING FOUNDATION - CHAIR OF FREE ENTERPRISE:

12 Shs. The Dow Chemical Company Common Stock
\$1,034.64

115 Shs.
Halliburton Company Common Stock
$\$ 16,225.61$
U. T. Austin - Engineering Fdn. - Chair of Free Enterprise. . $\$ 75,000.00$
U. T. Austin - Engineering Fdn. - Various Donors. . . . . . . 750.00
U. T. Austin - T. U. Taylor Professorship in Engineering. . . 475.61
U. T. AUSTIN - WILHELMINA PEGRAM ROBERTSON SCHOLARSHIP FUND:

[^54]STOCK RECEIVED BY GIFT OR BEQUEST: (Continued)

## U. T. DALLAS:



## STOCK SALES (Continued)

December, 1975)

| $\begin{aligned} & \text { NO. OF } \\ & \text { SHARES SOLD } \\ & \hline \end{aligned}$ | ISSUE | NET SALES PROCEEDS |
| :---: | :---: | :---: |
|  | U. T. HEALTH SCIENCE CENTER AT HOUSTON: |  |
| 1,200 Shs. | Exxon Corporation Capital Stock <br> 55 Shs. - Jack L. Bangs Memorial Fund . . . . . . . $\$ 4,755.06$ ) ( 1,145 Shs. - Mrs. P. E. Turner Newborn Baby Nursery. . 98,991.85) | \$103,746.91 |
|  | U. T. HEALTH SCIENCE CENTER AT SAN ANTONIO: |  |
| $\begin{aligned} & 250 \text { Shs. } \\ & 250 \text { I" } \end{aligned}$ | Texaco Inc. Capital Stock Standard 0il Company of California Common Stock | $\begin{array}{r} \$ 5,796.04 \\ 6,997.97 \\ \hline \end{array}$ |
|  |  | \$12,794.01 |
|  | THE UNIVERSITY OF TEXAS SYSTEM CANCER CENTER: |  |
| $\begin{aligned} & 180 \text { Shs. } \\ & 400 \mathrm{l} \end{aligned}$ | Exxon Corporation Capital Stock Dunhill International, Inc. Common Stock (now Questor Corporation) | $\begin{array}{r} \$ 15,162.94 \\ 2,227.43 \\ \hline \end{array}$ |
|  |  | \$17,390.37 |

\$15,162.94
\$17,390.37

For Month Ended January 31, 1976

## II. TRUST AND SPECIAL FUNDS

## TRUST AND SPECIAL FUNDS - INVESTMENT MATTERS.--

REPORT ON SECURITIES TRANSACTIONS.--The following securities
transactions have been made for the Trust and Special Funds in January, 1976. The Associate Deputy Chancellor for Investments, Trusts and Lands recommends approval by the Board of Regents of these transactions.

## INVESTMENTS ACQUIRED

| Par Value | Description and Fund | Total Net Cost | Yield at Cost |
| :---: | :---: | :---: | :---: |
|  | COUNTY AND MUNICIPAL BONDS: <br> See Bond Purchase Schedule for Detail |  |  |
| \$ 20,000 | The William Stamps Farish Professorship of Geology | \$ 20,091.20 | 4.15\% |
|  | CORPORATE BONDS: <br> See Bond Purchase Schedule for Detail |  |  |
| 500,000 | Common Trust Fund | 500,000.00 | 8.50\% |
| 65,000 | Damage Payments for West Texas Lands | 65,000.00 | 6.50 |
| 150,000 | Ima Hogg Foundation | 150,000.00 | 8.50 |
| 50,000 | Ronya and George Kozmetsky Endowment Fund | 50,000.00 | 8.50 |
| 50,000 | GMB - The Libbie Moody Thompson Memorial Trust | 50,000.00 | 8.50 |
| 50,000 | GMB - Clark W. Thompson Trust | 50,000.00 | 8.50 |
|  | TOTAL - Corporate Bonds | 865,000.00 | 8.35\% |
|  | COMMON STOCKS: <br> See Stock Purchase Schedule for Detail |  |  |
|  | UTD - Cecil H. and Ida M. Green Honors Chair in the Natural Sciences | 150,000.00 |  |
|  | TOTAL - LONG TERM INVESTMENTS | \$1,035,091.20 |  |
|  | SHORT TERM PAPER: |  |  |
| 50,000 | SRAC 6-1/2\% Note, due 1/16/76 <br> (\$8,000 - George M. Kozmetsky Memorial Scholarship bought from GMB - Clark W. Thompson Trust on 1/14/76 | \$ 50,000.00 | 6.508\% |
|  | 42,000 - Ima Hogg Foundation bought from GMB - Clark W. Thompson Trust on $1 / 14 / 76$ ) |  |  |
| 84,000 | Montgomery Ward 5-1/2\% Note, due 1/26/76 (Ima Hogg Foundation bought from CTF on $1 / 22 / 76$ ) | 84,000.00 | 5.530 |
| 50,000 | FMC 6-1/2\% Note, due 1/27/76 <br> (George M. Kozmetsky Memorial Scholarship bought from GMB - Libbie Moody Thompson Memorial Trust on 1/14/76) | 50,000.00 | 6.833 |
| 13,000 | GMAC 6-3/8\% Note, due 1/16/76 (Common Trust Fund - Undistributed Receipts) | 13,000.00 | 6.383 |


| Par Value | Description and Fund | Total Net Cost | Yield at Cost |
| :---: | :---: | :---: | :---: |
|  | SHORT TERM PAPER: (Continued) |  |  |
| \$150,000 | Montgomery Ward 4-1/2\% Note, due 1/30/76 (UTD - Cecil H. and Ida M. Green Honors Chair in the Natural Sciences) | \$150,000.00 | 4.513\% |
| 127,000 | GMAC 4-7/8\% Note, due 2/9/76 <br> (Ronya and George Kozmetsky Endowment Fund) | 127,000.00 | 4.896 |
| 260,500 | City National Bank 5-1/4\% CD, due 2/26/76 <br> (\$133,000 - Common Trust Fund - Undistributed Receipts | 260,500.00 | 5.250 |
|  | 10,000 - GMB - C. M. Phillips Lectureship in Medical Economics <br> 12,500 - GMB - James Wade Rockwell Endowment Fund |  |  |
|  | 100,000 - Sublett Professorship in Industrial Pharmacy <br> 5,000 - King Faculty Professional Achievement Award) |  |  |
| 81,000 | FMC 5-3/8\% Note, due 2/27/76 <br> (\$50,000 - AH - The Hubert L. Stringer Professorship <br> 25,000 - SAMS - Dr. Witten B. Russ Chair in Surgery <br> 6,000 - SAMS - Miss Eloise Alexander Memorial Fund) | $81,000.00$ | 5.420 |
| 59,000 | City National Bank 5\% CD, due 2/27/76 <br> (Common Trust Fund - Undistributed Receipts) | 59,000.00 | 5.000 |
| 108,000 | City National Bank 5\% CD, due 2/27/76 <br> (\$98,000 - Common Trust Fund - Undistributed Receipts <br> 10,000 - Raymond Dickson Foundation Scholarship Fund in Memory of Dillon Anderson) | 108,000.00 | 5.000 |
| 56,300 | City National Bank 5\% CD, due 2/27/76 <br> (\$37,000 - Common Trust Fund - Undistributed Receipts <br> 9,300 - Wilhelmina Pegram Robertson Scholarship Fund <br> 10,000 - DMS - Jack A. Pritchard Professorship in the Department of Obstetrics and Gynecology) | 56,300.00 | 5.000 |
| 7,000 | C.I.T. $4-5 / 8 \%$ Note, due $3 / 3 / 76$ <br> (\$700-AH - Anderson-Mayfair Mortgage Retirement Fund <br> 6,300 - Student Property Deposit Scholarship Fund) | 7,000.00 | 4.645 |



INVESTMENTS DISPOSED OF (Continued)
(January, 1976)


## THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND

 (January, 1976)BOND PURCHASES

| PAR | ISSUE |  | COST |  | YIELD |
| :---: | :---: | :---: | :---: | :---: | :---: |
| VALUE |  |  | UNIT | TOTAL | AT COST |
| \$500,000 | Transocean Gulf due 11/10/81 | 0il Company 8-1/2\% Guaranteed Notes, (Guaranteed by Gulf 0il Corporation) | 100.00 | \$500,000.00 | 8.50\% |



BOND MATURITIES AND PREPAYMENTS

| $\frac{\text { PAR }}{\underline{V A L U E}}$ | $\underline{\text { ISSUE }}$ | PROCEEDS |
| :--- | :--- | :--- |$\quad$| PROFIT OR (LOSS) |
| :--- |
| $\$ 6,052.50$ |

CECIL H. AND IDA M. GREEN HONORS CHAIR IN THE NATURAL SCIENCES - U. T. DALLAS
(January, 1976)
STOCK PURCHASES
NO.
$\frac{\text { PURCHAंSED }}{175.1836}$ The Common Fund $\quad$ ISSUE

TOTAL COST
175.1836 The Common Fund
$\$ 150,000.00$

| $\frac{\text { BOND PURCHASES }}{(J \text { January, 1976) }}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| PAR |  | COST |  | YIELD |
| VALUE | ISSUE | UNIT | TOTAL | AT COST |
|  | THE WILLIAM STAMPS FARISH PROFESSORSHIP OF GEOLOGY |  |  |  |
| \$20,000 | City of Richardson, Texas, Dallas \& Collin County 4-1/4\% General Obligation Bonds, Series 1968, due 4/1/81 | 100.456 | \$20,091.20 | 4.15\% |
| DAMAGE PAYMENTS FOR WEST TEXAS LANDS |  |  |  |  |
| \$65,000 | General Motors Acceptance Corporation 6-1/2\% Medium Term Note, due 10/12/76 | 100.000 | \$65,000.00 | 6.50\% |
| IMA HOGG FOUNDATION |  |  |  |  |
| \$150,000 | General Motors Acceptance Corporation 8-1/2\% Medium Term Note, due 1/14/81 | 100.000 | \$150,000.00 | 8.50\% |
| RONYA AND GEORGE KOZMETSKY ENDOWMENT FUND |  |  |  |  |
| \$50,000 | General Motors Acceptance Corporation 8-1/2\% Medium Term Note, due 1/14/81 | 100.000 | \$50,000.00 | 8.50\% |
| THE LIBBIE MOODY THOMPSON MEMORIAL TRUST - GALVESTON MEDICAL BRANCH |  |  |  |  |
| $\begin{array}{r}\$ 50,000 \\ \hline\end{array}$ | General Motors Acceptance Corporation 8-1/2\% Medium Term Note, due 1/14/81 | 100.000 | \$50,000.00 | 8.50\% |
| CLARK W. THOMPSON TRUST - GALVESTON MEDICAL BRANCH |  |  |  |  |
| \$50,000 | General Motors Acceptance Corporation 8-1/2\% Medium Term Note, due 1/14/81 | 100.000 | \$50,000.00 | 8.50\% |


| THE WILLIAM STAMPS FARISH PROFESSORSHIP OF GEOLOGY |  |  |  |
| :---: | :---: | :---: | :---: |
| BOND MATURITIES AND PREPAYMENTS |  |  |  |
| $\frac{\text { PAR }}{\sqrt{\text { ALUE }}}$ | ISSUE | PROCEEDS | PROFIT OR (LOSS) |
| \$20,000 | Tyler Independent School District Unlimited Tax School Bonds $3.40 \%$ Second Series 1960, due 1/1/76 | \$20,000.00 | -- |



## THE LEILA A. OLIVER CHARITABLE TRUST (January, 1976)

STOCK SALES
2,000 Shs. Farah Manufacturing Company, Inc. Common Stock
\$18,870.49
(\$79,004.51) -0-

## $\frac{\text { THE LORAINE 0'GORMAN GONZALEZ TRUST }}{(J a n u a r y, ~ 1976)}$ <br> (January, 1976)

NO. OF SHS.
ISSUE
17 Shs. Big Three Industries, Inc. Capital Stock (Received in $2 \%$ stock dividend)

NO. OF
SHARES SOLD
52/100 Sh.

ISSUE
Big Three Industries, Inc. Capital Stock

NET SALES PROCEEDS
$\$ 30.29$

| $\left(\frac{\text { STOCK SALES }}{(J a n u a r y, ~ 1976)}\right.$ |  |  |  |
| :---: | :---: | :---: | :---: |
| NO. OF |  |  |  |
| SHARES SOLD | ISSUE | NET SALES PROCEEDS |  |
| STOCK RECEIVED BY GIFT OR BEQUEST: |  |  |  |
| CHANCELLOR'S COUNCIL - UNRESTRICTED ACCOUNTS: |  |  |  |
| 30 Shs. | Mapco, Inc. Common Stock | \$7,026.56 |  |
|  | U. T. AUSTIN - PRESIDENT'S ASSOCIATES: |  |  |
| 6 Shs. | Exxon Corporation Capital Stock | \$530.47 |  |
|  | U. T. AUSTIN - GRADUATE SCHOOL OF BUSINESS - STUDENT-FACULTY EXCELLENCE FUND: |  |  |
| $\begin{aligned} & 200 \text { Shs. } \\ & 100 \text { " } \end{aligned}$ | Getty 0il Company Common Stock Tenneco Inc. Common Stock | $\begin{array}{r} \$ 35,156.32 \\ 2,727.65 \\ \hline \end{array}$ | $\stackrel{\omega}{\sim}$ |
|  |  | \$37,883.97 |  |
| 100 Shs. | U. T. AUSTIN - CENTER FOR ENTREPRENEURIAL STUDIES - VARIOUS DONORS: |  |  |
|  | Xerox Corporation Common Stock | \$5,303.57 |  |
|  | U. T. AUSTIN - ARCHER M. HUNTINGTON MUSEUM FUND: |  |  |
| 900 Shs. | Westvaco Corporation Common Stock | \$32,715.14 |  |
|  | U. T. AUSTIN - CIVIL ENGINEERING - HYDRAULIC ENGINEERING: |  |  |
| 100 Shs. | Delta Airlines Inc. Common Stock | \$4,010.67 |  |
|  | U. T. AUSTIN - GEOLOGY FOUNDATION - WAYNE FRANKLIN BOWMA |  | ${ }^{3}$ |
| 20 Shs. | Exxon Corporation Capital Stock | \$1,739.41 | $\checkmark$ |

## NO. OF

SHARES SOLD
ISSUE
NET SALES PROCEEDS
STOCK RECEIVED BY GIFT OR BEQUEST: (Continued)
U. T. ARLINGTON:
214 Shs. Canadian Superior $0 i 1$ of California, Ltd. Common Shares $\$ 8,422.71$
U. T. DALLAS:
21 Shs. Lincoln National Corporation Common Stock
6 " Texas Instruments Incorporated Common Stock
\$ 555.85
690.46
$\$ 1,246.31$

| 400 Shs. | U. T. DALLAS - FUND FOR LIBRARY BOOKS (GREEN): |  |
| :---: | :---: | :---: |
|  | Texas Instruments Incorporated Common Stock | \$46,081.45 |
|  | U. T. DALLAS - CECIL H. AND IDA M. GREEN HONORS CHAIR IN THE NATURAL SCIENCES: |  |
| 1,600 Shs. | Texas Instruments Incorporated Common Stock | \$150,816.46 |
|  | U. T. HEALTH SCIENCE CENTER AT DALLAS: |  |
| 1,340 Shs. | Seligman \& Latz, Inc. Common Stock | \$19,504.28 |
|  | GALVESTON MEDICAL BRANCH: |  |
| 100 Shs. | American Medicorp, Inc. Common Stock | \$566.35 |
|  | U. T. HEALTH SCIENCE CENTER AT HOUSTON: |  |
| 60 Shs. | Exxon Corporation Capital Stock | \$5,273.44 |

STOCK RECEIVED BY GIFT OR BEQUEST: (Continued)
THE UNIVERSITY OF TEXAS SYSTEM CANCER CENTER:
1,800 Shs. Halliburton Company Common Stock
\$282,548.03
5,563.85 18,339.62 $\$ 306,451.50$

THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND - RECOMMENDATION RE ADDITIONS AND WITHDRAWALS.--The Associate Deputy Chancellor for Investments, Trusts and Lands recommends that the following additions and withdrawals made to the Common Trust Fund endowment account on September 1, 1975 at a unit market value of $\$ 1.975784120$ be approved.

| Fund | Recommended Additions |  | No. Units Added |
| :---: | :---: | :---: | :---: |
| Chimes Scholarship Fund | \$ | 65.23 | 33 |
| (College of Arts and Sciences Foundation) |  |  |  |
| ( $\$ 1,649.91$ already in CTF) |  |  |  |
| Arthur Andersen and Company Alumni |  |  |  |
| Professorship of Accounting |  | 18,265.00 | 9,244 |
| (College of Business Administration) |  |  |  |
| (NEW FUND) |  |  |  |
| J. C. Dolley Finance Education Fund <br> (College of Business Administration) |  | 3.79 | 2 |
|  |  | ( $\$ 210.18$ already in CTF) |  |  |  |
|  |  |  |  |  |  |
| Mavis Alexander Fitzgerald Award <br> (College of Business Administration) |  |  |  |
|  |  |  |  |  |  |  |  |
| (\$305.41 already in CTF) |  |  |  |
| I. Friedlander Building and Loan Prize (College of Business Administration) |  |  |  |
|  |  |  |  |  |  |  |  |
| ( $\$ 5,420.47$ already in CTF) |  |  |  |
| (College of Business Administration) 10.57 |  |  |  |
|  |  |  |  |  |  |  |  |
| (\$620.41 already in CTF) |  |  |  |
| C. Aubrey Smith Accounting Educational |  |  |  |
| Endowment Fund |  | 17,600.00 | 8,908 |
| (College of Business Administration) , 8, 908 |  |  |  |
| The Accounting Education Fund |  | 170.00 | 86 |
| (College of Business Administration) |  |  |  |
| (\$71,537.49 already in CTF) |  |  |  |
| Arthur Young Distinguished Professorship Fund(College of Business Administration)$(\$ 96,750.00$ already in CTF) |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Charles Robert Devall Journalism Scholarship <br> (School of Communication - Department of Journalism) <br> ( $\$ 3,000.00$ already in CTF) |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Journalism Foundation - Paul J. Thompson - |  |  |  |
| DeWitt Reddick Society |  | 845.00 | 428 |
| (School of Communication - Department of Journalism) |  |  |  |
| ( $\$ 42,723.95$ already in CTF) |  |  |  |
| John E. McGary Advertising Scholarship |  | 43.83 | 22 |
| (School of Communication - Department of Journalism) ( $\$ 2,673.61$ already in CTF) |  |  |  |
| The Will H. Mayes Scholarship in Journalism (School of Communication - Department of Journalism) ( $\$ 14,588.83$ already in CTF) |  |  |  |
|  |  |  |  |  |  |  |  |

## THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND (Continued)



## THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND (Continued)

| Fund | Recommended Additions |  | No. Units Added |
| :---: | :---: | :---: | :---: |
| Mollie Fitzhugh Thornton Music Scholarship Fund (College of Fine Arts Foundation) <br> (\$706.85 already in CTF) | \$ | 10.96 | 6 |
| University Theatre Associates Endowment (College of Fine Arts Foundation) ( $\$ 22,232.79$ already in CTF) |  | 15.00 | 8 |
| Wayne Franklin Bowman Scholarship Fund (Geology Foundation) <br> ( $\$ 32,110.60$ already in CTF) |  | 20.00 | 10 |
| Fred M. Bullard Professorship (Geology Foundation) ( $\$ 30,389.68$ already in CTF) |  | 3,006. 24 | 1,522 |
| Hal P. Bybee Memorial Fund (Geology Foundation) ( $\$ 269,553.77$ already in CTF) |  | 3,613.50 | 1,829 |
| ```Dorothy Ogden Carsey Memorial Scholarship (Geology Foundation) ($19,752.00 already in CTF)``` |  | 270.00 | 137 |
| ```Robert H. Cuyler Memorial Scholarship Fund (Geology Foundation) ($20,794.32 already in CTF)``` |  | 35.00 | 18 |
| Ronald K. DeFord Field Scholarship Fund (Geology Foundation) ( $\$ 16,642.97$ already in CTF) |  | 749.75 | 379 |
| Carolyn G. and George M. Knebel Fund (Geology Foundation) <br> ( $\$ 37,375.12$ already in CTF) |  | 50.00 | 25 |
| J. Hoover Mackin Scholarship Fund (Geology Foundation) (\$10,281.72 already in CTF) |  | 12.00 | 6 |
| Wallace E. Pratt Professorship in Geophysics (Geology Foundation) <br> ( $\$ 99,574.84$ already in CTF) |  | 1,552.67 | 786 |
| ```Professorship in Sedimentary Geology (Geology Foundation) ($16,586.68 already in CTF)``` |  | 897.66 | 454 |
| Vetebrate Paleontology Fund (Geology Foundation) (\$13,929.61 already in CTF) |  | 2,785.16 | 1,410 |
| Dr. F. L. Whitney Memorial Scholarship Fund (Geology Foundation) <br> ( $\$ 24,052.75$ already in CTF) |  | 40.00 | 20 |

## THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND (Continued)



THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND (Continued)

| Fund | Recommended Additions |  | No. Units Added |
| :---: | :---: | :---: | :---: |
| Roy Crane Award in the Arts ( $\$ 11,174.32$ already in CTF) | \$ | 39.85 | 20 |
| Ethel V. Loving de Diaz Scholarship Fund ( $\$ 9,188.84$ al ready in CTF) |  | 150.25 | 76 |
| Edward Louis Dodd and Alice Laidman Dodd Fellowship Fund ( $\$ 56,303.90$ already in CTF) |  | 387.56 | 196 |
| Clara Driscoll Scholarship for Research in Texas History ( $\$ 14,800.66$ already in CTF) |  | 749.52 | 379 |
| James Leonard Duncan Scholarship Fund ( $\$ 9,406.16$ already in CTF) |  | 53.65 | 27 |
| Richard T. Fleming Library of The University of Texas Writer's Fund ( $\$ 2,377.46$ already in CTF) |  | 33.36 | 17 |
| Maud McCain Harding Fund ( $\$ 550,327.39$ already in CTF) |  | 21,959.86 | 11,115 |
| Hinds-Webb Scholarship Fund ( $\$ 202.20$ already in CTF) |  | 3.32 | 2 |
| Hogg Foundation: Will C. Hogg Fund ( $\$ 11,025,070.87$ already in CTF) |  | 58,110.09 | 29,411 |
| Hogg Foundation: Varner Properties ( $\$ 2,981,196.88$ already in CTF) |  | 30,003.50 | 15,186 |
| Hogg Foundation - Eloise Helbig Chalmers Ima Hogg Fund ( $\$ 6,844.34$ already in CTF) |  | 230.66 | 117 |
| Thomas E. Hogg - Residuary Legacy ( $\$ 14,638.79$ already in CTF) |  | 1,356.43 | 687 |
| Archer M. Huntington Museum Fund ( $\$ 2,795,117.27$ already in CTF) |  | 137,693.61 | 69,691 |
| John Lewis Keel Memorial Scholarship Fund ( $\$ 2,210.55$ already in CTF) |  | 233.14 | 118 |
| W. F. and Marian Michael Scholarships and Fellowships (German) ( $\$ 4,718.99$ already in CTF) |  | 179.54 | 91 |
| The Roger Q. Mills Scholarship Fund ( $\$ 97.21$ already in CTF) |  | 1.93 | 1 |
| Harry Estill Moore Disaster Study Collection ( $\$ 1,433.46$ already in CTF) |  | 21.47 | 11 |
| Additions - September 1, 1975 |  |  |  |

THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND (Continued)

| Fund | Recommended <br> Additions |  | No. Units $\qquad$ |
| :---: | :---: | :---: | :---: |
| Benonine Muse Scholarship Fund ( $\$ 36,077.46$ already in CTF) | \$ | 1,269.90 | 643 |
| Shiela 0'Gara Scholarship Fund ( $\$ 3,073.54$ already in CTF) |  | 43.71 | 22 |
| S. H. Osmond Scholarship Fund ( $\$ 1,736.32$ already in CTF) |  | 147.92 | 75 |
| Lora Lee Pederson Scholarship Fund Graduate School of Social Work ( $\$ 4,248.86$ already in CTF) |  | 70.00 | 35 |
| Dr. Edward Randall, Jr. Memorial Fund ( $\$ 3,516.19$ already in CTF) |  | 49.82 | 25 |
| Louis W. Rase Band Scholarship ( $\$ 2,640.00$ already in CTF) |  | 2,000.00 | 1,012 |
| Aaron Schaffer Memorial Scholarship Fund (French) ( $\$ 5,586.60$ already in CTF) |  | 181.30 | 92 |
| ```Tom Slick Memorial Trust for The University of Texas at Austin ($387,695.70 already in CTF)``` |  | 1,709.61 | 865 |
| VanderPoel Fund for Research and Publication ( $\$ 53,279.40$ already in CTF) |  | 776.16 | 393 |
| C. D. Belding Memorial Fund (U. T. E1 Paso) ( $\$ 9,647.00$ al ready in CTF) |  | 500.00 | 253 |
| Roland W. Claudius Memorial Scholarship Fund (U. T. El Paso) <br> (NEW FUND) |  | 15,000.00 | 7,592 |
| Frank B. Cotton Trust - Endowment Account (U. T. El Paso) <br> ( $\$ 3,395,453.97$ al ready in CTF) |  | 819.46 | 415 |
| Brooks Dawson Memorial Scholarship <br> (U. T. El Paso) <br> ( $\$ 2,965.54$ already in CTF) |  | 1,191.21 | 603 |
| Josephine Clardy Fox Estate Fund (U. T. E1 Paso) <br> ( $\$ 1,719,313.01$ already in CTF) |  | 11,710.68 | 5,927 |
| Library Endowment Fund <br> (U. T. El Paso) <br> ( $\$ 22,394.48$ already in CTF) |  | 2,003.00 | 1,014 |
| E. Ray Lockhart Library Memorial (U. T. E1 Paso) ( $\$ 3,293.10$ already in CTF) |  | 15.00 | 8 |

```
Additions - September 1, }197
```

THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND (Continued)

| Fund | Recommended Addition |  | No. Units Added |
| :---: | :---: | :---: | :---: |
| ```Lloyd A. Nelson Professorship in Geology (U. T. E1 Paso) ($102,841.31 already in CTF)``` | \$ | 25.00 | 13 |
| Vincent M. Rauel Collection of Judaica (U. T. E1 Paso) <br> ( $\$ 2,722.00$ already in CTF) |  | 15.00 | 8 |
| Patrick Romanell Library Fund (U. T. El Paso) <br> ( $\$ 5,818.81$ already in CTF) |  | 82.80 | 42 |
| ```Julia Ann Ross Memorial Scholarship (U. T. El Paso) ($12,506.49 already in CTF)``` |  | 1,233.75 | 624 |
| Student General Property Deposits Fund (U. T. E1 Paso) <br> ( $\$ 223,273.86$ already in CTF) |  | 38,921.61 | 19,699 |
| Katherine H. White Memorial Library Fund (U. T. El Paso) <br> ( $\$ 2,940.50$ already in CTF) |  | 5.00 | 3 |
| The B. Marshall Willis Library Memorial Endowment (U. T. E1 Paso) <br> ( $\$ 3,523.50$ already in CTF) |  | 50.00 | 25 |
| The Mr. and Mrs. William Henry Wooldridge Library Fund (U. T. El Paso) <br> ( $\$ 25,124.06$ already in CTF) |  | 1,000.00 | 506 |
| Estate of Elmer Ellard Stalcup (Dallas Medical School) ( $\$ 62,786.74$ already in CTF) |  | 695.94 | 352 |
| The Robert Cantrell Feamster Foundation (Galveston Medical Branch) ( $\$ 4,378.06$ already in CTF) |  | 75.56 | 38 |
| ```The David Fant and Ollie Hibbs Henry Lectureship in Psychiatry and Religion (Galveston Medical Branch) (NEW FUND)``` |  | 10,000.00 | 5,061 |
| The Dr. Walter Junius Hildebrand Scholarship Fund (Galveston Medical Branch) <br> ( $\$ 71,709.63$ already in CTF) |  | 152.91 | 77 |
| ```Gladys Kempner and R. Lee Kempner Professorship in Child Psychiatry (Galveston Medical Branch) ($40,000.00 already in CTF)``` |  | 20,000.00 | 10,123 |
| Harris L. Kempner Professorship in Humanities in Medicine <br> (Galveston Medical Branch) <br> ( $\$ 20,000.00$ already in CTF) |  | 20,000.00 | 10,123 |

THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND
(Continued)

| Fund | Recommended Additions | No. Units Added |
| :---: | :---: | :---: |
| The James W. McLaughlin Fellowship Fund (Galveston Medical Branch) ( $\$ 982,721.46$ already in CTF) | 35,747.17 | 18,093 |
| The Robertson Poth Professorship in Opthalmology (Galveston Medical Branch) ( $\$ 66,170.29$ already in CTF) | 1,078.07 | 546 |
| ```William N. and Ida Zinn Alpha Omega Alpha Scholarship Fund (Galveston Medical Branch) ($3,569.60 already in CTF)``` | 41.97 | 21 |
| The Robert A. Welch Chair in Chemistry (Houston Medical School) <br> ( $\$ 275,000.00$ already in CTF) | 125,000.00 | 63,266 |
| Fitzhugh Carter Pannill Scholarship and Loan Fund (San Antonio Medical School) ( $\$ 5,822.29$ already in CTF) | 30.00 | 15 |
| Ruth Harriet Ainsworth Professorship in Developmental Therapeutics (Anderson Hospital) ( $\$ 292,949.62$ already in CTF) | 40,073.16 | 20,282 |
| Charles B. Baker Professorship in Surgery (Anderson Hospital) ( $\$ 474,757.61$ already in CTF) | 98.64 | 50 |
| Carolyn Froebel Fund (Anderson Hospital) ( $\$ 1,605.52$ already in CTF) | 22.18 | 11 |
| Madeline Kavanaugh Fund (Anderson Hospital) ( $\$ 8,722.63$ already in CTF) | 308.14 | 156 |
| The Hubert L. Stringer Professorship (Anderson Hospital) <br> (NEW FUND) | 163,323.03 | 82,662 |
| University Cancer Foundation (Anderson Hospital) ( $\$ 558,627.47$ already in CTF) | 258.21 | 131 |
| The Robert A. We1ch Chair in Chemistry (Anderson Hospital) <br> ( $\$ 275,000.00$ already in CTF) | 125,000.00 | 63,266 |
| Mary Rolaya Nicholas Endowed Scholarship (School of Nursing) <br> (NEW FUND) | 5,000.00 | 2,531 |
| TOTAL CASH ADDITIONS TO COMMON TRUST FUND ON SEPTEMBER 1, 1975 | \$1,009,088.63 | 510,731 |

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THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND (Continued)
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As of September 1, 1975, the following monies were withdrawn from the Common Trust Fund endowment account at a unit market value of $\$ 1.975784120$ based on market valuation of August 29, 1975:

Fund
Cash

| Fund | $\frac{\text { Withdrawn }}{\$ 2,637.50}$ |
| :--- | ---: | ---: |
| Miss Eloise Alexander Memorial Fund | 84.96 |
| Robert A. Welch Chair in Chemistry | 12.40 |
| E. M. Barron Endowment Fund | $\$ 2,734.86$ |
| $\quad$ TOTAL CASH WITHDRAWN ON SEPTEMBER 1, 1975 |  |

Results in Common Trust Fund endowment account after withdrawl:
Miss Eloise Alexander Memorial Fund:

| Book Value prior |
| :---: | :---: | :---: |
| to withdrawal |


| Book Value withdrawn | $\$ 212,525.15$ | Units Held prior |
| :---: | :---: | :---: |
| Book value remaining |  |  |
| after withdrawal |  |  |

Robert A. Welch

Book Value prior
to withdrawal

Book Value remainin after withdrawal
$\begin{array}{r}\$ 369,090.99 \\ 92.02 \\ \hline\end{array}$
$\$ 368,998.97$
E. M. Barron

Book Value prior
to withdrawal
Book Value withdrawn
Book Value remaining after withdrawal
\$ $92,509.36$
Units Held prior
to withdrawal 40,592
Units withdrawn $\quad 6$
Units remaining after withdrawal 40,586
*The $\$ 12.40$ was withdrawn at a unit market value of $\$ 1.926404324$ the market valuation on March 1,1975 . The $\$ 12.40$ check received as a gift to the Barron Fund was uncollectable.

```
THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND (Continued)
```

Net Realized Profit on Sale of Investments:

| Realized Profit prior to withdrawal |  | \$1,298,917.00 |
| :---: | :---: | :---: |
| Additions due to withdrawal: |  |  |
| Miss Eloise Alexander Memorial Fund | \$473.37 |  |
| Robert A. Welch Chair in Chemistry | 7.06 | 480.43* |
| After withdrawal |  | \$1,299,397.43 |

*Difference between Book Value in the Amount of $\$ 3,202.89$ written off and cash withdrawn in the amount of $\$ 2,722.46$ based on unit market value of $\$ 1.975784120$.

The results of the above additions and withdrawals will be THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND with a total book value of $\$ 50,635,590.86$ with $23,116,819$ units outstanding as of September 1, 1975.

## SUMMARY

| Cash Added $9 / 1 / 75$ | $\$ 1,009,088.63$ |
| :--- | ---: |
| Cash Withdrawn $9 / 1 / 75$ | $2,734.86$ |

NET ADDITIONS TO COMMON TRUST FUND 9/1/75
$\$ 1,006,353.77$

THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND - RECOMMENDATION RE ADDITIONS, TRANSFERS AND WITHDRAWALS.--The Associate Deputy Chancellor for Investments, Trusts and Lands recommends that the following additions, transfers and withdrawals made to the Common Trust Fund endowment account on December 1, 1975 at a unit market value of $\$ 2.013577058$ be approved.

| Fund | Recommended Additions |  | No. Units$\frac{\text { Added }}{1,013}$ |
| :---: | :---: | :---: | :---: |
| Jennie and Carl Sundberg Scholarship Fund | \$ | 2,040.34 |  |
| (College of Arts and Sciences Foundation) (\$37,278.85 already in CTF) |  |  |  |
| J. C. Dolley Finance Education Fund |  | 4.27 | 2 |
| (College of Business Administration) (\$213.97 already in CTF) |  |  |  |
| Mavis Alexander Fitzgerald Award |  | 6.30 | 3 |
| (College of Business Administration) |  |  |  |
| The Gilbreth Award Fund |  | 11.88 | 6 |
| (College of Business Administration) |  |  |  |
| Karl and Helen McGinnis Scholarship |  | 100.00 | 50 |
| (College of Business Administration) |  |  |  |
| C. Aubrey Smith Accounting Educational Endowment Fund |  | 200.00 | 99 |
| (College of Business Administration) (\$44,712.69 already in CTF) |  |  |  |
| The Accounting Education Fund |  | 125.00 | 62 |
| (College of Business Administration) (\$71,707.49 already in CTF) |  |  |  |
| J. Anderson Fitzgerald Special Scholarship Fund (College of Business Administration) <br> ( $\$ 11,040.45$ already in CTF) |  |  |  |
|  |  |  |  |  |
| Arthur Young Distinguished Professorship Fund (College of Business Administration) <br> (\$99,250.00 already in CTF) |  | 4,050.00 | 2,011 |
| ```Journalism Foundation - Paul J. Thompson - DeWitt Reddick Society``` |  |  |  |
| (School of Communication - Department of Journalism)$(\$ 43,568.95$ already in CTF) |  |  |  |
|  |  |  |  |
|  |  |  |  |  |
| The Ernest Cockrell, Jr. Fund for College of |  |  |  |
| (College of Engineering Foundation) ( $\$ 36,461.87$ already in CTF) | (College of Engineering Foundation) |  |  |
| Additions - December 1, 1975 |  |  |  |



Additions - December 1, 1975

## THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND (Continued)

| Fund | Recommended Additions |  | No. Units <br> Added |
| :---: | :---: | :---: | :---: |
| ```Carolyn G. and George M. Knebel Fund (Geology Foundation) ($37,425.12 already in CTF)``` | \$ | 21,245.00 | 10,551 |
| J. Hoover Mackin Scholarship Fund (Geology Foundation) <br> (\$10,293.72 already in CTF) |  | 5.00 | 2 |
| Ed Owen - Geo. Coates Fund (Geology Foundation) ( $\$ 102,912.20$ already in CTF) |  | 15.00 | 7 |
| Wallace E. Pratt Professorship in Geophysics (Geology Foundation) <br> ( $\$ 101,127.51$ already in CTF) |  | 3,943.18 | 1,958 |
| ```Professorship in Sedimentary Geology (Geology Foundation) ($17,484.34 already in CTF)``` |  | 402.45 | 200 |
| Vertebrate Paleontology Fund (Geology Foundation) ( $\$ 16,714.77$ already in CTF) |  | 4,350.00 | 2,160 |
| ```Dr. F. L. Whitney Memorial Scholarship Fund (Geology Foundation) ($24,092.75 already in CTF)``` |  | 620.00 | 308 |
| ```F. L. Whitney Memorial Book Fund - Various Donors (Geology Foundation) ($6,269.05 already in CTF)``` |  | 5.00 | 2 |
| Pharmaceutical Research Fund (College of Pharmacy) ( $\$ 1,857.26$ already in CTF) |  | 43.68 | 22 |
| ```Raoul Daniel Rene "Daddy" Cline Memorial Endowment Fund (Pharmaceutical Foundation) ($1,455.17 already in CTF)``` |  | 29.10 | 14 |
| ```W. F. Gidley Appreciation Endowment Fund (Pharmaceutical Foundation) ($4,235.78 already in CTF)``` |  | 77.62 | 39 |
| The Senior Class Endownent Fund (Pharmaceutical Foundation) ( $\$ 16,027.00$ already in CTF) |  | 287.34 | 143 |
| The Charles W. Laughton Endowed Presidential Scholarship (Endowed Presidential Scholarships) <br> (NEW FUND) |  | 29,723.38 | 14,761 |
| Alma Walsh Mallison Endowed Presidential Scholarship (Endowed Presidential Scholarship) <br> (NEW FUND) |  | 25,000.00 | 12,416 |
| Additions - December 1, 1975 |  |  |  |

THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND (Continued)

| Fund | Recommended Additions |  | No. Units Added |
| :---: | :---: | :---: | :---: |
| ```E. Bagby Atwood Memorial Graduate Scholarship in English ($10,338.37 already in CTF)``` | \$ | 180.07 | 89 |
| Carl Stone Benedict Scholarship Fund (\$29,771.27 already in CTF) |  | 221.25 | 110 |
| Nettie Lee Benson Library Fund (NEW FUND) |  | 10,000.00 | 4,966 |
| Lloyd Bentsen, Jr. Professorship in Public Affairs ( $\$ 61,075.29$ already in CTF) |  | 1,036.41 | 515 |
| Bonham-Dietrich Memorial Fund for Memorial Museum ( $\$ 33,046.00$ already in CTF) |  | 672.83 | 334 |
| Morgan and Hamah Smith Callaway Fund ( $\$ 16,525.27$ already in CTF) |  | 314.07 | 156 |
| Alma Idell Carlson Fund (\$9,246.58 already in CTF) |  | 1,674.42 | 832 |
| The Cline Collection of Eng1ish and American Literature Since 1800 (\$29,026.72 already in CTF) |  | 145.71 | 72 |
| Roy Crane Awards in the Arts (\$11,214.17 already in CTF) |  | 44.28 | 22 |
| Ethel V. Loving de Diaz Scholarship Fund (\$9,339.09 already in CTF) |  | 216.32 | 107 |
| Edward Louis Dodd and Alice Laidman Dodd Fellowship Fund ( $\$ 56,691.46$ already in CTF) |  | 157.75 | 78 |
| James Leonard Duncan Scholarship Fund ( $\$ 9,459.81$ already in CTF) |  | 54.53 | 27 |
| ```Richard T. Fleming Library of The University of Texas Writer's Fund ($2,410.82 already in CTF)``` |  | 37.53 | 19 |
| Maud McCain Harding Fund ( $\$ 572,287.25$ already in CTF) |  | 11,213.64 | 5,569 |
| Hinds-Webb Scholarship Fund ( $\$ 205.52$ already in CTF) |  | 3.74 | 2 |
| Hogg Foundation: Will C. Hogg Fund ( $\$ 11,083,180.96$ already in CTF) |  | 48,740.90 | 24,206 |
| ```Hogg Foundation: Eloise Helbig Chalmers - Ima Hogg Fund ($7,075.00 already in CTF)``` |  | 234.15 | 116 |
| Additions - December 1, 1975 |  |  |  |

## THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND

(Continued)

| Fund | Recommended Additions |  | No. Units Added |
| :---: | :---: | :---: | :---: |
| Thomas E. Hogg - Residuary Legacy ( $\$ 15,995.22$ already in CTF) | \$ | 1,177.07 | 585 |
| John Lewis Keel Memorial Scholarship Fund ( $\$ 2,443.69$ already in CTF) |  | 40.87 | 20 |
| General Libraries Endowed Development Fund Account (NEW FUND) |  | 10,000.00 | 4,966 |
| W. F. and Marian Michael Scholarships and Fellowships ( $\$ 4,898.53$ already in CTF) |  | 100.00 | 50 |
| The Roger Q. Mi11s Scholarship Fund (\$99.14 already in CTF) |  | 2.18 | 1 |
| Harry Estill Moore Disaster Study Collection ( $\$ 1,454.93$ already in CTF) |  | 24.15 | 12 |
| Shiela 0'Gara Scholarship Fund ( $\$ 3,117.25$ already in CTF) |  | 49.16 | 24 |
| Lora Lee Pederson Scholarship Fund Graduate School of Social Work ( $\$ 4,318.86$ already in CTF) |  | 130.00 | 65 |
| Dr. Edward Randall, Jr. Memorial Fund ( $\$ 3,566.01$ already in CTF) |  | 56.02 | 28 |
| Lynda B. Johnson Robb Award ( $\$ 2,169.53$ already in CTF) |  | 22.02 | 11 |
| Wilhelmina Pegram Robertson Scholarship Fund ( $\$ 208,406.46$ already in CTF) |  | 1,520.00 | 755 |
| Albert Schweitzer Scholarship ( $\$ 975.38$ al ready in CTF) |  | 14,000.00 | 6,953 |
| ```Tom Slick Memorial Trust for The University of Texas at Austin ($389,405.31 already in CTF)``` |  | 8,599.90 | 4,271 |
| Joanne Thaman Memorial Awards ( $\$ 1,427.00$ already in CTF) |  | 10.00 | 5 |
| Vander Poel Fund for Research and Publication ( $\$ 54,055.56$ already in CTF) |  | 873.13 | 434 |
| ```Frank B. Cotton Trust - Endowment Account (U. T. E1 Paso) ($3,396,273.43 already in CTF)``` |  | 834.91 | 415 |
| Brooks Dawson Memorial Scholarship <br> (U. T. El Paso) <br> ( $\$ 4,156.75$ already in CTF) |  | 83.51 | 41 |
| ```Jack A. Pritchard Professorship in the Department of Gynecology (Dallas Medical School) ($100,000.00 already in CTF)``` |  | 2,500.00 | 1,242 |
| Additions - December 1, 1975 |  |  |  |

THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND (Continued)

| Fund | Recommended Additions | No. Units Added |
| :---: | :---: | :---: |
| ```Estate of Elmer Ellard Stalcup (Dallas Medical School) ($63,482.68 already in CTF)``` | \$ 709.95 | 353 |
| ```Agnes Thelma Anderson Fund for Student Aid (Galveston Medical Branch) ($140,740.14 already in CTF)``` | 1,055.75 | 524 |
| The Robert Cantrell Feamster Foundation (Galveston Medical Branch) ( $\$ 4,453.62$ already in CTF) | 84.98 | 42 |
| ```Dr. Granville T. Hall Professorship of General Surgery (Galveston Medical Branch) ($100,000.00 already in CTF)``` | 25,000.00 | 12,416 |
| The Dr. Walter Junius Hildebrand Scholarship Fund (Galveston Medical Branch) (\$71,862.54 already in CTF) | 764.60 | 380 |
| The James W. McLaughlin Fellowship Fund (Galveston Medical Branch) ( $\$ 1,018,468.63$ already in CTF) | 15,952.73 | 7,923 |
| ```The Robertson Poth Professorship in Ophthalmology (Galveston Medical Branch) ($67,248.36 already in CTF)``` | 9,098.92 | 4,519 |
| The Paul R. Stalnaker, M.D. Fund (Galveston Medical Branch) <br> (NEW FUND) | 172,348.30 | 85,593 |
| ```Edgar H. and Lillie Mae Vaughan Lectureship in Medical Philosophy and Morality (Galveston Medical Branch) (NEW FUND)``` | 10,000.00 | 4,966 |
| William N. and Ida Zinn Alpha Omega A1pha Scholarship Fund (Galveston Medical Branch) <br> ( $\$ 3,611.57$ already in CTF) | 80.11 | 40 |
| M. D. Anderson Foundation - John H. Freeman Fund (Houston Medical School) <br> ( $\$ 400,000.00$ already in CTF) | 200,000.00 | 99,326 |
| ```Fitzhugh Carter Pannill Scholarship and Loan Fund (San Antonio Medical School) ($5,852.29 already in CTF)``` | 25.00 | 12 |
| Phillip Pauerstein Memorial Fund (San Antonio Medical School) ( $\$ 2,159.00$ already in CTF) | 82.00 | 41 |

Additions - December 1, 1975

| Fund |  |  | Recommended Additions |  | No. Units $\qquad$ <br> Added |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Carolyn Froebel Fund  $\$ 12$  <br> (M. D. Anderson Hospital)    |  |  |  |  |  |
| ( $\$ 1,627.70$ already in CTF) |  |  |  |  |  |
| Madeline Kavanagh Fund <br> (M. D. Anderson Hospital) |  |  |  |  |  |
|  |  |  |  |  |  |
| ( $\$ 9,030.77$ already in CTF) |  |  |  |  |  |
| TOTAL ADDITIONS TO COMMON TRUST FUND |  |  |  |  |  |
| ON DECEMBER 1, 1975 |  |  |  | 658,946.80 | 327,251 |
| Effective December 12, 1975, the following transfer was made between Common Trust Fund endowment accounts as follows: |  |  |  |  |  |
| Fund |  |  | Book Value |  | No. Units <br> Transferred |
| From: <br> Alfred and Nellie King Graduate Fellowship $\quad \$ \quad 48,029.99 \quad 23,470$ <br> Units transferred at a unit book value of \$2.046441841 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| To: |  |  |  |  |  |
|  |  |  |  |  |  |
| Units transferred at a unit book value of \$2.046441841 48,029.99 23,470 |  |  |  |  |  |
| Results in Common Trust Fund endowment account after transfer: |  |  |  |  |  |
| Alfred and Nellie King Graduate Fellowship: |  |  |  |  |  |
| Book Value prior to transfer | \$48,029.99 | Units Held pr to transfer |  | 23,470 |  |
| Book Value transferred | 48,029.99 | Units transfe | red | 23,470 |  |
| Book Value remaining after transfer | -0- | Units remaini after trans |  | -0- |  |
| King Faculty Professional Achievement Award: |  |  |  |  |  |
| Book Value prior to transfer | \$ -0- | Units Held pr to transfer |  | -0- |  |
| Book Value transferred | 48,029.99 | Units transfe | red | 23,470 |  |
| Book Value held after transfer | \$48,029.99 | Units Held after trans |  | 23,470 |  |
| Additions - December 1, 1975 |  |  |  |  |  |

## THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND (Continued)

As of December 1, 1975, the following monies were withdrawn from the Common Trust Fund endowment account at a unit market value of $\$ 2.013577058$ based on market valuation as of November 30, 1975:

## Cash

Fund
Withdrawn
W. J. McDonald Observatory Fund
$\$ 1,368.41$
Results in Common Trust Fund endownent account after withdrawal:

| Book Value prior to withdrawal | \$110,275.18 | Units Held prior to withdrawal | 494.39 |
| :---: | :---: | :---: | :---: |
| Book Value withdrawn | 1,516.76 | Units withdrawn | 6.80 |
| Book Value remaining |  | Units remaining |  |
| after withdrawal | \$108,758.42 | after ẇithdrawal | 487.59 |

Net Realized Profit on Sale of Investments:

```
Realized Profit prior to withdrawal $1,299,652.34
Addition due to withdrawal
                                    148.35*
        After withdrawal
    $1,299,800.69
```

*Difference between Book Value in the amount of $\$ 1,516.76$ written off and cash withdrawn in the amount of $\$ 1,368.41$, based on unit market value of $\$ 2.013577058$.

The results of the above additions, transfer, and withdrawal will be THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND with a total book value of $\$ 51,293,424.16$ with $23,443,390$ units outstanding as of December 1, 1975.

## SUMMARY

| Cash Added $12 / 1 / 75$ | $\$ 651,221.80$ |
| :--- | ---: |
| Securities Added $12 / 1 / 75$ |  |
| Cash Withdrawn $12 / 1 / 75$ | $\left(\begin{array}{r}3,725.00 \\ \\ \text { NET ADDITIONS TO COMMON TRUST FUND } 12 / 1 / 75\end{array}\right.$ |


[^0]:    Many things make UT-Dallas unique, but two in particular are important: the College and the Interdisciplinary activities, which include College seminars, courses, and degree programs.

[^1]:    ${ }^{*}$ Degrees in Classics will not be awarded until 1977. Courses for juniros with a major in classics will begin in 1975-1976.

[^2]:    Degrees in German will not be awarded until 1977. Courses for juniors with a major in German will be available in 1975-1976.

[^3]:    HIST 4364 Education and Social Change in North America II (3 semester hours) (same as Education 4316),
    Continuation of themes studied in History 4363. Individual and group research reports. New trends of analysis, new methods and new interpretations from a comparative perspective. Prerequisite: Education and Social Change in North America I.

    HIST 4365 Advanced Topics in Urban History (3 semester hours)
    HIST 4366 Advanced Topics in American Social History (3 semester hours)
    HIST 4367 Advanced Topics in American Economic History ( 3 semester hours).
    HIST 4368 Advanced Topics in Labor History (3 gemester hours).
    HIST 4369 American Labor History, 1945-75 (3 semester hours).
    Probleas of labor history, with special emphasis on 1945 to the present. Topics considered will include organized labor and the black worker, the problems of mion democracy, women in the labor movement, and the migratory worker.

    HIST 4370 Black Labor History (3 senester hours).

    HIST 4371 Advanced Topics in Afro-American History (3 semester hours)

    HIST 4372 Advanced Topics in Colonial and Revolutionary American History
    (3 semester hours)
    HIST 4373 Advanced Topics in Nineteenth-Century American History (3 semester hours)

    HIST 4374 Advanced Topics in Twentiety-Century American History (3 semester hours)

    HIST 4375 Women's H1story (3 semester hours)

    HIST 4377 Advanced Topics in Latin-American History (3 semester hours)

    History of Sclence and Technology

    ## Course Description

    HIST 3381 Introduction to the History and Philosophy of Science and Technology
    (3 semester hours) (same as Philosophy 3380).
    An Interdisciplinary approach to the issues of science and tech-
    nology. Major scientific and technological developments and the important philosophical dimensions of them will be considered, along with varlous ways of interpreting the nature of science and technology.

[^4]:    Music 3283 Secondary School Music: The Large Instrumental Ensemble

    ## semester hours)

    Techniques and materials for organizing and developing the band and orchestra in the secondary school. (2-0)

    Music 3284 Secondary School Music: The Choral Ensemble (2 semester hours)
    Techniques and materials for organizaing and developing the choral ensemble in the secondary school. (2-0)

    Music 4380 Curriculum and Instruction in Elementary School Music (3 semester hours)

    Same as ED. 4380. Methods and materials for elementary school music programs. Laboratory experience in teaching songs, rhythms, music listening, and sight reading. Study of curriculum guides and materials. (3-0)

    Music 4381 Curriculum and Instruction in Secondary School Music (3 semester hours)

    Same as Ed. 4381. Techniques and materials for the general music program in the secondary school. Methods for teaching music as one of the humanities. (3-0)

[^5]:    COURSES IN SPANISH LANGUAGE AND LITERATURE
    Course Description

    SPAN 3601 Intensive Elementary Spanish (6 semester hours)

    SPAN 3301 Beginning Spanish I (3 semester hours)
    SPAN 3302 Intermediate Spanish II (3 semester hours)
    SPAN 4301 Advanced Spanish I (3 semester hours)
    SPAN 4302 Advanced Spanish II (3 semester hours)
    SPAN 4305 History of the Spanish Language (3 semester hours)
    The history and development of the language.
    COMP LIT 3302 The Heritage of Western Literature (3 semester hours)
    COMP LIT 3301 Literary Criticism (3 semester hours)

    SPAN 3310 The Development of Spanish Literature (3 semester hours)
    Readings in the representative Spanish authors from the Middle Ages to the present. Required for teacher certification.

    SPAN 4310 Studies in Individual Spanish Authors (3 semester hours)
    A11 Spanish concentrators must study at least one author in depth. List of authors for 1975-76 may be obtained in the Program Office. Required for teacher certification.

    SPAN 3308 Applied Linguistics (3 semester hours) Required for teacher certification.

    SPAN 3370 Studies in Spanish-American Literature (3 semester hours) Required for teacher certification. Topics vary each year. May be repeated for credit.

    COMP LIT 4301 Problems in Translation (3 semester hours)
    SPAN 3315 Cervantes (3 semester hours)
    A study of Don Quixote and selected other works by Cervantes
    SPAN 4318 The Theatre of the Spanish Golden Age (3 semester hours)
    The works of Lope de Vega, Tirso de Molina, Calderon de la Barca, and others. SPAN 3380 Community Fieldwork in Spanish (3 semester hours)

    Individual assignments under the sponsorship of local social service agencies, involving work with Spanish-speaking families or groups, with written and oral reports in Spanish.

    COMP LIT 3381 Third World Literature (3 semester hours)

[^6]:    The State of Texas requires completion of these courses prior to the granting of an undergraduate degree.

[^7]:    * There are many possible choices for areas of applied concentration. Some examples are environmental science, business management, political science, anthropology, economics, geography, psychology, sociology, biology, physics, geology, special education, etc. All applied concentration programs are arranged on an individual basis and are subject to approval by the undergraduate adviser.

[^8]:    *May be offered subject to approval of the Texas Education Agency, **
    Generic Special Education, although technically a "teaching field" for a "Provisional Secondary Certificate", does in fact provide certification that permits a school district to employ a teacher in a variety of roles at any grade level for students from age 3 to 21 . A second teaching fleld should be chosen which will appropriately complement the special education specialization.

[^9]:    *The student working for Teacher Certification must present evidence of working with children and or adolescents in a variety of settings. We encourage students to do as much of this as possible in their first two years of college in order to test their desire and ability to work with ch1ldren and young people.

[^10]:    1. The University of Texas at Dallas Women's Club Amelia A. Lundell Textbook Scholarship Fund.
    2. The Richardson Environmental Action League Scholarship Fund
    3. The Strauss Scholarships of the University of Texas at Dallas
[^11]:    [Gtudents-ehoesing-to-enter-the-Graduate-Program-in-Environmental-Setences shoutd-have-a-baehełerls-degree-in-the-naturat-or-mathematieał-seitenees-or engineeringr--A-seciat-seienee-baetground-is-ałso-aeeeptabłe-for-speeiat-
     researein-shoutd-have-a-streng-miner-in-ene-ef-the-naturat-seienees.

[^12]:    [6330-----Mathematieat-Eeology-f3-semestez-heurs]
    A-generat-surษey-ef-the-mathematieat-and-statistieat-aspeets-of ełessteat-eeełegẏ-pepułation-genetues-and-dynamiest-eeełegy-and
    
    [6337------Ethnegeegraphy-(3-semeste飞-houxs)-
    
    

[^13]:    * Students interested in the M.S. degree should consult with the Dean of the School of General Studies. [The-Mr $\boldsymbol{G}_{\boldsymbol{\tau}} \mathrm{Gr}_{\boldsymbol{\tau}}$-degree-wity-net-be-awarded-before-the 4976-77-academfe-year.--Hewever,-eourse-wert-Zeading-te-the-degree-may-be もaken-starting-September--1975].

[^14]:    ［Feeh－eandidate－must－eomplete－a－program－e£－gtudies－ef－at－łeast－36－semester
     and－IMG－6360－チモnternationał－Business－Managementł－as－a－eapstone－as－wełt－as－one course－from－each－of－the－foltowing－areast
    beheviorat－management
    eeonomies
    finance
    marketang

[^15]:    Legend: PUF-Permanent University Fund Bond Proceeds CFB-Combined Fee Bond Proceeds

[^16]:    VII. [YFr] BACHELOR'S DEGREE REGULATIONS

    Bachelor's Degree Requirements
    [Uałversity-Wide] General Education Requirements Minimum Residence Requirements
    Transfer of Credit
    Correspondence and Extension Courses
    Credit by Examination
    [Płacement-Examinatiens-fRequipedt]
    UT San Antonto Challenge Examinations [fop-Ghałfeaging
    
    Multiple Majors
    Additional Baccalaureate Degrees
    Earning Graduate Credit While an Undergraduate
    Catalog of Graduation
    Application for the Degree
    Graduation with Honors
    Graduation Dates
    VIII.[Y¥¥-] SUMMARY OF UNDERGRADUATE DEGREE PROGRAMS AND SUPPORT AREAS FOR 1976-78 [7975-76]
    IX. [ $\forall \ddagger \ddagger \mathrm{F}$ ] UNDERGRADUATE DEGREE PROGRAMS AND COURSE DESCRIPTIONS

    APPENDIX A: Borrowing and Fine Regulations of the John Peace Library
    APPENDIX B: Rules and Regulations for Determining Residence Status
    APPENDIX C: Professional Courses of Study in the Health Fields
    APPENDIX D: Courses Eligible for the General Education Requirement in History and Government
    DIRECTORY FOR CORRESPONDENCE

[^17]:    ${ }^{1}$ A more detailed calendar for registration, orientation, and advisement will be issued by the Registrar.

[^18]:    ${ }^{3}$ A more detailed calendar for registration, orientation, and advisement will be issued by the Registrar.

[^19]:    ${ }^{4}$ A more detailed calendar for registration, orientation, and advisement will be issued by the Registrar.

[^20]:    ${ }^{1}$ See Borrowing Regulations of The John Peace Library in the Appendix of this Catalog.

[^21]:    $\left.\underline{I}^{[ }\right]_{\text {All }}$ tuition charges and fees are subject to change without notice.
    ${ }^{2}$ See the Exemption from Tuition and Fees section also in part III of this catalog.

[^22]:    ${ }^{8}$ See the Exemption from Tuition and Fees section also found in part III of
    

[^23]:    ${ }^{9}$ See the Exemption for Tuition and Fees section also found in part III of this catalog.

[^24]:    ${ }^{11}$ These refund percentages are applicable to tuition, the supplementary fees, the student use fee, laboratory fees, and the student service fee.

[^25]:    1[*] When there are more qualified applicants than can be demonstrated, The University may control enrollment by limiting the admission of first-time freshmen and other new students.

    2[**] Applicants furnishing results on the General Educational Development Test āre [wipl-be] required to have an average standard score of 45 or above on the five tests in the battery and to have no scores less than 35 on any of the five tests.

[^26]:    $\left.5^{[*}\right]_{\text {For }}$ high schools on a calendar using other than the semester system, determination of eligibility may be made at the end of the term which is the next to the last term prior to graduation.
    [ $t \pm$ £n-7975-76;-tpansfer-wit7-be-restrieted-te-upper-divisien-students-whe-have 60-өr-more-houps-өf-aceeptabłe-credit:]

[^27]:    ${ }^{6}$ In the event there are more qualified applicants for admission than can be accommodated by The University，it may be necessary to restrict admission and／or enrollment．All applicants are，therefore，encouraged to apply for admission at the earliest possible time．
     $\theta$ ffitee－by－もh $\ddagger$ s－date．］

[^28]:    TStudents are held individually responsible for meeting all requirements as Indicated in this catalog. Fallure to read and comply with policies, regulations, and procedures does not exempt a student from whatever penalities he/she may incur.

    The policies, regulations, and procedures stated in this catalog are subject to change without prior notice, if necessary, so that University policies are consistent with the policies of the Board of Regents of The University of Texas System.

[^29]:    2During this period a special student should seek approval of the course instructor and Dean of the College in which the course is offered. A certificate only student should seek approval of the course instructor and the Assistant Dean for Certification and Teacher Placement.

    3 For a special student and a certificate only student, additional approval should be sought of the Dean of the College in which the course is offered.

[^30]:    TA singie course can be applied to only one of the following: 1) general education requirements, 2) requirements for the major, 3) requirements for support work, 4) requirements for free electives.
    ${ }^{2}$ Free electives, as used in this catalog, are any semester hours of credit accepted by UT San Antonio in transfer or awarded by UT San Antonio which, for degree purposes, are not applied to general education, major, or support requirements.

    The only restrictions placed upon courses used as free electives are:

    1) that a specified number of free elective credits must be at the upper-division level for some degree programs;
    2) that a maximum of six hours of physical activities courses can be applited to the free electives allowed for any UT San Antonio degree program; and
    3) that a maximum of nine hours of military science credit can be applied to the free electives allowed for any UT San Antonio degree program.
[^31]:    8[*] Where vocational-technical courses support an individual's degree program, free-elective credit may be given upon the approvals of the Dean of College in which the student is enrolled and of the Vice President for Academic

    - Affairs. Consideration of free-elective credit is [wif7-be] made only upon the written request of the student.

[^32]:    T0 $\left.{ }^{[ }{ }^{[ }\right]$Credit cannot be earned by examination 1) for courses which are used to fulfill the statutory history and government General Education Requirements in excess of 3 semester hours in history and 3 semester hours in government or political science or 2) for courses in a degree program for which no appropriate examination exists or which consist of materials that cannot be tested by means of examination.

[^33]:    *[日nty-courses-whese-first-number-is-a-3-өp-4-fsignifying-upper-division coursest-witl-be-өffered-in-7975-76:--Individuat-upper-division] Course[s] offerings in undergraduate degree programs may be postponed if [faeifíties-ape unavaiłabłe-өr-if] enrollments or resource and space limitations do not warrant their implementation.

[^34]:    ＊Fransfer－stadents－mast－present－a－portfotio－of－work－to－the－Bivision－of－Art－and Bestign－prior－to－－or－during－the－regtstratton－period－－－7his－portfotio－shoutd－con－
     eaeh－individuat－student－with－fegapd－te－his－degree－pregram．］

[^35]:    *Thirty-nine of the total semester hours required for the degree must be at the upper-division level.

[^36]:    *Thirty-nine of the total semester hours required for the degree must be at the upper-division level.

[^37]:    \＄EDU 4043 and 4063 may substitute for 4046 ．EDU 4086 or EDU 4083 and EDU
    1043 may also substitute for EDU 4046．Students must inform the Director of
    itudent Teaching of their plans to enroll in this course（these courses）one emester in advance．

[^38]:    Between the junior and senior years of college, students are required to

[^39]:    
    

[^40]:    A. Sixty-one semester hours in the Physical Therapy curriculum. Twenty-two semester hours in the biological sciences are required as follows:

[^41]:    *With the consent of the undergraduate advisor, up to 12 hours may in in upper-
    division Mathematics, Computer Science and Systems Design or Chemistry courses.

[^42]:    1002 INTERPRETING THE EARTH
    (2-0) 2 hours credit. Concurrent registration for AS 1011 required; exceptions with consent of instructor.
    The Earth as a dynamic planet; relation of Earth's present day processes to its materials, structure and internal constitution. Nature of minerals and rocks, the hydrosphere, tectonics, and surface features of Earth.

    1011 INTERPRETING THE EARTH LABORATORY
    (0-3) 7 hour credit. Concurrent registration for AS 1002 required;
    exceptions with consent of instructor.
    Relation of Earth's present day processes to its materials, structure and internal constitution. Field trips and laboratory study of minerals, rocks, maps and air and satellite photos.

    1022 EARTH HISTORY AND STRATIGRAPHY
    (2-0) 2 hours credit. Prerequisites: AS 1022 and 1011. Concurrent registration for AS 1031 required; exceptions with consent of instructor. Formation and evolution of the Earth, its life forms, and the major features of its surface.

[^43]:    あFhirもy－Rine－өf－the－tetal－semester－hetrs－required－fer－the－degree－mast－be－at
    

[^44]:    ［3822－－EXPERIMENFAL－RHFSIES－I
    
     Fhe－puppese－is－te－famiftapize－the－student－with－appapatus－and－techniques
    
    ［3842－－EXPERIMENFAL－RH7 SIES－玉
     Besfgned－te－fołtow－Experimentał－Phystes－I－－－Fhe－experiments－ape－mestły in－＊－pays－and－nuełeap－phystes：］
    ［3862－－EKPERIMENFAE－RHZSIGS－I $\ddagger \ddagger$
     aRA－PHY－3723．
    Experiments－in－atemie－and－nuełeap－phystes＿－－Emphasis－is－өA－censiderabłe
    
    ［3883－－BIӨPHҰSIGS－£
    
    
    
     biełegieat－matepiats．］
    ［3893－－BIOPHYSIGS－II
    
    
    
    
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    ［4723－－ELEGFTRGMAGNEFIG－RA日 $\ddagger$ AFI $\because \mathrm{N}$
    
    
     wavegtides－and－scattering－өf－płane－waves－子
    ［4743－－FLUIB－MEGHANIGS－
    
    
    
    ［4763－－INFROBUGFIGN－FQ－QUANFUM－MEGHANIES
    
    
    
    ［4783－－NEGEEAR－PHFSIGS
    
    
    Ruєłear－mөdełs；－ełementapy－papticłes＿］

[^45]:    ＊Thirty－nine of the total semester hours regarded for the degree must be at the upper－division level．

[^46]:    * The student who is not prepared to begin MAT 1213 must take MAT 1011, Algebra and/or MAT 1092, Elementary Functions. [From-ene-to-three-addititenat-ppe-eałeufus heurs-]
    ** Thirty-nine of the total semester hours required for the degree must be at the upper-division level.

[^47]:    * No Award Letter Received
    ** Original Award Letter Not Received

[^48]:    * Original Award Letter Not Received
    ** No Award Letter Received
    *** No Application Since This is Awarded Each Year

[^49]:    * Original Award Letter Not Received

[^50]:    * No Award Letter Received
    ** Original Contract Not Received

[^51]:    P. O. Box 20038

    1100 Holcombe Boulevard
    1100 Hoicombe Boule
    Houston, Texas 77026

[^52]:    *Includes Cumulative Total Realized Net Profit
    to $12 / 31 / 74$ of $\$ 39,344,073.73$; to $12 / 31 / 75$ of $\$ 38,619,841.23$

[^53]:    *Includes Cumulative Total Realized Net Profit to $1 / 31 / 75$ of $\$ 39,223,821.63 ; \quad$ to $1 / 31 / 76$ of $\$ 38,847,595.88$

[^54]:    16
    16
    11
    Dallas Power \& Light Company $\$ 4.50$ Cumulative Preferred Stock Texas Electric Service Company $\$ 4.56$ Cumulative Preferred Stock

