CHANCELLOR'S DOCKET NO. 79

THE UNIVERSITY OF TEXAS SYSTEM Office of the Chancellor

3311

April 10, 1975

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 April 28, 1975. 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-48)

The University of Texas at Austin (Pages A-1 through A-76)

The University of Texas at Dallas (Pages D-1 through D-201)

The University of Texas at El Paso (Pages EP-1 through EP-18)

The University of Texas of the Permian Basin (Pages PB-1 through PB-13)

The University of Texas at San Antonio (Pages SA-1 through SA-25)

The University of Texas Health Science Center at Dallas (Pages HD-1 through HD-22)

The University of Texas Medical Branch at Galveston (Pages G-1 through G-15)

The University of Texas Health Science Center at Houston (Pages HH-1 through HH-16)

The University of Texas Health Science Center at San Antonio (Pages HS-1 through HS-373)

The University of Texas System Cancer Center (Pages CC-1 through CC-10)

The University of Texas System School of Nursing (Pages N-1 through N-13)

On the following pages, C-2 through C-3, 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.

Sincerely,

Charles A. LeMaistre, M.D.

habe a. L. Marste/a.

Chancellor

CAL/cp



ADJUSTMENTS TO THE 1974-75 SYSTEM-WIDE PERSONNEL PAY PLAN

Ratification is requested for the following adjustments to the 1974-75 System-wide Personnel Pay Plan, effective March 1, 1975:

ADDITIONS

Code	Title	System-wide Annual Salary Range				
1.260	Assistant Technical Director, Respiratory Therapy	\$ 13,008 - 16,440				
9013	Coordinator, Special Programs	7,632 - 10,656				

CHANGES - SALARY RANGES

		System-wide			
		Annual Salary Range			
Code	Title	From	То		
9342	Supervisor, Computer Operations	\$ 11,388 - 17,004	\$ 11,388 - 18,180		

Ratification is requested for the following adjustments to the 1974-75 System-wide Personnel Pay Plan, effective April 1, 1975:

ADDITION

		System-wide
<u>Code</u>	Title	Annual Salary Range
1651	Histology Instrumentation	
	Technician	\$ 6,036 - 8,160

CHANGES - SALARY RANGES

<u>Code</u>		System-wide Annual Salary Range					
	Title	From	To				
1636	Cytotechnologist II	\$ 8,436 - 11,016	\$ 8,436 - 12,576				
5257	Furniture Upholsterer/Repairer and Refinisher	7,632 - 9,648	7,632 - 11,388				

ADJUSTMENTS TO THE 1975-76 SYSTEM-WIDE PERSONNEL PAY PLAN

Ratification is requested for the following adjustment to the 1975-76 System-wide Personnel Pay Plan, effective September 1, 1975:

CHANGES - SALARY RANGES

		System-wide					
		Annual Salary Range					
Code	Title	From	То				
9342	Shift Supervisor II, Computer						
	Operations	\$ 13,008 - 18,180	\$ 13,008 - 20,100				

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 compensation 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 Deputy Chancellor for Administration.

THE UNIVERSITY OF TEXAS SYSTEM ADMINISTRATION REPORT OF AMENDMENTS TO THE 1974-75 OPERATING BUDGET

BOARD OF REGENTS MEETING - APRIL 28, 1975

Source of Funds - Departmental Appropriations (Unless Otherwise Specified)

Office of the Chancellor

- 1. Appoint Billy H. Amstead as Special Assistant to the Chancellor effective March 1, 1975 at an annual salary rate of \$47,588. (RBC# D-63)
- 2. Appoint F. Lanier Cox as Assistant to the Chancellor for Academic Affairs effective April 1, 1975 at an annual salary rate of \$45,000. (RBC# D-67)
- 3. Appoint James P. McWilliams as Special Projects Officer (one-half time) effective February 1, 1975 at a full-time annual salary rate of \$36,000. (RBC# D-62)
- 4. Resign James P. McWilliams, Special Projects Officer (one-half time) at a full-time annual salary rate of \$36,000, effective March 31, 1975. (RBC# D-65)

Office of the Comptroller

5. Transfer \$5,000 from the System Administration Unallocated Account to the Office of the Comptroller Travel account. These funds are needed to offset increased staff travel expenses during the current fiscal year. (RBC# D-66)

Legal Expenses and Other Services

6. Transfer \$6,000 from the Available University Fund Unallocated Operating Account to the account for Legal Expenses and Other Services. (RBC# D-64)

Office of Facilities Planning and Construction

7. Change the status of Corey A. Hoffpauir from Landscape Architect to Senior Landscape Architect and increase his annual salary rate from \$17,331 to \$18,500 effective April 1, 1975. (RBC# D-68)

THE UNIVERSITY OF TEXAS AT ARLINGTON

Arlington, Texas

March 31, 1975

Chancellor Charles A. LeMaistre The University of Texas System 601 Colorado Street Austin, Texas 78701

Dear Chancellor LeMaistre:

The docket for the April 28, 1975, meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.

Sincerely,

W. H. Nedderman

President

BOARD MEETING ON APRIL 28, 1975

GIFTS

The following gift has been received and I recommend acceptance by the Board:

Donor	Purpose	Amount

 Amon G. Carter Foundation Fort Worth Star-Telegram
 400 West Seventh Street Fort Worth, Texas 76102 Living Textbook
Conference

\$6,500.00

A x

BUSINESS CONTRACTS

I recommend approval and ratification of signatures of the following business contract:

1. Agreement dated February 25, 1975, whereby Armored Motor Service of Texas agrees to provide armored delivery service to The University of Texas at Arlington for one year beginning

March 1, 1975.

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 (Non-Governmental)

- 1. Letter dated January 24, 1975, providing teaching grant from Arbrook, Inc. to The University of Texas at Arlington in support of two "Arbrook Research Fellowships in Chemistry" in the amount of \$9,250. This teaching grant is for 1975, and shall be administered by the Department of Chemistry.
- 2. Renewal Grant No. Y-530 by The Robert A. Welch Foundation in the amount of \$48,000, to be paid at the rate of \$16,000 per year during the period June 1, 1975, through May 31, 1978. This grant will be under the direction of Dr. Daniel M. Blake and is for a project entitled, "Calorimetric and Synthetic Study of Organometallic Compounds."

- 3. Renewal Grant No. Y-488 by The Robert A. Welch Foundation in the amount of \$54,000, to be paid at the rate of \$18,000 per year during the period June 1, 1975, through May 31, 1978. This grant will be under the direction of Dr. Edward Bellion and is for a project entitled, "The Biosynthesis of Thiamine."
- 4. Contract between City of Arlington, Texas and The University of Texas at Arlington for Personal Services, Comprehensive Planning Assistance Project, which provides \$2,200 in support of research to be directed by Dr. Max Spindler, Assistant Professor of Civil Engineering, for the period January 21, 1975, to June 30, 1975.
- 5. Agreement between the Dallas County Community Action Committee, Inc., and The University of Texas at Arlington whereby the University of Texas at Arlington shall provide assistance in the development of a "Regional Human Service Delivery System" to be directed by Robert Clapp, Senior Research Associate, Institute of Urban Studies. The contract is in the amount of \$25,000, and is for the period February 17, 1975, and shall expire no later than August 31, 1975.

3317. A 4₁

THE UNIVERSITY OF TEXAS AT ARLINGTON

FEDERAL CONTRACTS AND GRANTS

BOARD MEETING ON APRIL 28, 1975

- Grant from U. S. Postal Service, Order-Invoice-Voucher No. 479984-75-Q-0615, for services to be provided by the Department of Industrial Engineering, The University of Texas at Arlington, under the terms and conditions of the "Proposal to and Agreement with Engineering Division, Headquarters Southern Region, U. S. Postal Service, Memphis, Tennessee." The amount of the grant is not to exceed \$4,988, and is for the period March 17, 1975, and end on or before March 18, 1976. The full amount of this grant will be expended in Tarrant County, Texas.
- Amendment to National Science Foundation Grant No. SOC74-08178 A01, Proposal No. SOC75-09856 (formerly GS-42695) to The University of Texas at Arlington in support of project entitled "Prehistoric Research at Hayonim Terrace, Israel" under the direction of Don O. Henry, Department of Sociology. This amendment is for an additional \$23,000, bringing the total amount of this grant to \$35,300, and extending the period of time by twelve months, or to October 31, 1976. The full amount of this grant will be expended in Tarrant County, Texas.

RECOMMENDED AMENDMENTS TO THE 1974-75 BUDGET

Board Meeting - April 28, 1975

COLLEGE OF LIBERAL ARTS

Department of Architecture

1. Appoint Thomas E. Woodward (non-tenure) as Adjunct Assistant Professor with academic rate of \$8000 at 25% with stipend of \$1000, 4 1/2 months; effective January 16, 1975. Funds are available from Unallocated Faculty Salaries. (RBC #515)

2. Transfer of Funds:

From: Liberal Arts Unallocated

Travel \$98.

To: Architecture

Maintenance and Operation \$98.

For: To provide additional funds for the maintenance of the department

for the remainder of the year.

(RBC #523)

Department of Art

3. Transfer of Funds:

From: Maintenance and Operation \$200. To: \$200.

For: To provide funds for additional staff member to attend the College

Art Association meeting in Washington, D.C.

(RBC #506)

4. Transfer of Funds:

From: Liberal Arts Unallocated

Maintenance and Operation \$2,000.

To: Art

Maintenance and Operation \$2,000.

For: To provide funds to the department for use by the search committee

to cover expenditures involved with the recruiting of a chairman

for the department.

(RBC #511)

Department of Psychology

5. Transfer of Funds:

From: Liberal Arts Unallocated

Maintenance and Operation \$1,134.

To: Psychology

Maintenance and Operation \$1,134.

For: To provide funds to the department for use by the search committee

to cover expenditures involved with the recruiting of a chairman

for the department.

(RBC #510)

6. Transfer of Funds:

From: Maintenance and Operation \$400.

To: Travel \$400.

For: Additional funds are needed to support faculty presentations at

regional psychological conventions.

(RBC #519)

RECOMMENDED AMENDMENTS TO THE 1974-75 BUDGET

Board Meeting - April 28, 1975

COLLEGE OF BUSINESS

Dean of Business

From:

7. Transfer of Funds:

Travel

\$1,000.

To:

Maintenance and Operation

\$1,000.

To provide funds for supplies, printing, and general expenditures

for the Dean's Office.

(RBC #521)

Department of Accounting

8. Transfer of Funds:

From:

Business Unallocated

Travel

\$300.

To:

Accounting

Travel

\$300.

For:

To provide additional travel funds to cover trips not anticipated

at the beginning of the year.

(RBC #508)

9. Accept the resignation of Terry E. Hansen (non-tenure), Lecturer with academic rate of \$6778 effective February 15, 1975. (RBC #522)

Department of Business Administration

10. Transfer of Funds:

From: Business Unallocated

Travel

\$300.

Business Administration

\$300.

For:

To provide additional travel funds to cover trips not anticipated

at the beginning of the year.

(RBC #507)

Department of Economics

11. Re-appoint John F. Ryan (non-tenure) as Lecturer with academic rate of \$6000 at 25% with stipend of \$750, 4 1/2 months; effective January 16, 1975. Funds are available from Business Unallocated Faculty Salaries. (RBC #502)

COLLEGE OF ENGINEERING

Department of Industrial Engineering

- 12. Change the status of France A. Meier (Tenure), from Professor and Chairman to Professor with no change in academic rate of \$21,736 effective February 1, 1975. (RBC #512)
- 13. Promote John N. Fox (Tenure) from Associate Professor with academic rate of \$19,044 to Associate Professor and Acting Chairman with academic rate of \$20,394 effective February 1, 1975. Additional funds are available from Engineering Unallocated Faculty Salaries. (RBC #513)

RECOMMENDED AMENDMENTS TO THE 1974-75 BUDGET

Board Meeting - April 28, 1975

SPECIAL ITEMS

Institute of Urban Studies

14. Re-appoint Geoffrey B. Stanford (non-tenure) as Visiting Professor with academic rate of \$18,639 at 40% with stipend of \$828, 1 month; effective February 1, 1975. Funds are available from Unallocated Salaries within the departmental account. (RBC #514)

AUXILIARY ENTERPRISES

Intercollegiate Athletics for Women

15. Transfer of Funds:

From: Special Concessions

Maintenance and Operation \$4,000.

To: Intercollegiate Athletics for

Women

Maintenance and Operation \$4,000.

For: To provide funds for the establishment of athletic scholarships

for women.

(RBC #503)

Track

16. Transfer of Funds:

From: Maintenance and Operation \$1,250.

To: Wages \$1,250.

For: To pay for matching funds of work-study students who are

earning work-study allowances.

(RBC #509)

Soccer

17. Transfer of Funds:

From: Travel \$225.39
To: Maintenance and Operation \$225.39

For: To provide additional funds to cover general expenses.

(RBC #505)

SERVICE DEPARTMENTS

Supply Center

18. Transfer of Funds:

From: Estimated Income \$25,000.
To: Maintenance and Operation \$25,000.

For: This amount is needed in the department budget to replace stock.

(RBC #518)

1975 SUMMER SESSION BUDGET

I recommend approval of the 1975 Summer Budget. The budget reflects an expenditure of \$1,352,607. This amount is available from funds within the Summer School Faculty Salaries account in the 1974-75 Operating Budget.

THE UNIVERSITY OF TEXAS AT ARLINGTON

RECOMMENDATIONS FOR SALARY BUDGET FOR SUMMER SESSION 1975

ARLINGTON, TEXAS
April 1, 1975

THE UNIVERSITY OF TEXAS AT ARLINGTON

Arlington, Texas

1975 SUMMER SESSION BUDGET

First Term: June 1 - July 15 July 16 - August 31

RESIDENT INSTRUCTION	
COLLEGE OF LIBERAL ARTS	A 10 006
Architecture	\$ 19,286
English	79,606
Art	21,713
Music	10,241
Foreign Languages and Linguistics	64,357
Political Science	66,529
History	67,095
Philosophy	8,935
Physical Education	19,625
Psychology	46,154
Education	21,403
Sociology	26,758
Communication	<u>17,859</u>
Total College of Liberal Arts	469,561
COLLEGE OF SCIENCE	
Biology	56,658
Chemistry	44,933
Geology	20,927
Mathematics	113,967
Physics	39,662
	37,002
Total College of Science	276,147
COLLEGE OF BUSINESS	
Accounting	72,482
Business Administration	141,248
Economics	74,710
Total College of Business	288,440
COLLEGE OF ENGINEERING	
Aerospace Engineering	32,097
Civil Engineering	49,567
Engineering Graphics	6,343
Mechanical Engineering	47,701
Electrical Engineering	62,568
Industrial Engineering	27,425
Computer Science	24,672
Total College of Engineering	250,373

1975 SUMMER SESSION BUDGET (Continued)

CRIMINAL JUSTICE PROGRAM	\$ 17,386
INSTITUTE OF URBAN STUDIES	24,205
GRADUATE SCHOOL OF SOCIAL WORK	26,495
TOTAL 1975 SUMMER SESSION BUDGET	\$1,352,607

SUMMARY OF 1975 SUMMER SESSION BUDGET (ELEMENTS OF INSTITUTIONAL COST)

RESIDENT INSTRUCTION Teaching Salaries Only	\$1,352,607
SOURCE OF FUNDS	
Summer Session Appropriation in 1974-75 Budget	\$1,125,000
Transfer from Unallocated Salaries to Summer Session Salaries:	
Business Administration Engineering	\$ 50,367 66,833 \$ 117,200
Estimated Income from Senate Bill I	\$ 110,407
TOTAL FUNDS AVAILABLE FOR SUMMER SESSION SALARIES	\$1,352,607

ITEM - PAYROLL TITLE - NO. NAME		9 MOS. RATE	FIRST TERM 6-1/7-15 PERCENT OF TIME SALARY	Term .	TOTAL SALARY
12-115 ARCHITECTURE					
PROFESSOR AND CHAIRMAN					
001 HAROLD BOX	Ť	23,562	100 3,927	100 3,927	7,854
PROFESSOR					
002 GEORGE S WRIGHT	T	18,585	100 3,097	100 3.097	6.194
ASSO PROFESSOR					
005 JOE DANIEL SPEARS	T	15,714	100 2,619	100 2,619	5,238
SUB-TOTAL			9.643	9,643	19,286

ITEM NO.	- PAYROLL TITLE - NAME		9 MOS. RATE	6-1 PERC	T TERM //7-15 ENT OF SALARY	7-1 PERC	OND TERM 6/8-31 CENT OF SALARY	TGTAL SALARY
12-12	0 ENGLISH							
p	ROFESSOR AND CHAIRMAN							
001	EMORY D ESTES	Ť	23,562	100	3,927	100	3,927	7,854
P	PROFESSOR							
003	STANTON GARNER	*	23,076	100	3,846			3,846
004	LYLE H KENDALL JR	T	22,248	100	3,708			3,708
005	CLAYTON L EICHELBERGER	T	21,105	100	3,517			3,517
006	CLARENCE 5 TURNER	***	21,006			100	3,501	3,501
007	DUNCAN W ROBINSON	7	20,286	100	3,381			3,381
008	ARLIE V GOYNE JR		19,863			100	3,310	3.310
009	GEORGE E FORTENBERRY	7	18,018	100	3,003	100	3,003	6,006
011	ANNE WHALING	7	16,308	100	2,718			2.718
012	CORINNE E KAUFFMAN	7	16,416			100	2,736	2,736
013	ROBERT L LITTLEFIELD	T	16,191			100	2,698	2,698
ß	SSO PROFESSOR							
014	JOHN S BURNS	***	16,641	100	2,773			2,773
015	GERTRUDE L GOLLADAY	7	16,416			100	2,736	2.736
016	DON R SWADLEY	T	16,416	100	2.736			2.736
018	FIORELLA S TURBEVILLE	T	16,299	100	2,716			2.716
019	MAURICE I CARLSON	T	14,787			100	2,464	2.464
020	RICHARD B ZACHA	T	14,436	050	1,203	050	1.203	2,406
021	ERNESTINE M SEWELL	**	14,292			100	2,383	2,383
022	JAMES M MOFFETT	7	14.202			100	2,367	2,367
023	BILLI M ROGERS	7	14,085	100	2,347			2,347
024	KENNETH M ROEMER	7	13,941	100	2,323			2,323

ITEM NO.	- PAYROLL TITLE -		9 MOS. Rate	6=1 PERC	T TERM /7-15 ENT OF SALARY	7=1 PER(ND TERM 6/8-31 ENT OF SALARY	TOTAL Salary
12-13	0 ENGLISH							
<u> A</u>	ASSO PROFESSOR		,					
025	DALLAS L LACY	T	13,959	100	2,326			2,326
027	JOHN S LEWIS	T	13,392	100	2,232			2,232
028	WILLIAM M RICHARDSON	7	13,392	050	1,116	050	1.116	2,232
030	HARRY S HANKS	7	13,050	050	1,087	050	1.088	2,175
031	MARGUERITE S HOLTON	T	12,924	050	1,077			1.077
A	ASST PROFESSOR							
037	MARGARET J MCGOWAN	6 74	12,456			050	1,038	1,038
	SUB-TOTAL				46,036		33,570	79,606

				T TERM /7-15		ND TERM 6/8-31	
ITEM - PAYROLL TITLE - NO. NAME		9 MOS. Rate	PERC	ENT OF SALARY	PERC	ENT OF SALARY	
12-131 ART							
PROF & ACT CHAIRMAN							
001 WILLIAM E TURNER	T	15,588	100	2,598	100	2,598	5,196
ASSO PROFESSOR							
004 ORTON HAMBY	Ţ	15,372	100	2,562			2,562
005 MARY L HODNETT	٣	14.670	100	2,445			2,445
ASST PROFESSOR							
007 WILLIAM M STEGALL	ĩ	13,050			100	2,175	2,175
012 HARLEY J SCOTT JR		10,926			100	1,821	1,821
INSTRUCTOR							
015 SANDRA R RUBIN		10,962	100	1.827			1,827
017 DAVID W KEENS		10,026	100	1,671			1,671
016 LOUIS HOCK		10,602			100	1,761	1,761
LECTURER							
019 DONALD BELL		9.027	100	1,505			1,505
		9,000			050	750	750
SUB-TOTAL				12,608		9,105	21.713

ITEM NO.	- PAYROLL TITLE - NAME	•	9 MOS. RATE	6-1 PERC	T TERM /7-15 ENT OF SALARY	7#1 PERC	ND TERM 6/8-31 ENT OF SALARY	
12-13	32 MUSIC							
ş	PROFESSOR AND CHAIRMAN							
001	JACK H MAHAN	T	18,036	050	1,503	050	1.503	3,006
F	PROFESSOR							
002	LLOYD C TALIAFERRU	T	17:028			050	1:419	1,419
ß	ASSO PROFESSOR							
003	DANIEL C BURKHOLDER	7	14,526	050	1,211			1,211
004	WILLIAM F POSTELTHWAITE	Ţ	13,275			050	1:105	1,106
Á	ASST PROFESSOR							
005	GARY L ESENSBERGER	7	15,138	025	631	075	1,892	2,523
006	RAY C LICHENWALTER	Ţ	11:709			050	976	976
	SUB-TOTAL				3,345		6,895	10,241

ITEM	- PAYROLL TITLE - NAME		9 MOS. RATE	6≖1 PERC	T TERM /7-15 ENT OF SALARY	7=1 PERC	ND TERM 6/8-31 ENT OF SALARY	
12-14	O FOREIGN LANGUAGE & LINGU	ISTI	S					
A	SSO PROF AND CHAIRMAN							
001A	VIRGIL L POULTER	7	21,564	100	3.594	100	3,594	7,188
٩	ROFESSOR							
003	DENES MONOSTORY	T	18,378			100	3 ,063	3,063
004	DUANE A ADAMS	Ť	18,153	100	3,025			3,025
005	JOHN A STUART	7	16,902	100	2,817	050	1,409	4,226
Д	SSO PROFESSOR							
008	ALAN W STEINECKE	٣	18,036	100	3,006	100	3,005	6,012
009	CHARLES MCDOWELL	7	17,451	100	2,908			2.908
010	ALVIN D JETT JR	T	17:136	100	2,856			2,856
011	ANNIE L GIBSON	7	15,372			050	1.281	1.281
015	BERTIE W ACKER	T	15,138	100	2,523	100	2,523	5,046
014	TED E FRANK	T	14,517	100	2,419			2,419
0164	DUANE V KEILSTRUP	T	13,374	100	2 . 22 9			2,229
A	SST PROFESSOR							
015	FREDERICK VINA	T	13.626	100	2,271	100	2,271	4,542
017	CARLOS NOGUEIHA-MARTINS	*	13,050	100	2:175	100	2.175	4,350
018	JAMES D WILMETH	7	12,924	100	2,154	100	2.154	4,308
019	DOLORES H WILLIAMS	T	12.807			100	2,134	2,134
020	WELDON LITSEY	T	12,456	100	2,076			2,076
021	NORMAN A WHITLOCK	7	12,024	100	2,004	050	1,002	3,006
052	JACK PALANGIAN		11,385			100	1,897	1,897
025	EDWARD A COWAN	T	10.746			100	1,791	1.791
	SU8-TOTAL				36,057		28,300	64,357

COLLEG	E OF LIBERAL ARTS						3331	
ITEM NO.	- PAYROLL TITLE - NAME		9 MOS. Mate	6-1 PERC	T TERM /7-15 ENT OF SALARY	7™1 PERC	ND TERM 6/8-31 ENT OF SALARY	TOTAL SALARY
12=14	5 POLITICAL SCIENCE							
q	ROFESSOR AND CHAIRMAN							
001	SAMUEL B HAMLETT	7	19,359	100	3,226	100	3,226	6,452
p	PROFESSOR							
002	LUTHER G HAGARD JR	7	19,665	100	3,277	100	3,277	6,554
003	EDWARD 8 RICHARDS	*	17:811	100	2,968	100	2,968	5,936
004	IRVING O DAWSON	Ť	17,469	100	2,911			2,911
005	HUBERT L C MATTHIAS	T	16,902			100	2,817	2,817
A	SSO PROFESSOR							
0064	LUTHER W ODOM	7	17,364	100	2,894	100	2,894	5.788
007	JHANG S MOON	ap.	17,235	100	2,872	100	2,872	5,744
008	IVAN TABORSKY	7	16,740	100	2,790	100	2,790	5,580
009	ALLAN SAXE		15:687	100	2,614	100	2,614	5,228
010	CHARLES W VAN CLEVE	T	14,409	100	2,401	100	2,401	4 ₉ 8 0 2
A	SST PROFESSOR							
011	STEPHEN L DAIGLE		12,582	100	2,097			2,097
015	SUZANNE M KATSIKAS		12,546	100	2,091	100	2,091	4,182
013	HUNTER SCHMIOT JR		11,493	100	1,915	100	1,915	3,830
W.	NSTRUCTOR							
014	JAMES D CLARK		10,962	067	1,218	067	1.219	2,435
<u>.</u>	ECTURER							
015	GARY P DWORKIN		6,516	100	1,086	100	1.086	2,172
	SUB-TOTAL				34,360		320169	66,529

	OLL TITLE -		9 MOS. RATE	6-1 Perc	T TERM /7-15 Ent of Salary	7-1 PERC	ND TERM 6/8-31 ENT OF SALARY	TOTAL SALARY
12-150 HISTORY								
ASSO PROF	AND CHAIRMAN					•		
001 RICHARD	G MILLER	***	19,566	100	3,261	100	3,261	6,522
PROFESSOR								
002 CASPER G	WOLFSKILL	4	23,562			100	3,927	3,927
003 ROBERT W	I AMSLER	7	18,263	050	1.521	050	1.522	3,043
004 VAN MIT	CHELL SMITH	7	17,703	100	2,950			2,950
005 HOWARD L	.ACKMAN	Ť	17.136	100	2,856			2,856
006 HOMER L	KERR	Ţ	17.001	100	2,833			2,833
007 CHARLES	D RICHARDS	T	16,659	100	2.776			2.776
008 MARTIN F	MALL	100m	17,442	100	2,907	100	2,907	5,814
ASSO PROFE	ESSOR							
010 ROBERT W	ILLIAMSON	7	16,767	100	2,794	100	2,794	5,588
011 J w KNO	Κ.	T	15,489	100	2,581	100	2,581	5,162
012 ARTHUR W	TUCKER JR	T	15:138	100	2.523			2,523
Old DENNIS F	REINHARTZ	T	15,372			100	2,562	2,562
014 JEROME L	. RODNITZKY	7	15,696	100	2,616			2.616
016 EDWARD	CHESTER	490	14,670	050	1,222	050	1,223	2,445
018 EDWARD (BOCK	4	14,319	100	2,386			2,386
ASST PROFE	SSOR							
023 GUSTAVE	A ANGUIZOLA	op }	13,977	100	2,329			2,329
025 ELLIOTT	WEST		140166			100	2,361	2,361
026 ROBERT F	OAKS		13,392	100	2.232			2,232
ANDRA L	PREWITT	7	12,753	100	2,125			2,125
029 STANLEY	H PALMER		12,249			100	2.041	2,041

ITEM NO.	- PAYROLL TITLE - NAME	9 MOS. Pate	FIRST TERM 6-1/7-15 PERCENT OF TIME SALARY	SECOND TERM 7-16/8-31 PERCENT OF TIME SALARY	TOTAL SALARY
12-15	O HISTORY				
A.S	SST PROFESSOR				
031	ANTHONY S BAKER	12,024	100 2,004		2,004
	SUB-TOTAL		41,916	25,179	67,095

COLLEGI	E OF LIBERAL ARTS					3334	:
ITEM NO.	- PAYROLL TITLE - NAME	9 MOS. RATE	6-1. PERC	T TERM /7-15 Ent of Salary	7≈1 PERC	ND TERM 6/8-31 ENT OF SALARY	TOTAL SALARY
12-15	5 PHILOSOPHY						
A	SSO PROFESSOR						
002	HOUGHTON B DALRYMPLE	14,553			100	2,425	2,425
A	SST PROFESSOR						
001A	GARY L WHITED	12,024	100	2.004		,	2,004
004	THOMAS W KING	13,518	100	2,253	100	2,253	4,508
	SUB-TOTAL			4,257		4,678	8,935

				T TERM /7-15		ND TERM 6/8-31	
ITEM - PAYROLL TITLE - NO. NAME		9 MOS. RATE	PERC	ENT OF SALARY	PERC	ENT OF SALARY	TOTAL SALARY
12-170 PHYSICAL EDUCATION							
PROFESSOR AND CHAIRMAN							
001 CLAUDE R GILSTRAP	7	18,945			100	3,157	3.157
PROFESSOR							
002 THOMAS J TINKER	7	16,308	100	2,718	050	1.359	4,077
ASSO PROFESSOR							
005 WILLIAM E REEVES	T	13,356	100	2,226			2,226
006 CARLA D LOWRY	7	13,356			050	1:113	1,113
007 BURLEY L BEARDEN	T	14,166	100	2,361	050	1,180	3,541
008 MARGARET A SIMMONS	T	12.348	050	1,029			1,029
ASST PROFESSOR							
011 TOMMY S BEASLEY	***	11.709	040	780	100	1,951	2,731
012 THOMAS D BOONE		11,678	045	875	045	876	1,751
SUB-TOTAL				9,989		9,636	19,625

ITEM - PAYROLL TITLE - NO. NAME		9 MOS. HATE	6=1 PERC	T TERM /7-15 ENT OF SALARY	7-1 PERC	ND TERM 6/8-31 ENT OF SALARY	TOTAL SALARY
12-181 PSYCHOLOGY							
ASSO PROF & ACT CHAIRMAN							
001 JAMES W BAERWALDT	7	16,740	100	2,790	100	2.790	5,580
PROFESSOR							
002 GARVIN M MCCAIN	Spanner of the state of the sta	21,969	067	2,440	067	2,440	4,880
004 VERNE C COX	7	19,854	067	2,206	067	2,205	4,412
005 IRA H BERNSTEIN	T	19,539	067	2,170	067	2,170	4,340
006 JAMES N BOWEN	T	18,504	n67	2,056	067	2,056	4,112
ASSO PROFESSOR							
009 JAMES KOPP	7	16,767	067	1,863	047	1,863	3.726
010 DUANE R MARTIN	T	15,246	067	1.694	067	1,694	3,388
ASST PROFESSOR							
012 PAUL 8 PAULUS		14,733	067	1,637	067	1,637	3.274
013 ROBERT J GATCHEL		14,094	067	1,566	067	1,566	3,132
014 BRUCE A AMBLER		13,626	067	1,514	047	1,514	3,028
015 JAMES T MILLER		13,626	067	1,514	0K7	1 0 5 1 %	3,028
GRADUATE TEACHING ASSO							
		8,136	045	610	045	610	1.220
GRADUATE TEACHING ASST							
		6,102	050	508	050	509	1,017
		6,102	050	508	050	509	1,017
SUB-TOTAL				23,076		23,078	46,154

	9 MOS. Rate	6-1/7-15 PERCENT OF	7-16/8-31 PERCENT OF	TOTAL
***	15,264	100 2,544	100 2,544	5,088
7	15,957	050 1 ,330	100 2,659	3,989
NP N	15,260	050 1,271	050 1,272	2,543
	13,941	100 2,323	050 1:162	3,485
	12,654	100 2,109	050 1,055	3,164
	12,537	100 2,089	050 1,045	3,134
		11,666	9,737	21,403
	2007 2004	T 15,264 T 15,957 T 15,260	9 MOS. PERCENT OF TIME SALARY T 15.264 100 2.544 T 15.957 050 1.330 T 15.260 050 1.271 13.941 100 2.323 12.654 100 2.109 12.537 100 2.089	9 MOS. PERCENT OF PERCENT OF TIME SALARY T 15.264 100 2.544 100 2.544 T 15.957 050 1.330 100 2.659 T 15.260 050 1.271 050 1.272 13.941 100 2.323 050 1.162 12.654 100 2.109 050 1.055 12.537 100 2.089 050 1.045

ITEM = PAYROLL TITLE = NO. NAME		9 MOS. Rate	6-1 PERC	T TERM /7-15 ENT OF SALARY	7=1 PgRC	ND TERM 6/8-31 ENT OF SALARY	TOTAL Salary
12-190 SOCIOLOGY			V 04 (17 44	- And the last of Lat E	* ** * * **	e incompression of the	emby bank bank bank 1 at 3
PROFESSOR AND CHAIRMAN							
001 LEE TAYLOR	7	23,562	100	3,927	100	3,927	7,854
PROFESSOR							
002 ROBERT STEBBINS		19,647	025	818	025	. 819	1,637
003 BLAINE T WILLIAMS	***	17,469			100	2,911	2,911
ASSO PROFESSOR							
005 BRUCE ANDERSON		18,477	100	3,079	•		3,079
007 WILLIAM A STACEY	7	16,416			100	2,736	2,736
008 DAVID G BROMLEY		17,442	100	2,907			2,907
ASST PROFESSOR							
006 JOSEPH C VENTIMIGLIA		16,353	025	681	075	2.044	2,725
010 JOHN M TAVES		13,626	050	1 0 135			1.135
012 EDMUND RUDOWSKI	270	10,647			100	1,774	1,774
SUB-TOTAL				12,547		14,211	26,758

							artis, with price, artis	•
ITEM NO.	- PAYROLL TITLE - NAME		9 MOS. RATE	6=1 PERC	T TERM /7-15 ENT OF SALARY	7=1 PERC	6/8-31 Ent of	
12-19	5 COMMUNICATION							
A	SSO PROF & ACT CHAIRMAN							
AEOO	CHARLES S PROCTOR	7	15,498	100	2,583	100	2,583	5,166
P	ROFESSOR							
002	MARGARET A CAMERON	T	16,308			100	2,718	2,718
A	SSO PROFESSOR							
001A	CHAPIN ROSS	T	17,586	100	2,931			2,931
004	NITA F COX	T	14,445	100	2,407			2,407
A	SST PROFESSOR							
005	WILLIAM J STONE JR		15,093	050	1 , 257			1.257
006	CARROLL HICKEY		14,292	025	595	025	596	1,191
010	ROY D HAMRIC		12,654			050	1,054	1,054
I	NSTRUCTOR							
007A	TOM SHUFORD		13,626	050	1,135			1,135
	SUB-TOTAL				10,908		6,951	17,859

COLLEGE OF SCIENCE 3340

ITEM NO.	PAYROLL TITLE - NAME		9 MOS. RATE	6-1 PERC	T TERM /7-15 ENT OF SALARY	7-1 PERC	ND TERM 6/8-31 ENT OF SALARY	TOTAL SALARY
12-2	20 BIOLOGY							
	PROFESSOR AND CHAIRMAN							
001	W C MCDONALD	enga P	23,886	100	3,981	100	3,981	7,962
	PROFESSOR							
0024	WILLIAM R MEACHAM	T	24:066	100	4,011			4,011
004	THOMAS E KENNERLY JR	mb.	19,044	100	3,174	050	1,587	4,761
005	CLARENCE C HALL JR	T	18,828	050	1,569	100	3,138	4,707
006	WILLIAM B MCCRADY	T	17,811	100	2,968			2,968
007	THOMAS R HELLIER JR	T	17,586	050	1,465	100	2,931	4,396
	ASSO PROFESSOR							
010	ROBBY ROY ELLER	7	16,848	100	2,808			2,808
011	LOUIS H BRAGG	T	16,767	100	2,794	100	2,794	5,588
012	ROBERT B BOLEY	T	15,957	075	1,994	025	665	2,659
013	FRANK G GLADDEN	T	15,489	050	1,290	100	2,581	3,871
014	BERNARD L FRYE	7	15:264	100	2,544			2,544
015	ROBERT L NEILL	7	14,400			100	2,400	2,400
	ASST PROFESSOR							
017	RONALD KNAUS		13,509			100	2,251	2.251
	ASSISTANT INSTRUCTOR							
022	JACQUELINE PERRYMAN		8,811	100	1,468	100	1,468	2,936
	GRADUATE TEACHING ASST							
101	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		6,102	050	508	050	509	1.017
105	୬ ର ର ର ର ର ର ର ର ର ର ର ର ର ର ର ର ର ର ର		6,102	050	508	050	509	1,017
103	2		6,102	050	508	025	254	762
	SUB-TOTAL				31,590		25.068	56 ,65 8

ITEM - PAYROLL TITLE - NO. NAME		9 MOS. RATE	6-1 PERC	T TERM /7-15 ENT OF SALARY	7=1 PERC	IND TERM 6/8-31 ENT OF SALARY	
12-230 CHEMISTRY				,			
PROFESSOR AND CHAIRMAN							
001 DONALD R MARTIN	90	26,163	100	4,360	100	4,360	8,720
PROFESSOR							
003 PETER R GIRARDOT	9	24,525			100	4.087	4,087
004 ROBERT F FRANCIS	80	19,233			100	3,205	3,205
005 HAROLD G BURMAN	T	17:109	100	2,851			2,851
ASSO PROFESSOR							
007 ANDREW L TERNAY JR	7	18,486			100	3,081	3,081
008 THOMAS J COGDELL	*****	17,586	100	2,931			2,931
009 A T ARMSTRONG	Ţ	17.586	100	2,931			2,931
010 SARAH M WILLOUGHBY	7	17,469	100	2,9]]			2,911
011 EDWARD BELLION	T	15,093			100	2,515	2,515
O12 DANIEL M BLAKE	Ť	14,985	050	1,248			1,248
013 ANN H BENHAM	T	14,787	100	2,464			2,464
ASST PROFESSOR							
015 LANNY M CASEY		14,553			100	2,425	2,425
ASSISTANT INSTRUCTOR							
017 MARTHA L HARDIN		10,647			100	1,774	1,774
018 CLOVIS HUDDLESTON		10,539	100	1,756			1,756
019 EUNICE A BONAR		9:783					
GRADUATE TEACHING ASST							
032 MARION H HOWELL		6,102	050	508	050	509	1 . 017
033 TAK WAI LEUNG		6,102	050	508	050	509	1,017
SUB-TOTAL				22,468		22:465	44,933

ITEM - PAYROLL TITLE - NO. NAME		9 MOS. RATE	6=1 PERC	T TERM /7-15 Ent of Salary	7=1 PERC	ND TERM 6/8-31 ENT OF SALARY	TOTAL SALARY
12-240 GEOLOGY							
PROFESSOR AND CHAIRMAN							
001A CHARLES F DODGE	7	22,248	100	3,708	067	2,472	6,180
PROFESSOR							
002 JOHN D BOON	٣	18,918	100	3,153		1	3,153
ASST PROFESSOR							
005 DAVID A KOTILA		14,166	100	2,361	100	2,361	4,722
006 DONALD F REASER	7	14,517	100	2,419	100	2,419	4,838
GRADUATE TEACHING ASST							
		6,102	050	508	050	509	1,017
		6,102	050	508	050	509	1,017
SUB-TOTAL				12,657		8,270	20,927

						Wall with The	3.D
ITEM - PAYROLL TITLE - NO. NAME		9 MOS. Rate	6-1 PERC	T TERM /7-15 ENT OF SALARY	7=1 PERC	ND TERM 6/8-31 ENT OF SALARY	TOTAL Salary
12-250 MATHEMATICS							
PROFESSOR AND CHAIRMAN							
001 V LAKSHMIKANTHAM	T	26,766	100	4,461	100	4,461	8,922
PROFESSOR							
OOZ BASIL M WALL	T	23,076			100	3,846	3,846
003 JAMES L SHAWN	-	16,902	050	1,408	050	1,409	2,817
ASSO PROFESSOR							
004 ROBERT L TENNISON	ĩ	20,682	050	1,723	050	1,724	3,447
005 JOHN K PERRYMAN	¥°	19,458	100	3,243			3,243
007 ALFRED R MITCHELL	GE .	18,711	100	3,118			3,118
008 ROGER W MITCHELL	Ţ	18,711	050	1,559	050	1,559	3,118
010 STILLMAN A SIMS	*	18,378	050	1,531			1,531
011 LARRY F HEATH	@	17,919	100	2,986			2,986
012 MARION E MOORE	T	17,361	100	2,893			2,893
013 C W MARSHALL	*	17,109	100	2,851			2,851
014 JAMES C BOLEN	T	17:028			080	1,419	1,419
015 M E LORD	T	16,767	050	1,397	050	1.397	2,794
016 DANNY D DYER	4	16,767	050	1,397	050	1.397	2.794
017 WILLIAM W HAMILTON	~	16,416	100	2,736			2,736
018 WILLIAM E BEEMAN	7	15,489	100	2,581	050	1,290	3.871
018 MILLIAM LAMPEA	*	15,489	100	2,581			2,581
020 THURMAN M JASPER	7	15,021	050	1,251			1,251
021 LEDLIE R HOLLAND	**	14,787	050	1,535			1,232
022 JOHN A GARDNER	450	14,787			100	2,464	2,464
023 HAROLD R GREEN	**************************************	13,851	100	2,308			2,308
ASST PROFESSOR							

ITEM	- PAYROLL TITLE -		9 MOS.	6-1	T TERM /7-15 Ent of	7-1	ND TERM 6/8-31 Ent of	TOTAL
NO.	NAME		RATE		SALARY		SALARY	SALARY
12-25	O MATHEMATICS							
å	SST PROFESSOR							
024	JAMES R HARVEY	***	17,028	100	2,838			2,838
025	FRANK N HUGGINS	7	16,767			100	2,794	2,794
026	MERLYND K NESTELL		16,416			050	1,368	1,368
027	WESLEY E MEAD JR	*****	15,380	050	1,281			1,281
028	JACOB T B BEARD		15,336	100	2,556			2,556
029	JAMES C NICHOLSON	T	14,553	100	2,425			2,425
030	gay a Turney	- The state of the	14,553	100	2,425			2,425
031	JOE GILBREATH	T	14,530	050	1,210			1,210
032	WILLIAM O MILLER	T	14,445		•	050	1,203	1.203
033	MERVIN R CHILDERS	7	14,445			100	2.407	2,407
034	ARTHUR A GILLESPIE	S	14,094	050	1,174	050	1,175	2,349
035	EUDA E DEAN	T	13,743			100	2,290	2,290
036	ROBERT J FOSTER	7	13,275			050	1,106	1.106
037	LEE G SHILLING JR		13,275			100	2,212	2,212
038	MARIAN E PAYSINGER	3	14,445	100	2,407	050	1,203	3,610
039	BILL F HOIT	8	12,924	050	1,077	050	1,077	2,154
040	KIRBY D WATKINS	Sparie .	12,807	100	2,134			2,134
042	EDDIE N WARREN	7	12,456			100	2,076	2,076
Ž	NSTRUCTOR							
043	HENRY T WISE JR		12,132	050	1,011	050	1 : 011	2,022
G	RADUATE TEACHING ASST							
101	8 3 3 3 8 8 9 9 9 9 9 9 8 8 9 9 9 9 9 9		6,102	045	457	045	458	915
102	0 a a a 0 a a a a a a a a a a a a a a a		6,102	045	457	045	458	915

ITEM NO.	- PAYROLL TITLE - NAME	9 MOS. Rate	6-1/ PERCE	TERM 7-15 NT OF SALARY	7-16 PFRCE	ID TERM 1/8-31 INT OF SALARY	TOTAL SALARY
12=25	50 MATHEMATICS						
G	SPADUATE TEACHING ASST						
103	8 0 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	6.102	045	457	045	458	915
104	4 4 5 2 3 4 6 6 9 9 9 9 9 6 6 6 6 6 6 9 5 5 5 5 5 5	6,102	045	457	045	458	915
105	8 0 0 0 0 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	6,102	045	457	045	458	915
106	\$ @ @ @ @ \$ \$ \$ \$ \$ \$ \$ \$ \$ @ @ @ # # # #	6,102	045	457	045	458	915
107	4 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	6,102	045	457	045	45 8	915
108	\$ \$ 5 9 8 8 8 8 8 8 8 8 8 5 5 5 5 8 8 8 8 8	6,102	045	457	045	458	915
109	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6:102	039	396	039	397	793
110	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6,102	039	396	039	397	793
111	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6,102	039	396	039	397	793
112	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	6.102	639	396	039	397	793
223	9 0 9 9 9 8 9 9 9 9 6 9 9 9 9 9 9 9 9 9 9	6.102	039	396	039	397	793
	SUB-TOTAL	,	6	7,430	4	.6,537 1	13,967

PROFESSOR AND CHAIRMAN 001 LOUIS A RAYBURN					FIRST TERM 6-1/7-15		SFCOND TERM 7-16/8-31		
PROFESSOR AND CHAIRMAN 01 LOUIS A RAYBURN T 24.714 100 4.119 100 4.119 8.238 PROFESSOR 002 RICHARD J MARQUIS T 20.106 050 1.675 050 1.676 3.351 003 LEONARD M DIANA T 19.872 T 100 3.312 3.312 ASSO PROFESSOR 004 TRUMAN D BLACK T 20.682 100 3.447 T 2.968 007 JASON A ELLIS T 17.586 100 2.931 2.931 008 JOHN L FRY T 17.433 T 100 2.905 2.905 009 NOLEN G MASSEY T 17.361 050 1.446 050 1.447 2.693 010 R S RUBINS T 17.028 T 050 1.425 1.425 011 GLEN E TERRELL T 17.028 T 050 1.426 1.425 1.425 014 WILLIAM B SELF T 15.957 100 2.814 2.814 015 ERWIN G DOUGHTY T 15.606 050 1.300 T 1.300 1.300							•		
Note	12-26	O PHYSICS							
PROFESSOR 002 RICHARD J MARGUIS T 20.106 050 1,675 050 1.676 3.351 003 LEONARD M DIANA T 19.872	P	ROFESSOR AND CHAIRMAN							
002 RICHARD J MARGUIS T 20,106 050 1,675 050 1,676 3,351 003 LEONARD M DIANA T 19,872 100 3,312 3,312 ASSO PROFESSOR 3,447 004 TRUMAN D BLACK T 20,682 100 3,447 3,447 005 ULRICH O HERRMANN T 17,681 100 2,968 2,968 007 JASON A ELLIS T 17,433 100 2,905 2,905 009 NOLEN G MASSEY T 17,433 100 2,905 2,905 010 R S RUBINS T 17,109 1,446 050 1,447 2,893 011 GLEN E TERRELL T 17,028 050 1,419 1,419 012 BONNIE C THOMPSON T 16,884 100 2,814 2,814 014 WILLIAM B SELF T 15,957 100 2,659 2,859 ASST PROFESSOR T 15,606 050 1,300 1,300 1,300	001	LOUIS A RAYBURN	7	24.714	100	4,119	100	4,119	8,238
100 3.312 3.312 3.312 ASSO PROFESSOR	P	ROFESSOR							
ASSO PROFESSOR 004 TRUMAN D BLACK T 20,682 100 3,447 3,447 005 ULRICH O HERRMANN T 17,811 100 2,968 2,968 007 JASON A ELLIS T 17,586 100 2,931 2,931 008 JOHN L FRY T 17,433 100 2,905 2,905 009 NOLEN G MASSEY T 17,361 050 1,446 050 1,447 2,893 010 R S RUBINS T 17,019 050 1,425 1,425 011 GLEN E TERRELL T 17,028 050 1,419 1,419 012 BONNIE C THOMPSON T 16,884 100 2,814 2,814 014 WILLIAM B SELF T 15,957 100 2,659 2,659 ASST PROFESSOR 015 ERWIN G DOUGHTY T 15,606 050 1,300 1,300	002	RICHARD J MARQUIS	***	20,106	050	1,675	050	1,676	3,351
004 TRUMAN D BLACK T 20,682 100 3,447 3,447 005 ULRICH O HERRMANN T 17.811	003	LEONARD M DIANA	Ť	19,872			100	3,312	3,312
005 ULRICH O HERRMANN T 17.811 100 2.968 2,968 007 JASON A ELLIS T 17.586 100 2.931 2,931 008 JOHN L FRY T 17.433 100 2.905 2,905 009 NOLEN G MASSEY T 17.361 050 1.446 050 1.447 2.893 010 R S RUBINS T 17.109 050 1.425 1.425 011 GLEN E TERRELL T 17.028 050 1.419 1.419 012 BONNIE C THOMPSON 0 T 16.884 100 2.814 2.814 2.814 014 WILLIAM B SELF 0 T 15.957 100 2.659 2.659 2.659 ASST PROFESSOR T 15.606 050 1.300 1.300 1.300	۵	SSO PROFESSOR							
007 JASON A ELLIS T 17.586 100 2.931 2,931 008 JOHN L FRY T 17.433 100 2.905 2.905 009 NOLEN G MASSEY T 17.361 050 1.446 050 1.447 2.893 010 R S RUBINS T 17.109 050 1.425 1.425 011 GLEN E TERRELL T 17.028 050 1.419 1.419 012 BONNIE C THOMPSON T 16.884 100 2.814 2.814 014 WILLIAM B SELF T 15.957 100 2.659 2.659 ASST PROFESSOR 015 ERWIN G DOUGHTY T 15.606 050 1.300 1.300	004	TRUMAN D BLACK	7	20,682	100	3,447			3,447
008 JOHN L FRY T 17,433 100 2,905 2,905 009 NOLEN G MASSEY T 17,361 050 1,446 050 1,447 2,893 010 R S RUBINS T 17,109 050 1,425 1,425 011 GLEN E TERRELL T 17,028 050 1,419 1,419 012 BONNIE C THOMPSON T 16,884 100 2,814 2,814 014 WILLIAM B SELF T 15,957 100 2,659 2,659 ASST PROFESSOR T 15,606 050 1,300 1,300	005	ULRICH O HERRMANN	7	17.811			100	2,968	2,968
009 NOLEN G MASSEY T 17,361 050 1,446 050 1,447 2,893 010 R S RUBINS T 17,109 050 1,425 1,425 011 GLEN E TERRELL T 17,028 050 1,419 1,419 012 BONNIE C THOMPSON T 16,884 100 2,814 2,814 014 WILLIAM B SELF T 15,957 100 2,659 2,659 ASST PROFESSOR 015 ERWIN G DOUGHTY T 15,606 050 1,300 1,300	007	JASON A ELLIS	- Park	17,586	100	2,931			2,931
010 R S RUBINS T 17,109 050 1.425 1.425 011 GLEN E TERRELL T 17,028 050 1.419 1.419 012 BONNIE C THOMPSON T 16,884 100 2,814 2.814 014 WILLIAM B SELF T 15,957 100 2,659 2,659 ASST PROFESSOR 015 ERWIN G DOUGHTY T 15,606 050 1,300 1,300	008	JOHN L FRY	Ţ	17,433			100	2,905	2,905
011 GLEN E TERRELL T 17,028 050 1.419 1.419 012 BONNIE C THOMPSON T 16.884 100 2.814 2.814 014 WILLIAM B SELF T 15.957 100 2.659 2.659 ASST PROFESSOR 015 ERWIN G DOUGHTY T 15.606 050 1.300 1.300	009	NOLEN G MASSEY	Ţ	17,361	050	1,446	050	1,447	2,893
012 BONNIE C THOMPSON T 16.884 100 2.814 2.814 014 WILLIAM B SELF T 15.957 100 2.659 2.659 ASST PROFESSOR 015 ERWIN G DOUGHTY T 15.606 050 1.300 1.300	010	R S RUBINS	7	17,109			050	1.425	1.425
014 WILLIAM B SELF T 15,957 100 2,659 2,659 ASST PROFESSOR 015 ERWIN G DOUGHTY T 15,606 050 1,300 1,300	011	GLEN E TERRELL	T	17,028			050	1,419	1,419
ASST PROFESSOR 015 ERWIN G DOUGHTY T 15,606 050 1,300 1,300	012	BONNIE C THOMPSON	T	16.884	100	2,814			2,814
015 ERWIN G DOUGHTY T 15.606 050 1.300	014	WILLIAM B SELF	T	15,957	100	2,659			2,659
	۵	SST PROFESSOR							
	015	ERWIN G DOUGHTY	T	15,606	050	1,300			1,300
5U8=TOTAL 20,391 19,871 39,662		SUB-TOTAL				20,391		19,271	39,662

ITEM NO.	- PAYROLL TITLE - NAME		9 MOS. Rate	6≈1 PERC	T TERM /7-15 Ent of salary	7-1 PERC	ND TERM 6/8-31 ENT OF SALARY	TOTAL SALARY
12-32	O ACCOUNTING							
P	ROFESSOR AND CHAIRMAN							
101	WILBUR R ROSS	T	25,569	100	4,262	100	4,262	8,524
P	ROFESSOR							
005	HOWARD J SNAVELY	7	22,743	100	3,790	100	3,790	7,580
003	HARLEY M COURTNEY	T	22,140	050	1,845	100	3,690	5,535
102	FRANK J IMKE	T	24,570			100	4,095	4,095
A.	SSO PROFESSOR							
005	RICHARD J VARGO		21,195	100	3,532	100	3,532	7.064
008	JAMES F COOK	eda	13,832	050	1,152	050	1,153	2,305
009	BILLIE M WONCH	T	13,626	100	2,271	100	2.271	4,542
010	TERRY J WITT		13,482	100	2,247	050	1,123	3,370
A	SST PROFESSOR							
011	J J TSAY		16,893	100	2,815	100	2,815	5,630
013	J PERRY ABBOTT		15,714	100	2,619	100	2.619	5,238
014	ROBERT E MC GILLIVHAY		16,227	100	2,704	100	2.704	5,408
015	ELBERT C PAGE	****	11,925			100	1.987	1,987
	NSTRUCTOR							
017	LOLA L RHUDES		10.539	100	1,756	100	1,756	3,512
018	SHIRLEY S STRICKLAND		10:323	100	1,720	100	1,720	3,440
020	GOTTFRIED E WEBER		10,215	100	1,702	100	1,702	3,404
) Emo	ECTURER							
021A	JOSEPH J MORICI		6,780	075	848			848
	SUB-TOTAL				33,263		39,219	72,482

ITEM NO.	- PAYROLL TITLE - NAME		9 MOS. RATE	6-1 PERC	T TERM /7-15 ENT OF SALARY	7-1 PERC	ND TERM 6/8-31 ENT OF SALARY	TOTAL SALARY
12-33	O BUSINESS ADMINISTRATION							
Δ	SSO PROF AND CHAIRMAN							
002A	EDWIN A GERLOFF	7	19,566	100	3,261	100	3,261	6,522
þ	ROFESSOR							
004	JOHN D STANLEY	T	23,490	100	3,915			3,915
A	SSO PROFESSOR							
007	WILLIAM W LUCAS	agn }	19,872	100	3,312	100	3,312	6,624
009	HIRAM M HELM JR	7	18,945	100	3,157	100	3,157	6,314
010	MILLIAM E PINNEY	T	18,360	100	3,060	100	3,060	6,120
011	CARL D MCDANIEL JR	T	18,360	100	3,060	100	3,060	6,120
013	BURLEY WALKER JR	T	17.847	100	2,974	100	2,974	5,948
014	SANFORD M EDGAR	eggt 3	17,550	100	2,925	100	2,925	5 • 850
015	THOMAS I KINDEL	N.	17,361			100	2.893	2,893
017	ROGER H GATES	٦	16,974	100	2,829	100	2.829	5,658
018	BILLY W TURNER	5 70	13,950	100	2,325	100	2,325	4,650
019	DONALD W CANTWELL	7	13,626	100	2,271	100	2,271	4,542
101	PAUL HAYASHI	T	18,377	050	1,531	050	1,531	3,062
A	SST PROFESSOR							
020	R C BAKER		15,884	100	2,814	100	2,814	5,628
021	PAULA A HUGHES		16,659	100	2,776	100	2,776	5,552
023	PAT J CALABRO		16,155			100	2,692	2,692
024	RONALD E MILLIMAN		15,840	100	2,640			2,640
025	M WAYNE ALEXANDER		16,263	100	2.710	100	2,710	5,420
026	KENNETH H PRICF		15,714	100	2,619			2,619
027	DAVID GRAY		16,047	100	2,674	100	2,674	5,348

ITEM - PAYROLL TITLE - NO. NAME	9 MOS. RATE	FIRST TO SERVE SA	≈15 T OF	7-16 PFRC6	ND TERM 5/8-31 ENT OF SALARY	TOTAL
12-330 BUSINESS ADMINISTRATION						
ASST PROFESSOR						
028 LARRY SECREST	16:353	100 2	,725	100	2,725	5,450
031 WILLIAM ASHLEY	15,138	100 2	₉ 523	100	2,523	5,046
032 ROSS A FLAHERTY	15,138	100 2	,523	100	2,523	5.046
033 HOWARD GARLAND	16:128	100 2	,688			2,688
034 ALBERT S LEWIE JR	11,817	100 1	, 969	100	1,959	3,938
102 ROBERT BROBST	15,000			100	2,500	2.500
VISITING ASST PROFESSOR						
030A DONALU 8 MCWILLIAMS	15,264	100 2	,544	100	2,544	5,088
INSTRUCTOR						
035 JOHN V DOWDY JR	10,647	100 1	a 774	100	1,774	3,548
	9,097	100 1	,513			1,513
\$ O &	9.078			100	1,513	1,513
	9.078			050	7 56	756
106 9986889899998898898	9,078	100 1	,513	100	1,513	3,026
307	9078	075 1	,134	075	1,135	2,249
LECTURER						
	9,000	050	750			750
SU8-TOTAL		72	₉ 509	é	68,739	141.248

ITEM NO.	- PAYROLL TITLE - NAME		9 MOS. RATE	6=1 PERC	T TERM /7-15 ENT OF SALARY	7=1 PERC	ND TERM 6/8-31 ENT OF SALARY	TOTAL SALARY
12-34	0 ECONOMICS							
P	ROFESSOR AND CHAIRMAN							
0018	SAMUEL T KEIM JR	T	25,666	100	4,277	100	4,277	8,554
P	ROFESSOR							
002	WALLACE B NELSON	4	25,353	100	4,225	100	4,225	8,450
003	THOMAS E HOLLAND	T	21,735			100	3,622	3,622
004	WILLIAM C REHER	7	20,592	100	3,432			3,432
005	THEODORE L WHITESEL	T	20,187	100	3,364			3,364
A	SSO PROFESSOR							
006	JOHN B MCCALL	T	19,566	100	3,261	100	3,261	6,522
007	GHAZI DUWAJI	7	19,566	100	3,261	100	3,261	6,522
0084	WALTER E MULLENDORE	T	19,445	100	3,240	100	3,240	6,480
009	JOAN M MCCREA	T	19,359			100	3,226	3,226
010A	PAUL M HAYASHI	are	18,377	050	1,531	050	1.531	3,042
011	LAWRENCE F ZIEGLER	7	17,802	100	2,967	100	2.967	5,934
012B	MARNA K CARNEY	T	17,223	100	2,870	100	2,870	5.740
為	SST PROFESSOR							
014	CHARLES M HARGROVE		15:138	050	1,261			1,261
015	WALTER R SHUTTEE	7	12,249	100	2,041	050	1,020	3,061
016	RICHARD WILSON	7	11,493	050	957	050	958	1,915
I	NSTRUCTOR							
018	ROBERT L RAFTER		11,286	050	940	050	941	1,881
019	LESTER HAMMOND		10,107	100	1,684			1.684
	SU8-TOTAL				39,311		35,399	74,710

ITEM - PAYROLL TITLE - NO. NAME		9 MOS. RATE	6=1 PERC	T TERM /7-15 ENT OF SALARY	7=1 PERC	ND TERM 6/8-31 ENT OF SALARY	TOTAL SALARY
12-413 AEROSPACE ENGINEEPING							
PROFESSOR AND CHAIRMAN							
001A DONALD D SEATH	7	20,766	067	2,307	067	2,308	4,615
PROFESSOR							
002 JOSEPH W DALLEY	T	22,356	050	1,863	050	1,863	3,726
003 JACK E FAIRCHILD	T	21,429	067	2,380	067	2,381	4,761
006 J H GAINES	T	18,603	067	2,066	057	2,067	4,133
ASSO PROFESSOR							
005 FRED R PAYNE	T	19,146	067	2,127	067	2,128	4,255
ASST PROFESSOR							
007 DONALD R WILSON	Ĩ	15,924	067	1,769	067	1.770	3,539
LECTURER							
		9,000	050	750	050	7 50	1,500
		9,000	050	750	050	750	1,500
GRADUATE TEACHING ASST							
		5,102	050	508	050	509	1.017
102		5,102	050	508	050	509	1,017
		6,102	050	508	050	509	1,017
104 8060000000000000000000000000		6,102	050	508	050	509	1,017
SUB-TOTAL				16.044		16:053	32,097

ITEM NO.	- PAYROLL TITLE - NAME		9 MOS. RATE	6=1. PERCI	T TERM /7-15 ENT OF SALARY	7-1 PERC	ND TERM 6/8-31 ENT OF SALARY	TOTAL SALARY
12-416	CIVIL ENGINEERING							
PR	OFESSOR AND CHAIRMAN							
001	NOEL J EVERARD	T	23,283	100	3,880	100	3,880	7,760
PR	OFESSOR							
003A	JOHN J HAYNES	Ŧ	23,594	050	1,966	050	1,966	3,932
004	TSENG HUANG	T	21,114	100	3,519	100	3,519	7,038
AS	SO PROFESSOR							
009	SYED R GASIM		17,910	100	2,985	100	2,985	5,970
010	FRANK M SMITH JR	T	16,533	100	2,755	100	2.755	5,510
011	ROBERT L YUAN	7	15,606	100	2,601	100	2,601	5,202
AS	ST PROFESSOR							
013	MAX SPINDLER		16,659	100	2,776	100	2,776	5,552
014	THOMAS M PETRY		14,715	050	1,226	050	1,226	2,452
l.E	CTURER							
101	8 8 9 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		13,200	025	550	025	550	1.100
105	9 9 8 % 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		12,000	025	500	025	5 00	1,000
103	\$ 5 5 5 6 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5		12.000	025	500	025	500	1,000
GR	ADUATE TEACHING ASST							
104	D 20 0 2 4 5 5 7 8 7 9 7 9 8 8 8 8 8 8 8 8 8 8 8 8 8 8		6,102	050	508	050	509	1,017
105	8 8 9 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		6,102	050	508	050	509	1,017
106	\$ \$ 9 9 9 8 9 8 8 8 8 8 8 8 8 8 8 8 8 8		6,102	050	508	050	509	1,017
	SUB-TOTAL				24.782		24,785	49,567

ITEM NO. 12-420	- PAYROLL TITLE - NAME ENGINEERING GRAPHICS		9 MOS. RATE	6-1/ PERCE	TERM 77-15 ENT OF SALARY	7-16 PERCE	ND TERM 5/8-31 Ent of Salary	TOTAL SALARY
PRO	PFESSOR							
001 G	GROVER C GRUBB	3	15,372	050	1,281	050	1,281	2,562
ASS	O PROFESSOR							
002 0	CHARLES H CONNALLY	7	16,492	050	1,374			1.374
003 0	W CRENSHAW	***	14,445	050	1,203	050	1.204	2,407
S	SUB-TOTAL				3,858		2,485	6,343

ITEM NO.	- PAYROLL TITLE - NAME		9 MOS. Rate	6=1 PERC	T TERM /7-15 ENT OF SALARY	7-1 PERC	ND TERM 6/8-31 ENT OF SALARY	TOTAL SALARY
12-43	3 MECHANICAL ENGINEERING							
r a	ROFESSOR AND CHAIRMAN							
001	CARL W FILES	7	22,977	100	3,829	100	3,829	7,658
Þ	ROFESSOR							
005A	CALVIN L BARKER	Ť	20,326	033	1,129	033	1,129	2,258
006	CARL D WISEMAN	threa:	19,872	075	2,484	075	2,484	4,968
007	CHARLES C BLACKWELL JR	T	19,764	100	3,294	100	3,294	6,588
010	A HAJI-SHEIKH	7	19,458	100	3,243	100	3,243	6,486
A	SSO PROFESSOR							
012	ROBERT M JOHNSON	450	16,767	075	2,095	075	2,096	4,191
A	SST PROFESSOR							
013	TOMMY J LAWLEY		17,514	100	2,919	100	2,919	5,838
015	GERALD W LOWERY		15,714	050	1,309	050	1,310	2,619
034	ROBERT L WOODS		16,128	050	1,344	050	1.344	2,688
G	RADUATE TEACHING ASSO							
019	KOTHAN S RAVINDHRAN		8,136	050	678	050	678	1,356
G	RADUATE TEACHING ASST							
039	MARCISO F MACIA		6,102	050	508	050	509	1.017
023	JAMES E NICHOLSON		6,102	050	508	050	509	1.017
042	LYNDALE A TRAMMELL		6,102	050	508	050	509	1,017
	SUB-TOTAL				23,848		23,853	47,701

					T TERM /7-15		ND TERM 6/8-31	
ITEM - PAYROL NO. NAM			9 MOS. Rate	PERC	ENT OF SALARY	PERC	ENT OF SALARY	TOTAL SALARY
12-435 ELECTRICA	L ENGINEERING							
PROFESSOR AN	ID CHAIRMAN							
001 FLOYD L CA	ASH	T	24,120	100	4,020	100	4,020	8,040
PROFESSOR								
003 MO-SHING	CHEN	7	24,300	075	3,037	075	3,038	6,075
004 STEPHEN F	CRUMB	T	23,490	100	3,915	100	3,915	7,830
005 CHARLES W	JILES	**	22,248	100	3,708	100	3,708	7,416
007 K R RAO		7	18,477	075	2,309	075	2,310	4,619
ASSO PROFESS	SOR							
009 JACK FITZE	ER	T	19,359	100	3,226	100	3,226	6,452
012 DONALD L C	NONAS	nga a	17,200	075	2,149	075	2,150	4,299
042 JOHN M OWE	INS		16,350	100	2,725	100	2,725	5,450
ASST PROFESS	SOR							
014 WILLIAM E	DILLON		15,804	100	2,634	100	2,634	5,268
GRADUATE TEA	CHING ASST							
) 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		6,102	050	508	050	50 9	1,017
			6,102	050	508	050	509	1,017
	n n o o o o o o o o o o o o o o o o o o		6,102	050	508	050	509	1,017
	3 3 8 8 9 9 9 9 9 9 9 9 9 9 9		6,102	050	508	050	509	1,017
105 889998888	7 W & B & B & B & B & B & B & B & B & B &		6,102	050	508	050	509	1,017
	*****************		6.102	050	508	050	509	1.017
107	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		6,102	050	508	050	509	1,017
SUB-TOTAL					31,279		31,289	62,568

ITEM - PAYROLL NO. NAME			9 MOS. RATE	6-1	T TERM /7-15 ENT OF SALARY	7-16 PERCE	ND TERM 6/8-31 Ent of Salary	TCTAL SALARY
12-440 INDUSTRIAL	- ENGINEERING							
ASSO PROF &	ACT CHAIRMAN							
003 JOHN N FOX		7	20,394	050	1,699	050	1.700	3,399
PROFESSOR								
001 FRANCE A ME	EIER	7	21.735	100	3,622	100	3,,622	7.244
ASSO PROFESSO	OR .							
002 LARRY E ST	ANFEL	T	21,204	075	2,650	075	2,651	5,301
004 ROBERT D DE	RYDEN	T	16,767	025	698	025	699	1,397
ASST PROFESS	SKC							
005 HERBERT W	CORLEY		17,793	050	1,482	050	1,483	2,965
GRADUATE TEAC	CHING ASSO							
	3 2 3 5 2 9 9 9 9 9 9 9 9 9 9		8,136	050	678	050	678	1,356
	3 0 2 2 0 0 0 0 0 0 0 0 0 0 0		8,136	050	678	050	678	1,356
	3 40 6 8 8 8 8 8 8 8 8 8 8 8 8		8,136	050	678	050	67 8	1.356
GRADUATE TEAC	CHING ASST							
101 999888988	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		6,102	050	508	050	509	1,017
102 *********	0 6 4 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9		6,102	050	508	050	509	1,017
	3 5 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		6,102	050	508	050	509	1:017
SUB-TOTAL				;	13,709	1	3,716	27,425

ITEM - PAYROLL TITLE - NO. NAME		9 MOS. RATE	6-1 PERC	T TERM /7-15 ENT OF SALARY	7-1 PERC	ND TERM 6/8-31 ENT OF SALARY	TOTAL SALARY
12-445 COMPUTER SCIENCE							
ASSO PROFESSOR							
005 MELVIN L PIERCE	T	17,502	025	729	025	730	1,459
006 DONALD L CANNON	T	17,200	025	716	025	717	1,433
ASST PROFESSOR							
008A ROGER WALKER		15,914	100	2,652	100	2,652	5,304
009 KURT A SCHEMBER		13,392	100	2,232	100	2,232	4,464
OZI TED M SPARR		15.696	100	2,616	100	2,616	5,232
GRADUATE TEACHING ASSO							
		8,136	050	678	050	678	1,356
		8,136	050	678	050	678	1,356
GRADUATE TEACHING ASST							
		6,102	050	508	050	509	1.017
		6.102	050	508	050	509	1,017
		6,102	050	509	0 5 0	509	1,017
		6,102	050	508	050	509	1.017
SUB-TOTAL				12,333		12.339	24,672

				_	T TERM /7-15		ND TERM 6/8-31	
ITEM NO.	- PAYROLL TITLE - NAME		9 MOS. Rate	PERC	ENT OF SALARY	PERC	ENT OF SALARY	TOTAL SALARY
12-53	O CRIMINAL JUSTICE PROGRAM							
A	SSO PROFESSOR							
002	ALLAN K BUTCHER	T	18,882	050	1,573	050	1,574	3,147
A	SST PROFESSOR							
003	MARY ALMORE		16,524	050	1,377	050	1,377	2.754
004	GILBERT SMITH		15.138	080	2,018	080	2,019	4,037
٧	ISITING ASST PROFESSOR							
020	DENNY F PACE		16,350			100	2,725	2,725
A	DJUNCT ASST PROFESSOR							
101	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		9,000	100	1,500			1,500
102	\$ a a g q 0 0 0 a a b o a a a a a a a		6,000	100	1,000			1,000
203	*************************		6,000			100	1,000	1.000
104	ଥି ଞ ବ ରୁ ର ବ ବି ବ ବ ଦ ମ ଶ କ ଶ ଦ ଘ କ ବ ଗ କ ନ ର କ ମ ନ		4,290			100	715	715
9	RADUATE TEACHING ASST							
105	0 a a a a a a a a a a a a a a a a a a a		6,102	050	508			508
	SUB-TOTAL				7,976		9,410	17,386

ITEM NO.	- PAYROLL TITLE - NAME		9 MOS. RATE	6=1 PERC	T TERM 17-15 Ent of Salary	7=1 PERC	ND TERM 6/8-31 Ent of Salary	TOTAL SALARY
12-5	40 INSTITUTE OF URBAN STUDI	ES						
ş	PROFESSOR							
002	PAUL N GEISEL	7	21,195	050	1.766	100	3,532	5,298
003	JAMES V CORNEHLS	T	20,366	050	1,697	050	1,697	3,394
	ASSO PROFESSOR							
101	DELBERT TAEBEL	7	18,603	100	3:100	080	1,550	4,650
:	ADJUNCT ASST PROFESSOR							
103	CHARLES HUNTER		13,076	051	1911			1,111
	ASST PROFESSOR					•		
021	DANIEL E GEORGES		15,259	100	2,543	100	2,543	5,086
105	ଷିଷ ବର୍ଷ ଶ ବିକ୍ଷ ଷ ବ ବ ବ ବ ବ ବ ବ ବ ବ ବ ବ ବ		14.000	100	2,333	100	2,333	4.666
	SUB-TOTAL				12,550		11:655	24,205

ITEM = PAYROLL TITLE = NO. NAME	9 MOS. RATE	FIRST TERM 6-1/7-15 PERCENT OF TIME SALARY	SECOND TERM 7-16/8-31 PERCENT OF TIME SALARY	TOTAL Salary
12-620 GRADUATE SCHOOL OF SUCIAL W	WORK			
ASSO PROFESSOR				
003 ANTHONY J ARANGIO T	T 19:134	050 1,594	050 1,595	3,189
004 JOHN M DALEY JR T	7 18,450	075 2,306	075 2,307	4,613
101 WAYNE DUEHN T	T 19.134	050 1,594	050 1,595	3,189
102 DENNIS SALEEBEY	T 19:134	050 1,594	050 1.595	3,189
103 NAZNEEN MAYADAS T	T 19:134	100 3,189		3,189
ASST PROFESSUR				
019 MARY C SHANNON	14,094	050 1.174	050 1.175	2,349
020 DONALD K GRANVOLD	16,245		100 2,707	2,707
104 DAVID MALDONADO	16,245	050 1,353	050 1.354	2,707
105 JEANNINE SANCHEZ	16,353		050 1.363	1,363
SUB-TOTAL		12,804	13,691	26,495

FIRST TERM SECOND TERM 6-1/7-15 7-16/8-31ITEM - PAYROLL TITLE - 9 MO. % OF % OF TOTAL NO. NAME RATE TIME SALARY TIME SALARY SALARY

TOTAL SUMMER SCHOOL SALARIES EDUCATIONAL AND GENERAL \$715,210 \$637,397 \$1,352,607

THE UNIVERSITY OF TEXAS AT AUSTIN Office of the President

April 3, 1975

Charles A. LeMaistre, M. D. Chancellor
The University of Texas System 601 Colorado
Austin, Texas 78701

Dear Chancellor LeMaistre:

The docket for the April 28, 1975 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 ad interim

Loren L. Rogers

LLR/aj Attachment

THE UNIVERSITY OF TEXAS AT AUSTIN

INDEX

April 28, 1975

Meeting

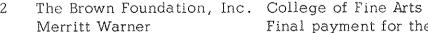
Budget	A-34
Catalogue Change Proposed Catalogue Change for the Division of Extension	A-12
Contracts	
Grants, contracts, and agreements (Federal)	A-24
Grants, contracts, and agreements (Non-Governmental)	A-15
Grants, contracts, and agreements (State)	A-21
Gifts	A- 3
Graduate Faculty Membership	A-12
Parking and Traffic Regulations (Amendments)	A-76

GIFTS TO THE UNIVERSITY OF TEXAS AT AUSTIN

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

A single asterisk preceeding 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	PURPOSE AND CONDITIONS AMOUNT	ľ
1	Mr. & Mrs. L. T. Barrow 3314 Chevy Chase Drive Houston, Texas 77019	College of Natural Sciences \$ 9,015.95 Contributions to the Depart- ment of Geological Sciences: Hal P. Bybee Memorial	5
		Fund \$3,215.95	
		Carolyn G. & G. M.	
	•	Knebel Fund in memory	
	✓	of Moses Knebel 1,000.00	
		Hal P. Bybee Memorial	
		Fund in memory of J.	
		Nalle Gregory 100.00	
		Hal P. Bybee Memorial	
		Fund in memory of	
		Dwight J. Edson, Jr. 100.00	
		Dorothy Ogden Carsey Scholarship Fund 1,000.00	
		Scholarship Fund 1,000.00° Guy E. Green Scholar-	
		ship Fund 1,000.00	
		Vertebrate Paleontology	
		Fund 1,000.00	
		DeFord Summer Scholar-	
		ship Fund 500.00	
		Geology Library 500.00	
		International Geology	
		Map Fund 500.00	
		Alumni NEWSLETTER 100.00	
2	The Brown Foundation Inc.	College of Fine Arts 50 000 0	n



Executive Administrator 2118 Welch Avenue Houston, Texas 77019 College of Fine Arts
Final payment for the Leslie
Waggener Professorship

50,000.00

10,000.00

3 Celanese Chemical Co. W. T. McNair

Director of Manufacturing
Development
Post Office Box 9077
Corpus Christi, Texas
78408

College of Engineering Contribution to the Engineering Foundation for support of the Industrial Associates Program

	DONOR	PURPOSE AND CONDITIONS	AMOUNT
4	Dreyfus Foundation, Inc. William L. Evers Executive Director 445 Park Avenue New York, New York 10022	College of Natural Sciences Contribution to the Depart- ment of Chemistry representing \$25,000 for teaching and re- search activities and \$3,000 for administrative purposes on be- half of Professor Denis Alan Kohl who was nominated for The Dreyfus Teacher-Scholar Grant	\$28,000.00
5	Mr. & Mrs. L. B. Ezell Towne Oaks, Apt. 220-V 500 East Anderson Lane Austin, Texas 78752	College of Business Administration Contribution to the Department of Accounting for the Ellen McAngus Ezell Scholarship Fund	5,000.00
6	Faith Foundation W. H. Hodges Post Office Box 7 Houston, Texas 77001	College of Natural Sciences Contribution to the Department of Biological Sciences for the benefit of the Cell Research Institute	20,000.00
7 3	*Foundation Nationale pour l'Enseignement de la Gestion des Entreprises 155 Boulevard Hawssmann Paris, France	College of Business Administration Continuation of support for the program of business education for a group of French educators	24,590.00
8	Gulf Oil Foundation A. Lewis, Jr. President Gulf Building Pittsburgh, Pennsylvania 15230	College of Engineering Contribution to the Engineering Foundation for support of the Industrial Associates Program \$10,000 Contributions to the Department of Chemical Engineering: Contribution representing \$2,500 stipend and \$500 tuition and fees for Norman P. Kolb who was selected to fill the Gulf Graduate Fellowship plus \$1,000 for an unrestricted grant to the Department 4,000 Contribution representing \$2,000 for scholarships and \$400 for an unrestricted grant 2,400	.00

	DONOR	PURPOSE AND CONDITIONS	AMOUNT
9 V	Halliburton Education Foundation, Inc. John P. Harbin President 3211 Southland Center Dallas, Texas 75201	College of Engineering Contribution for the Halliburton Professorship in Petroleum Engineering	315,000.00 ´
10	Alice G. K. Kleberg Fund Belton K. Johnson Post Office Box 1418 Kingsville, Texas 78363	College of Business Administration Regular annual support of the Kleberg Professorship to pro- vide salary of \$25,000 and \$2,500 for travel expenses	27,500.00
11	*The Latin American Scholar- ship Program of American Universities, Inc. 25 Mt. Auburn Street Cambridge, Massachusetts 02138	U. T. Austin Contributions to International Office to continue scholarship funds for several designated foreign students	14,171.50
12	Mobil Research and Devel- opment Corporation W. C. Skinner, Manager Field Research Laboratory Post Office Box 900 Dallas, Texas 75221	College of Engineering Contribution to the Department of Chemical Engineering to sup- port their research project on in situ gasification of lignite	5,000.00
13	The Moody Foundation Robert L. Washington Grant Analyst Moody Bank Building Galveston, Texas 77550	U. T. Austin Contribution to provide scholarships for designated students	19,175.00
14	The Moody Foundation H. C. MacDonald Comptroller Galveston, Texas 77550	College of Business Administration Second installment on renewal of \$36,400 grant to the Graduate School of Business for the Oral Business History Project	9,100.00
15	Sabine Royalty Corporation Ashley H. Priddy President 1200 Mercantile Bank Bldg. Dallas, Texas 75201	College of Engineering Contribution to the College of Engineering Foundation for the proposed Chair of Free Enterprise	25,000.00

	DONOR	PURPOSE AND CONDITIONS	AMOUNT
16	Texas Association of Realtors Ervin W. Luedtke Executive Vice President Post Office Box 9907 Austin, Texas 78766	College of Business Administration Contribution to establish the Realtors Trust Fund to develop and support the real estate curriculum and related campus programs	5,000.00
17	Schlumberger Foundation Captain Clifton Iverson Executive Secretary 5320 Sugar Hill Houston, Texas 77027	College of Engineering Contribution as a renewal grant for two Schlumberger Collegiate Awards for 1974-75	6,000.00
18	Worthing Scholarship Fund 1801 Main at Jefferson Houston, Texas 77001	U. T. Austin Contribution to provide \$500 scholarships for 13 designated students	6,500.00
19	Arthur Young Foundation Richard W. Morris 2200 Fort Worth National Bank Building Fort Worth, Texas 76102	College of Business Administration Contributions to the Department of Accounting: Contributions by various members of the firm and the matching thereof by the Foundation \$1,500. Contribution for an additional payment on pledge to the Arthur Young Professorship in Accounting 3,725.	

The following nonmonetary gifts have also been received:

20	Mr. Hawes Campbell Miss Mary Campbell 1615 Westover Road Austin, Texas 78703	Humanities Research Center Gift of the Killis Campbell collection of books and journals	8,750.00 **
21	Mr. & Mrs. John C. Duncan 555 Park Avenue, Apt. 5-E New York, New York 10021	U. T. Austin Gift of 14 drawings and paintings for the Barbara Duncan Collection of Latin American Paintings and Drawings in the University Art Museum	21,950.00 **

	DONOR	PURPOSE AND CONDITIONS	AMOUNT
22	Exxon Chemical Company Dr. Henry G. Schutze Chief Plastics Properties Scientist Plastics Technology Div. Post Office Box 4255 Baytown, Texas 77520	College of Engineering \$ Gift of an Atlas Electric Devices Company xenon arc weatherometer to the Department of Chemical Engineering	800.00 **
23	*George E. Haddaway Post Office Box 750 Dallas, Texas 75221	Humanities Research Center Gift of a collection of 43 first day covers, 26 of which are autographed by pilots and other notable personalities, for the History of Aviation Collection	775.00 **
24 v	* Fred George Klerekoper 1847 Coronado Hill Drive Austin, Texas 78752	Humanities Research Center Gift of a collection of Alaskan artifacts and motion pictures taken in the 1930's of Point Barrow and other Eskimo areas	8,250.00 **
25	N. D. Lobanov 49 East 96th Street New York, New York 10028	U. T. Austin Gift of three designs by D. S. Steletsky and two costume designs by K. Uon for the University Art Museum	1,000.00 **
26	*Vector Cable Company John Adams Marketing Director 555 Industrial Road Sugar Land, Texas 77486	Marine Science Institute Geophysics Laboratory Gift of eleven 1,000 foot lengths of seismic cable to be used in a forthcoming land seismic exploration project	2,200.00 **
27 ·	*Dr. W. D. Wolfean Post Office Box 8 Anahuac, Texas 77514	College of Natural Sciences Gift of x-ray machine and dental drill to the Physics Department	250.00 **



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. Tom Kiker, Training Specialist I, Office of Personnel Services and Employee Relations, May 11-15, 1975, to Las Vegas, Nevada, to attend the 1975 American Society for Training and Development National Conference for the purpose of improving training programs to solve organizational and developmental problems at the University. Expenses in the approximate amount of \$545.00 are to be paid from Training Account.
- William E. Peters, Supervisor, Organization and Employee Development, Office of Personnel Services and Employee Relations, May 11-15, 1975, to Las Vegas, Nevada, to attend the 1975 American Society for Training and Development National Conference, for the purpose of improving training programs to solve organizational and developmental problems at the University. Expenses in the approximate amount of \$545.00 are to be paid from Training Account.
- 3. Terry David Kahn, Assistant Professor of Architecture and Planning, June 24-29, 1975, to San Diego, California, to present a paper at a meeting of the Western Economic Association. Expenses in the approximate amount of \$329.47 are to be paid from Academic Development Fund.
- Douglas Browning, Professor of Philosophy, March 27-30, 1975, to New Orleans, Louisiana, to attend a meeting of the Southern Society of Philosophy and Psychology and to interview prospective visiting faculty. Expenses in the approximate amount of \$204.47 are to be paid \$98.31 from Travel Account and the balance from Academic Development Fund.
- 5. George Truett Cates, Jr., Teaching Assistant, Germanic Languages, April 26-27, 1975, to Lexington, Kentucky, to attend the Foreign Language Conference at the University of Kentucky. Expenses in the approximate amount of \$50.00 are to be paid from Academic Development Fund.
- 6. Richard B. Grant, Professor of French and Italian, March 27-29, 1975, to Columbia, South Carolina, to attend Symposium on French Literature and to consult with colleagues about the latest developments in the field. Expenses in the approximate amount of \$225.00 are to be paid from Academic Development Fund.
- 7. Aloysius Martinich, Assistant Professor of Philosophy, March 27-29, 1975, to San Diego, California, to attend the American Philosophical Association meeting and to aid the Philosophy Department in its placement efforts and in the contacting and interviewing of prospective faculty. Expenses in the approximate amount of \$218.00 are to be paid from Academic Development Fund.

TRAVEL FOR FACULTY AND STAFF (Cont'd.)

- 8. Yvonne Mulkern, Teaching Assistant, French-Italian, April 24-26, 1975, to Lexington, Kentucky, to attend the Kentucky Foreign Language Conference. Expenses in the approximate amount of \$281.00 are to be paid \$50.00 from Academic Development Fund, and the balance from Various Donors Various Purposes.
- 9. Carl A. Rubino, Assistant Professor of Classics, April 3-5, 1975, to Cleveland, Ohio to organize the next meeting of the Southern Section of the Classical Association of the Middle West and South to be held at The University of Texas at Austin in 1976. Expenses in the approximate amount of \$76.74 are to be paid from Academic Development Fund.
- 10. James Schorr, Teaching Assistant, French-Italian, April 24-26, 1975, to Lexington, Kentucky, to attend the Kentucky Foreign Language Conference at the University of Lexington. Expenses in the approximate amount of \$281.00 are to be paid \$50.00 from Academic Development Fund, and the balance from Various Donors Various Purposes.
- 11. Linda K. Thomas, Assistant Professor of Slavic Languages, March 8, 1975 only, to Houston, Texas, to attend the Houston Area Teachers of Foreign Languages meeting for the purpose of meeting Russian teachers, especially high school teachers, to interest them and students in the Russian program at U.T. Expenses in the approximate amount of \$25.00 are to be paid from Academic Development Fund.
- 12. Susan Wittig, Assistant Professor of English, March 13-14, 1975, to St. Louis, Missouri, to attend the Conference on College Composition and Communication, and to interview candidates for a position. Expenses in the approximate amount of \$215.00 are to be paid from Academic Development Fund.
- 13. Curtis J. Sorenson, Assistant Professor of Geography, March 14-15, 1975, to Lubbock, Texas, to visit with Texas Tech University representative to discuss The University of Texas at Austin and Texas Tech joint project. This joint project is for the purpose of developing a West Texas Center for Environmental Studies. Expenses in the approximate amount of \$104.00 are to be paid from Academic Development Fund.
- 14. Arno Bohm, Associate Professor of Physics, May 5 June 13, 1975, to Warsaw, Poland, to work with colleagues at the Institute for Theoretical Physics, University of Warsaw on our Cooperative Exchange Program, and to lecture at other institutes. No expense to the University.
- 15. Peter John, Professor of Mathematics, March 10-11, 1975, to Brenham, Texas, to address the Blinn College Mathematics Club. Expenses in the approximate amount of \$50.80 are to be paid from Academic Development Fund.
- 16. Edward W. Cundiff, Associate Dean, College of Business Administration, May 3 June 2, 1975, to France and Netherlands, to participate in an International Seminar on Marketing in the South of France, to teach in a Management Development Program at The European Institute of Business Administration, at Fontainebleau, and to participate in a Management Development Program in the Netherlands. No expense to the University.

TRAVEL FOR FACULTY AND STAFF (Cont'd.)

- 17. William A. Bennie, Professor of Curriculum and Instruction, March 15-20, 1975, to New Orleans, Louisiana, to interview candidates for faculty positions. Expenses in the approximate amount of \$254.00 are to be paid \$114.00 from Academic Development Fund, and the balance from Curriculum Travel Account.
- 18. Richard J. Connelly, Assistant Dean of Education and Teacher Certification Officer, Office of the Dean, March 9-14, 1975, to New Orleans, Louisiana, to attend a conference on competency-based education, including teacher education and staff development. Expenses in the approximate amount of \$283.22 are to be paid from Academic Development Fund.
- 19. Michael N. Hart, Teaching Assistant, Mechanical Engineering, March 20-24, 1975, to Madison, Wisconsin, to participate in the University of Wisconsin's Energy Resource Alternatives Symposium, to become more acquainted with the rules and procedures of the 1975 SCORE contest, and to participate in workshops with faculty and industry representatives to solve design and fabrication problems. Expenses in the approximate amount of \$388.85 are to be paid from Academic Development Fund.
- 20. Byron D. Tapley, Professor of Aerospace Engineering and Engineering Mechanics, August 1 September 3, 1975, to Cortina d'Ampezzo, Italy and Oberwalfach, West Germany, to Italy, to present a lecture at the NATO Advance Study Institute and to collect papers for the proceedings; to West Germany, to present a lecture at the Sixth Symposium on Mathematical Methods in Celestial Mechanics and to discuss current research with international scientists and engineers at both meetings. Expenses in the approximate amount of \$250.00 are to be paid from Engineering Foundation Faculty Travel.
- Charles Roeckle, Administrative Assistant to the Dean, College of Fine Arts, February 17-19, 1975, to Galveston, Alvin, Texas City, Freeport, Texas; to meet with students of junior colleges and high school students and their parents to inform them of the programs available at UT Austin. Expenses in the approximate amount of \$140.00 are to be paid from Academic Development Fund.
- Julie II. Bichteler, Assistant Professor, Graduate School of Library Science, February 14, 1975 only, to Houston, Texas, to recruit graduate students. Expenses in the approximate amount of \$58.52 are to be paid from Academic Development Fund.
- Julie H. Bichteler, Assistant Professor, Graduate School of Library Science, March 13-14, 1975, to Kingsville and Edinburgh, Texas, to recruit graduate students. Expenses in the approximate amount of \$118.10 are to be paid from Academic Development Fund.
- 24. Sam G. Whitten, Associate Professor, Graduate School of Library Science, February 14, 1975 only, to Houston, Texas, to recruit graduate students. Expenses in the approximate amount of \$7.00 are to be paid from Academic Development Fund.

TRAVEL FOR FACULTY AND STAFF (Cont'd.)

- 25. Sam G. Whitten, Associate Professor, Graduate School of Library Science, March 13-14, 1975, to Kingsville and Edinburgh, Texas, to recruit graduate students. Expenses in the approximate amount of \$38.50 are to be paid from Academic Development Fund.
- Center, February 24 May 1, 1975, to London, England, to work for two months as exchange personnel with Bertram Rota Ltd., to learn cataloging processes used in bookdealer's offices. Expenses in the approximate amount of \$328.00 are to be paid from Humanities Research Travel Account.
- 27. Hugh W. Bryant, Radiation Safety Specialist, February 19-21, 1975, to McDonald Observatory, Ft. Davis, Texas, to teach Defensive Driving Course to McDonald personnel and to discuss new laser regulations with appropriate personnel. Expenses in the approximate amount of \$66.00 are to be paid from M \S O Safety Office.
- Richard B. Borden, Fire Marshal, Safety Office, February 19-21, 1975, to McDonald Observatory, Ft. Davis, Texas, to teach Defensive Driving Course to McDonald personnel. Expenses in the approximate amount of \$66.00 are to be paid from M & O Safety Office.
- Lenard B. Kreuz, Communications Supervisor, Utilities, March 11-12, 1975, to Raleigh-Durham, North Carolina, to inspect telephone equipment at Duke University to determine whether to purchase this equipment for use by the University. Expenses in the approximate amount of \$309.11 are to be paid from M & O.
- Allen Brune, Research Engineer Associate V, McDonald Observatory, February 19-24, 1975, to McDonald Observatory, Fort Davis, Texas, to review physical plant building plan. Expenses in the approximate amount of \$70.00 are to be paid from M O & E.
- Nova Longest, Executive Assistant, Office of Sponsored Projects, March 10-14, 1975, to Dallas, Texas, to attend Department of Defense Industrial Management Course in relation to the security agreement entered into between the University and the Department of Defense. Expenses in the approximate amount of \$110.00 are to be paid from M O & E.
- 32. H. James Dorman, Research Scientist, Marine Science Institute Geophysics Lab, Galveston, February 19, 1975 only, to Austin, Texas, to teach class in Marine Geology and Geophysics as a replacement for Dr. orzel. Expenses in the approximate amount of \$97.00 are to be paid from Academic Development Fund.
- Joel S. Watkins, Marine Science Institute Geophysics Lab., Galveston, February 26-27, 1975, to Austin, Texas, to teach class in Marine Geology and Geophysics as a replacement for Worzel. Expenses in the approximate amount of \$119.00 are to be paid from Academic Development Fund.

PROPOSED CHANGES FOR THE DIVISION OF EXTENSION CATALOGUE. I recommend approval of the following changes to page 5 of the Extension Division Evening Class Catalogue (Long Term 1974-1975 Summer 1975) effective September 1, 1975.

Increase tuition from \$15.00 to \$20.00 per semester hour for credit programs in Extension Evening Classes, Extension Field Courses (off campus), and Extension Typewriting Courses.

GRADUATE FACULTY MEMBERSHIP. I recommend approval of the appointment of the following to membership in the Graduate Faculty, all of whom have been nominated by their graduate studies committees, and the names submitted by Dr. Gardner Lindzey, Dean of the Graduate School.

COLLEGE OF HUMANITIES

Department of English

Associate Professor John P. Farrell
Associate Professor Wayne A. Rebhorn
Associate Professor William J. Scheick
Associate Professor Warwick P. Wadlington

COLLEGE OF SOCIAL AND BEHAVIORAL SCIENCES

Department of History

Assistant Professor Michael G. Baylor Assistant Professor Carolyn P. Boyd Assistant Professor George B. Forgie Assistant Professor Guy Howard Miller Assistant Professor Gail Minault Assistant Professor Richard H. Pells Assistant Professor Thomas L. Philpott Assistant Professor Richard A. Ryerson Assistant Professor Claudio Segre Assistant Professor Edward I. Steinhart

COLLEGE OF NATURAL SCIENCES

Department of Geological Sciences

Dr. Charles George Groat (Special)

COLLEGE OF BUSINESS ADMINISTRATION

Department of Accounting

Assistant Professor Robert H. Ashton
Assistant Professor Edward B. Deakin
Assistant Professor Michael H. Granof
Assistant Professor James P. Mandel
Assistant Professor Kevin M. Misiewicz
Assistant Professor Michael L. Moore
Assistant Professor G. Fred Streuling
Assistant Professor Lawrence Anthony Tomassini
Assistant Professor David A. Wilson

GRADUATE FACULTY MEMBERSHIP (Cont'd.)

Department of Finance

Assistant Professor Robert W. Boatler Associate Professor R. D. Mettlen Assistant Professor Stephen A. Pyhrr Assistant Professor A. J. Senchack, Jr. Assistant Professor L. J. Spellman Associate Professor J. D. Todd Associate Professor Eugene Wisdom Associate Professor R. C. Witt

SCHOOL OF COMMUNICATION

Department of Radio-Television-Film

Assistant Professor John Elmer Fryman Assistant Professor William E. Mackie Assistant Professor Jack R. Stanley Assistant Professor George Wead

Department of Speech Communication

Assistant Professor Ronald E. Bassett
Assistant Professor Larry D. Browning
Assistant Professor Michael R. Chial
Assistant Professor Eva Garcia-Carrillo Currie
Associate Professor Grace Haen Hanson
Assistant Professor Robert W. Hopper
*Assistant Professor Harvey M. Sussman

COLLEGE OF EDUCATION

Department of Curriculum and Instruction

Assistant Professor Theresa H. Escobedo Assistant Professor Elaine D. Fowler Assistant Professor Ernest D. O'Neil Assistant Professor Nancy L. Roser

COLLEGE OF ENGINEERING

Department of Civil Engineering

Associate Professor Neal E. Armstrong Professor William S. Butcher Assistant Professor Nicholas J. Carino Assistant Professor Hal B. H. Cooper, Jr. Assistant Professor James E. Dailey Assistant Professor Robert S. Dunham Assistant Professor Karl H. Frank

GRADUATE FACULTY MEMBERSHIP (Cont'd.)

Department of Civil Engineering (continued)

Assistant Professor Jerold W. Jones Associate Professor Michael J. Humenick Assistant Professor Richard W. Miksad Assistant Professor Kenneth H. Stokoe, II Assistant Professor C. Michael Walton Associate Professor Stephen G. Wright

Department of Mechanical Engineering Associate Professor Billy Vaughn Koen

Department of Petroleum Engineering

Professor Folkert Brons
Assistant Professor Myron H. Dorfman
Professor Claude R. Hocott
Assistant Professor Roy M. Knapp
Associate Professor G. R. Pickett

COLLEGE OF FINE ARTS

Department of Art

Assistant Professor Frederick S. Levine

GRADUATE SCHOOL OF LIBRARY SCIENCE

Assistant Professor Willis Bernard Lukenbill

*Holds joint appointment in the Department of Linguistics



GRANTS, CONTRACTS, AND AGREEMENT (NON-GOVERNMENTAL):

- Grant PRF#7833-AC7, by which American Chemical Society, The Petroleum Research Fund, Washington, D. C., provides \$24,000 for support of research entitled, "Miscibility and Properties of Polymer Blends." The grant is effective for the period September 1, 1975 through August 31, 1978, and the research will be under the direction of Dr. Donald R. Paul, Professor of Chemical Engineering, and Dr. Joel W. Barlow, Assistant Professor of Chemical Engineering.
- Supplemental Agreement No. 7 to Subcontract No. 66-703427 and Letter dated January 30, 1975, by which California Institute of Technology administratively transfers, effective January 1, 1975, the Subcontract from The University of Texas Medical Branch to The University of Texas at Austin and provides \$4,000 for the period September 1, 1974 through June 30, 1975. The project entitled, "Viking 1975 Mars Mission," is under the direction of Dr. Gary V. Latham, Professor of Geophysics, The University of Texas Marine Science Institute, Geophysics Laboratory, Galveston, Texas.
- Performance Contract ESESC-93, by which Organization of American States, Washington, D. C., provides \$40,000 to conduct an Inter-American Forum on interactions between research and production on development, as a preliminary step to the "Inter-American Meeting" on Technical Development and Transfer of Technology. The performance contract is effective for the period February 24, 1975 through February 27, 1975, and the forum will be under the direction of Dr. William P. Glade, Professor of Economics, and Director, Institute of Latin American Studies; and John J. Allan, Associate Professor of Mechanical Engineering.
 - Letter Extension (dated 26 February 1975), by which Recruitment and Training Program, New York, New York, extends the Agreement between RTP, Inc. and UT-Austin through June 30, 1975, without additional funds. The research entitled, "A Pilot Project to Demonstrate Techniques for Overcoming Barriers to Employment of Minority Women in White Collar Jobs: Houston, "continues under the direction of Dr. F. Ray Marshall, Professor of Economics.
- Renewal of Agreement between the World Health Organization, Geneva, Switzerland, and The University of Texas at Austin, by which WHO provides an additional \$2,500 for continuation of an International Reference Centre for Serum Protein Groups in the Department of Zoology. The program continues under the direction of Dr. H. Eldon Sutton, Professor of Zoology.
- Grant F-042, by which The Robert A. Welch Foundation, Houston, Texas, provides \$54,000 for support of research entitled, "Mechanisms of Ozonation of Organic Compounds." The grant is effective for the period June 1, 1975 through May 31, 1978, and the research will be under the direction of Dr. Philip S. Bailey, Professor of Chemistry.
- Grant F-060, by which The Robert A. Welch Foundation, Houston, Texas, provides \$72,000 for support of research entitled, "Radiation Chemistry and Biochemistry of Drosophila and Other Organisms. The grant is effective for the period June 1, 1975 through May 31, 1978, and the research will be under the direction of Dr. Hugh S. Forrest, Professor of Zoology, and Dr. Robert P. Wagner, Professor of Zoology.

GRANTS, CONTRACTS, AND AGREEMENT (NON-GOVERNMENTAL):

- 8. Grant F-067, by which The Robert A. Welch Foundation, Houston, Texas, provides \$102,000 for support of research entitled, "Studies in Organometallic Chemistry." The grant is effective for the period June 1, 1975 through May 31, 1978, and the research will be under the direction of Dr. Rowland Pettit, Professor of Chemistry.
- 9. Grant F-069, by which The Robert A. Welch Foundation, Houston, Texas, provides \$102,000 for support of research entitled, "Coordination Chemistry of Hallucinogenic Drugs." The grant is effective for the period June 1, 1975 through May 31, 1978, and the research will be under the direction of Dr. George W. Watt, Professor of Chemistry.
- 10. Grant F-100. by which The Robert A. Welch Foundation, Houston, Texas, provides \$57,000 for support of research entitled, "Microwave Spectroscopy." The grant is effective for the period June 1, 1975 through May 31, 1978, and the research will be under the direction of Dr. James E. Boggs, Professor of Chemistry.
 - 11. Grant F-114, by which The Robert A. Welch Foundation, Houston, Texas, provides \$72,000 for support of research entitled, "Molecular Interactions at Surfaces." The grant is effective for the period June 1, 1975 through May 31, 1978, and the research will be under the direction of Dr. William H. Wade, Professor of Chemistry.
 - 12. Grant F-126, by which The Robert A. Welch Foundation, Houston, Texas, provides \$150,000 for support of research entitled, "Relationship between Chemical Behaviour and Molecular Structure." The grant is effective for the period June 1, 1975 through May 31, 1978, and the research will be under the direction of Dr. Michael J. S. Dewar, Professor of Chemistry.
- 13. Grant F-144, by which The Robert A. Welch Foundation, Houston, Texas, provides \$14,000 for support of research entitled, "Primary Processes in the Photochemistry of Simple Ketone Molecules." The grant is effective for the period June 1, 1975 through May 31, 1976, and the research will be under the direction of Dr. W. Albert Noyes, Jr., Ashbel Smith Professor of Chemistry.
- 14. Grant F-209, by which The Robert A. Welch Foundation, Houston, Texas, provides \$51,000 for support of research entitled, "Chemical Basis of Immunoglobulin Variability." The grant is effective for the period June 1, 1975 through May 31, 1978, and the research will be under the direction of Dr. William J. Mandy. Professor of Microbiology.
 - 15. Grant F-364, by which The Robert A. Welch Foundation, Houston, Texas, provides \$150,000 for support of research entitled, "Vitamins and Hormones." The grant is effective for the period June 1, 1975 through May 31, 1978, and the research will be under the direction of Dr. Karl Folkers, Professor of Chemistry.
 - 16. Grant F-370, by which The Robert A. Welch Foundation, Houston, Texas, provides \$57,000 for support of research entitled, "New Experiments in Pulsed Nuclear Magnetic Resonance." The grant is effective for the period June 1, 1975 through May 31, 1978, and the research will be under the direction of Dr. Charles G. Wade, Associate Professor of Chemistry.

GRANTS, CONTRACTS, AND AGREEMENT (NON-GOVERNMENTAL):

- 17. Grant F-597, by which The Robert A. Welch Foundation, Houston, Texas, provides \$45,000 for support of research entitled, "Studies of Correlated Radiation following Nuclear Transmutation." The grant is effective for the period June 1, 1975 through May 31, 1978, and the research will be under the direction of Dr. Wilfred J. Braithwaite, Assistant Professor of Physics.
- 18. Grant F-600, by which The Robert A. Welch Foundation, Houston, Texas, provides \$51,000 for support of research entitled, "Spectroscopy of van-der-Waals Molecules and of Biomolecular Pairs." The grant is effective for the period June 1, 1975 through May 31, 1978, and the research will be under the direction of Dr. Lothar Frommhold, Professor of Physics.
- 19. Grant F-604, by which The Robert A. Welch Foundation, Houston, Texas, provides \$45,000 for support of research entitled, "Experimental Study of Neutron Resonances in Nuclei with 12 \(\lambda \leq 40 \)
 Using the (d,p) Reaction and a Biased Magnetic Quadrupole Spectrometer." The grant is effective for the period June 1, 1975 through May 31, 1978, and the research will be under the direction of Dr. Gerald W. Hoffmann, Assistant Professor of Physics.
- 20. Grant F-610, by which The Robert A. Welch Foundation, Houston, Texas, provides \$51,000 for support of research entitled, "Phase Transformations in Transition Metal Hexacyanide Compounds." The grant is effective for the period June 1, 1975 through May 31, 1978, and the research will be under the direction of Dr. William D. McCormick, Associate Professor of Physics.
- 21. Grant F-613, by which The Robert A. Welch Foundation, Houston, Texas, provides \$45,000 for support of research entitled, "The Nerve Growth Factor Protein." The grant is effective for the period June 1, 1975 through May 31, 1978, and the research will be under the direction of Dr. Jose Regino Perez-Polo, Assistant Professor of Zoology.
- 22. Grant F-615, by which The Robert A. Welch Foundation, Houston, Texas, provides \$51,000 for support of research entitled, "Millimeter Wavelength Spectroscopy of Radicals and Ions." The grant is effective for the period June 1, 1975 through May 31, 1978, and the research will be under the direction of Dr. Herbert M. Pickett, Assistant Professor of Chemistry.
- 23. Grant F-620, by which The Robert A. Welch Foundation, Houston, Texas, provides \$60,000 for support of research entitled, "Bonding and Structural Studies of Transition Metal Cyanide Complexes." The grant is effective for the period June 1, 1975 through May 31, 1978, and the research will be under the direction of Dr. B. I. Swanson, Assistant Professor of Chemistry.
 - Grant F-623, by which The Robert A. Welch Foundation, Houston, Texas, provides \$45,000 for support of research entitled, "Galactic Abundances of the Chemical Elements." The grant is effective for the period June 1, 1975 through May 31, 1978, and the research will be under the direction of Dr. Paul A. Vanden Bout, Assistant Professor of Astronomy.
 - 25. Grant F-626, by which The Robert A. Welch Foundation, Houston, Texas, provides \$51,000 for support of research entitled, "The Total Synthesis of Brefeldin A." The grant is effective for the period June 1, 1975 through May 31, 1978, and the research will be under the direction of Dr. James K. Whitesell, Assistant Professor of Chemistry.



GRANTS, CONTRACTS, AND AGREEMENTS (NON-GOVERNMENTAL) (Cont'd.)

- 26. Amendment to existing contract between The Ex-Students' Association and the Coca-Cola/Dr. Pepper Bottling Company, signed by Vice President James H. Colvin, in which items one and two are amended as follows:
 - 1. The Coca-Cola/Dr. Pepper Bottling Company will operate machines which will dispense beverages in twelve (12) ounce cans @\$.25/per can.
 - 2. The Coca-Cola/Dr. Pepper Bottling Company agrees to pay the Ex-Students' Association 17.5% gross sales for the first quarter of 1975.

This amendment became effective January 1, 1975. All other terms and conditions not hereby amended are to remain in full force and effect.

27. Amendment to existing contract between The University of Texas at Austin (Campus Services, Incorporated) and the Neelley Vending Company, signed by Vice President James II. Colvin, to change items 1, 2, 3, 4, 5, 7, 12, 120 and 13 of the schedule of commission as it appears in Article 4 of the above-mentioned contract to read as follows:

ITEM			COMMISSION
1	Cup soda 8 oz. with ice	from 10¢ to 15¢	32%
2	Coffee7 oz. cup	from 10¢ to 15¢	20%
3	Hot chocolate 7 oz. cup	from 10¢ to 15¢	20%
4	Cigarettes	stay at 60¢	from 18.33%
			to 13.33%
5	*Candy	from 15¢ to 20¢	17%
7	Ice cream	from 15¢ to 20¢	10%
12	Pies and pastry	from 20¢ to 25¢	7 %
120	Chips	from 15 ¢ to 20 ¢	7 %
13	Gum and mints	from $10 ¢$ to $15 ¢$	17%

*Peter Paul Company, Hershey Company, Nestle's Company, Mars Company, and any other pre-marked 20¢ item.

This amendment became effective January 1, 1975. All other terms and conditions not hereby amended are to remain in full force and effect.

GRANTS, CONTRACTS, AND AGREEMENTS (NON-GOVERNMENTAL) (Cont'd.)

28. Amendment to existing contract between The University of Texas at Austin (Campus Services, Incorporated) and Neelley Vending Company, signed by Vice President James H. Colvin, to change the listing of all items of the schedule of commission as it appears in Article 4 to read:

ITEM		COMMISSION
I	15¢ Cold drinks, 8oz cup	32%
2	15¢ Coffee, 7oz. cup	20%
3	15¢ Hot Chocolate, 7oz. cup	20%
4 5	60¢ Cigarettes	13.33%
5	15¢ & 20¢ Candy	17%
6	20¢ Milk, Chocolate Milk, Buttermilk	
	& Orange Drink in 1/2 pint cartons	10%
7	20¢ Ice Cream - sandwiches and bar	10%
8	35¢, 45 ¢, 50 ¢, 55 ¢, 60 ¢, 65 ¢, 70 ¢, 75 ¢	
	all food including sandwiches, sal	
	desserts. Items 9, 10, and 11 hav	
	all been incorporated into item 8	
	7% commission will be paid.	7 %
12a	25¢, 30¢, Pastry-Fried Pies and Sweet	
12b	20¢ Fritos and Potato Chips	7%
13	40¢, 45¢, 50¢ Hot canned foods and sou	p 10%

This amendment became effective March 15, 1975. All other terms and conditions not hereby amended are to remain in full force and effect.

- 29. Amendment to existing contract between The Ex-Students' Association and the Pepsi-Cola Bottling Company, signed by Vice President James H. Colvin, to change Items 1 and 2 of the schedule of commissions as it appears in Article 4 of the present contract to read as follows:
 - 1. The Pepsi-Cola Bottling Company will operate machines which will dispense beverages in twelve (12) ounce cans @ \$.25 per can.
 - 2. The Pepsi-Cola Bottling Company agrees to pay The Ex-Students' Association 17.5% of gross sales and will pay State and City sales taxes in the amount of five (5%) per cent of gross sales. This agreement is based upon the prevailing wholesale price of \$4.45 per case. In the event that ingredient costs require further price adjustments, this agreement may be renegotiated by mutual consent.

This amendment became effective January 1, 1975. All other terms and conditions not hereby amended are to remain in full force and effect.

Jack Brown's Fabric Care Services, signed by Vice President James H. Colvin, to furnish laundry service for the Division of Housing and Food Service at the University for the remainder of the 1974-75 year. The contract period began February 1, 1975 and shall terminate August 31, 1975. The laundry contractor will render for each of the accounts serviced a fully itemized monthly statement. The charge will be \$.0975 per 1b. of the finished flatwork.

A.M.

GRANTS, CONTRACTS AND AGREEMENTS (NON-GOVERNMENTAL) (Cont'd.)

31. Contract between The University of Texas at Austin and Great Southwestern Pest Control, signed by Vice President James H. Colvin, to furnish pest control service for the Division of Housing and Food Service at the University. The contract began February 17, 1975 and shall terminate August 31, 1975. The contractor agrees to furnish services for the units below at the following prices:

Dormitories & Cafeterias	Monthly Charge
Andrews Dormitory Kitchen	\$17.50
Kinsolving Dormitory Kitchen	18.00
Littlefield Dormitory Kitchen	17.00
Jester Center Halls Kitchen	34.00
Varsity Cafeteria	17.00
Total Monthly Charge	\$103.50

32. Part II of contract dated November 1, 1968, between The University of Texas at Austin together with Campus Services, Incorporated and Vend-A-Copy, signed by Vice President James H. Colvin, to install and service plain-paper (dry, bond paper) copiers only. All other provisions of the basic agreement apply except as follows:

"As part of the consideration of this agreement, 'VEND-A-COPY' agrees to pay 'CAMPUS' five percent (5%) of the gross income from each plain-paper copier operated by 'VEND-A-COPY' pursuant to this agreement except that 'CAMPUS' will not share in the revenue of any copier during a month when the average gross income from all such copiers falls below two hundred fifty dollars (\$250.00)."

Part II of this contract became effective January 1, 1975.

GRANTS, CONTRACTS, AND AGREEMENTS (STATE):



- 1. Grant AC-75-A01-2696, by which the State of Texas, Office of the Governor, Criminal Justice Division, Austin, Texas, provides \$48,709 for support of "The University of Texas at Austin Crime Prevention Unit." The grant is effective for the period December 1, 1974 through November 30, 1975, and the project will be under the direction of Donald R. Cannon, Chief, The University of Texas at Austin Police Department.
- 2. Subcontract between The University of Texas Medical Branch at Galveston (Prime Contract NOI-MB-24391) and The University of Texas at Austin, by which the UT-Medical Branch at Galveston provides \$17,901 to assist in an Area Health Education Center Program. The subcontract is effective for the period July 1, 1974 through June 30, 1975, and the program will be under the direction of Dr. Victor A. Yanchick, Associate Professor, College of Pharmacy.
- Interagency Cooperation Contract No. IAC (74-75)-0246, Amendment No. 3, between The University of Texas at Austin (Graduate School of Social Work) and the State Department of Public Welfare, signed by Vice President James H. Colvin, to increase the total amount of this contract to the sum of \$250,000. This amendment became effective February 28, 1975. All other terms and conditions not hereby amended are to remain in full force and effect.
- 4. Interagency Cooperation Contract No. IAC (74-75)-0938, Amendment No. 3, between The University of Texas at Austin (Division of Natural Resources and Environment) and the Texas Parks and Wildlife Department, signed by Vice President James H. Colvin, to extend the termination date from February 28, 1975 to May 31, 1975. This extension will not require additional funds beyond the amount specified in the original contract. This amendment became effective on February 28, 1975. All other terms and conditions not hereby amended are to remain in full force and effect.
- Interagency Cooperation Contract No. IAC (74-75)-1343, Amendment No. 1, between The University of Texas at Austin (Computation Center) and the Texas Education Agency, signed by Vice President James H. Colvin, to increase the total amount of the contract from \$10,200 to \$13,200. This amendment became effective March 6, 1975. All other terms and conditions not hereby amended are to remain in full force and effect.
- 6. Interagency Cooperation Contract No. IAC (74-75)-1546, between The University of Texas at Austin (Drug Dynamics Institute of the College of Pharmacy) 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 period became effective February 1, 1975 and shall terminate January 31, 1976. Total amount of the contract shall not exceed \$17,004.
- 7. Interagency Cooperation Contract No. IAC (74-75)-1553, between The University of Texas at Austin (Joe C. Thompson Conference Center) and the Texas Education Agency, signed by Vice President James H. Colvin, whereby the University agrees to provide conference room space and movers to the Texas Education Agency for purpose of an awareness conference for the Texas Right to Read effort for staff members of the receiving agency, representatives of 20 regional education service centers and superintendents and reading directors from local school districts. The contract became effective February 24, 1975 and terminated February 27, 1975. Total amount of the contract shall not exceed \$230.

GRANTS, CONTRACTS, AND AGREEMENTS (STATE) (Cont'd.):

- 8. Interagency Cooperation Contract No. IAC (74-75)-1557, between The University of Texas at Austin (Texas Archeological Survey) and the Lower Colorado River Authority, signed by Vice President James H. Colvin, whereby the University agrees to complete and report an assessment of archeological/historical resources in specified portions of the Fayette Power Project. This work shall include necessary research, excavation, analysis, and submission of a final report on the findings. The contract became effective February 24, 1975 and shall terminate August 31, 1975. Total amount of the contract shall not exceed \$9,201.
- 9. Interagency Cooperation Contract No. IAC (74-75)-1559, between The University of Texas at Austin (Center for Energy Studies) and the Office of the Governor, Division of Planning Coordination, signed by Vice President James H. Colvin, whereby the University agrees to carry out research for minimizing utility costs for the State of Texas Capitol Complex Buildings. The contract became effective January 1, 1975 and shall terminate June 30, 1975. The total amount of the contract shall not exceed \$24,362.
- 10. Interagency Cooperation Contract No. IAC (74-75)-1569, between The University of Texas at Austin (Visual Instruction Bureau) and the Texas Department of Community Affairs (State Youth Secretariat Division), signed by Vice President James H. Colvin, whereby the University agrees to develop and produce a slide presentation which is professional in nature and meets the criteria set by the Texas Department of Community Affairs for such a presentation. The contract became effective February 28, 1975 and terminated March 12, 1975. Total amount of the contract shall not exceed \$500.
- 11. Interagency Cooperation Contract No. IAC (74-75)-1571, between The University of Texas at Austin (Joe C. Thompson Conference Center) and the Texas Education Agency, signed by Vice President James H. Colvin, whereby the University will provide the Texas Education Agency with conference rooms for the purpose of Inservice Education for Vocational Directors and Supervisors (L.E.A.) and for the benefit and use of public education for the State of Texas. The contract began March 17, 1975 and terminated March 19, 1975. Total amount of the contract shall not exceed \$280.
- 12. Interagency Cooperation Contract No. IAC (74-75)-1577, between The University of Texas at Austin (Lyndon B. Johnson School of Public Affairs) and the State Board of Insurance, signed by Vice President James H. Colvin, whereby the University agrees to complete studies on the feasibility of health maintenance organizations (HMOs) as an alternative form of health care delivery for Texas, including the role of the State Board of Insurance and/or alternative organization structures, for the establishment and regulation of HMOs by the state, and to provide final research data and findings on this project, as well as those of a study of no-fault automobile insurance for Texas, in the form of reports. The contract began March 12, 1975 and shall terminate August 31, 1975. Total amount of the contract shall not exceed \$6,000.

GRANTS, CONTRACTS, AND AGREEMENTS (STATE) (Cont'd.):

- 13. Interagency Cooperation Contract No. IAC (74-75)-1578, between The University of Texas at Austin (Bureau of Business Research) and the Texas Rehabilitation Commission, signed by Vice President James H. Colvin, whereby the University agrees to the sale of 4 copies of the publication entitled "Directory of Texas Manufacturers." The contract became effective March 10, 1975 and shall terminate August 31, 1975. Total amount of the contract shall not exceed \$72.
 - 14. Interagency Cooperation Contract No. IAC (74-75)-1579, between The University of Texas Austin (Industrial and Business Training Bureau, Division of Extension) and the Governor's Office of Traffic Safety, signed by Business Manager Bobby G. Cook for Vice President James H. Colvin, whereby the University agrees to develop training programs to assist the Governor's Office of Traffic Safety in improving its extended staff's performance in carrying out legislated responsibilities. The contract became effective March 17, 1975 and shall terminate August 31, 1975. Total amount of the contract shall not exceed \$30,000.
 - 15. Interagency Cooperation Contract No. IAC (74-75)-1580, between The University of Texas at Austin (Industrial and Business Training Bureau, Division of Extension) and the Governor's Office of Traffic Safety, signed by Business Manager Bobby G. Cook for Vice President James H. Colvin, whereby the University agrees to develop training programs to assist the Governor's Office of Traffic Safety in improving extended staff's performance in carrying out legislated responsibilities. The contract began March 17, 1975 and shall terminate August 31, 1975. Total amount of the contract shall not exceed \$40,000.
 - 16. Interagency Cooperation Contract No. IAC (74-75)-1591, between The University of Texas at Austin (Division of Extension, Instructional Material Services) and Texas State Technical Institute, signed by Vice President James H. Colvin, whereby the University agrees to sell University of Texas Prepared Training Publications depending on availability. The contract began February 1, 1975 and shall terminate August 31, 1975. Total amount of the contract shall not exceed \$2,250.
 - 17. Interagency Cooperation Contract No. IAC (74-75)-1592, between The University of Texas at Austin (LBJ School of Public Affairs) and the State Department of Public Welfare, signed by Vice President James H. Colvin, whereby the University will furnish various publications as requested by the State Department of Public Welfare. The contract period began March 18, 1975 and shall terminate August 31, 1975. Total amount of the contract shall not exceed \$1.000.



- 1. Modification AFOSR-72-2343C to Grant AFOSR-72-2343, by which the U. S. Air Force, Air Force Office of Scientific Research, Arlington, Virginia, authorizes the purchase of certain items of permanent equipment. The research entitled, "The Effect of Grain Size on Thermal Diffusion in Metals," continues under the direction of Dr. John P. Stark, Professor of Mechanical Engineering.
- 2. Modification AFOSR 72-2371C to Grant AFOSR 72-2371, by which the U.S. Air Force, Air Force Office of Scientific Research, Arlington, Virginia, provides \$26,514 additional funds (Travis County) and extends the grant for the period June 1, 1975 through March 31, 1976. The research entitled, "The Study of Rates of Convergence of Non-parametric Pattern Classification Algorithms," continues under the direction of Dr. Terry J. Wagner, Professor of Electrical Engineering.
- 3. Modification AFOSR-74-2658A to Grant AFOSR-74-2658, by which the U.S. Air Force, Air Force Office of Scientific Research, Arlington, Virginia, provides \$34,936 additional funds (Travis County) and extends the grant for the period January 1, 1975 through August 31, 1975. The research entitled, "Policy Modeling Methodology," continues under the direction of Dr. Gerald R. Wagner, Associate Professor of Mechanical Engineering.
- 4. Modification P00008 to Contract DMA 800-74-C-0086, by which Defense Mapping Agency, Topographic Center, Procument and Contracting Division, Washington, D. C., provides \$21,000 additional funds (Travis County) and increases the estimated cost from \$64,000 to \$85,000. The effective period of the contract (January 15, 1973 through January 14, 1975) is extended through January 15, 1976, and the Doppler Tracking System Operation continues in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.
- 5. Modification P00013, Change Order to Contract F33615-71-C-1350, by which the U.S. Air Force, Air Force Systems Command, Wright-Patterson Air Force Base, Ohio, provides incremental funds of \$25,000 and increases total funding through April 15, 1975, to \$1,318,021 against the \$1,367,021 total award under the contract which continues effective for the period March 1, 1971 through June 30, 1975. The advanced avionics analysis and evaluation program is conducted in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.
- 6. Modification P00016 to Contract F44620-71-C0091, by which the U. S. Air Force, Air Force Office of Scientific Research (AFSC), Arlington, Virginia, adds certain items of special test equipment to the contract and deletes certain items of equipment. The research entitled, "Basic Research in Electronics (JSEP)," continues under the direction of Dr. Arwin A. Dougal, Professor of Electrical Engineering.
- 7. Modification P003, Change Order to Contract DACW05-72-C-0082, by which the Department of the Army, Sacramento District, Corps of Engineers, Sacramento, California, extends the period of the contract through March 31, 1975, without additional funds. The research entitled, "Evaluation of Urban Runoff by Watershed Simulation," continues under the direction of Dr. Walter L. Moore, Professor of Civil Engineering.
- 8. Modification No. 10, Supplemental Agreement to Contract N00014-67-A-0126-0008, by which the Department of the Navy, Office of Naval Research, Arlington, Virginia, extends the contract through February 28, 1975, without additional funds. The research entitled, "Multi-Disciplinary Aspects of Personnel Assignment Techniques," continues under the direction of Dr. Abraham Charnes, Professor of General Business.

- 9. Modification No. 03, Administrative Change to Contract N00014-67-A-0126-0017, by which the Department of the Navy, Office of Naval Research, Arlington, Virginia, provides for continued scientific effort entitled, "Atom Scattering," under successor contract N00014-75-C-0498 effective January 1, 1975; and deletes from this contract the final report requirements which are incorporated into the new contract. The research continues under the direction of Dr. James C. Browne, Professor of Computer Sciences and of Physics.
- 10. Modification No. 2, Supplemental Agreement to Contract N00014-70-A-0166-0015, by which the Department of the Navy, Office of Naval Research, Arlington, Virginia, extends the period of performance under the contract through January 31, 1975, or until all funds shall have been expended after which funds from the successor contract N00014-75-C-0604 may be expended but not before; further, the final report requirements of this contract are deleted and incorporated into the new contract. The research entitled, "Thermoacoustics," continues in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.
- 11. Modification P00001, Supplemental Agreement to Contract N00014-70-A-0166-0023, by which the Department of the Navy, Office of Naval Research, Arlington, Virginia, extends the period of the contract through June 30, 1975, without additional funds or otherwise changing the contract. The research entitled, "Acoustic Analysis," continues in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.
- 12. Contract N00014-75-C-0429, by which the Department of the Navy, Office of Naval Research, Arlington, Virginia, provides \$75,000 (Travis County) for support of a project entitled, "WESTLANT 74 Exercise Data Analysis." The contract is effective for the period December 1, 1974 through June 30, 1975, and the research will be performed in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.
- 13. Contract N00014-75-C-0498, by which the Department of the Navy, Office of Naval Research, Arlington, Virginia, provides \$20,000 (Travis County) for support of research entitled, "Atom Scattering." The contract is effective January 1, 1975 through December 31, 1975, with funds becoming available for use only after all funds under Contract N00014-67-A-0126-0017 are exhausted. The research continues under the direction of Dr. James C. Browne, Professor of Computer Sciences and of Physics.
- 14. Contract N00014-75-C-0604, by which the Department of the Navy, Office of Naval Research, Arlington, Virginia, provides \$10,000 (Travis County) for support of research entitled, "Thermoacoustics." The contract is effective January 1, 1975 through December 31, 1975, with funds becoming available for use only after those remaining in Contract N00014-70-A-0166-0015 are exhausted. The research continues in Applied Research Laboratories under the direction of Dr. Chester M. Mc Kinney, Jr., Director.
- 15. Contract N00014-75-C-0616, by which the Department of the Navy, Office of Naval Research, Arlington, Virginia, provides \$49,000 (Travis County) for support of research entitled, "Multi-Disciplinary Aspects of Personnel Assignment Techniques." The contract is effective for the period January 1, 1975 through December 31, 1975, and the research will be under the direction of Dr. Abraham Charnes, Professor of General Business.

- 16. Modification P00006, Supplemental Agreement to Contract N00024-73-C-1053, by which the Department of the Navy, Naval Sea Systems Command, Washington, D. C., extends the contract completion date from March 1, 1975 through December 30, 1975, without changing other provisions. The research entitled, "BOTOSS Program Monitoring," continues in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.
- 17. ASSIGNMENT OF PATENT RIGHTS, by which the University and co-inventors, Theodore C. Madison and Harlan G. Frey, University employees, transfer to the Department of the Navy all right, title and interest in and to an invention entitled, "Multiple-Frequency Transducer," (Navy Case No. 58,274). The invention resulted from research performed in Applied Research Laboratories under Naval Sea Systems Command Contract N00024-73-C-1065 under the direction of Dr. Chester M. Mc Kinney, Jr., Director.
- 18. Modification P0001 to Contract N00024-74-C-1198, by which the Department of the Navy, Naval Sea Systems Command, Washington, D. C., extends the period of the contract through April 30, 1975, without additional funds. The research entitled, "AN/SQA-13 Hoist Study," continues in Applied Research Laboratories under the direction of Dr. Chester M. Mc Kinney, Jr., Director.
- 19. Modification P00001, Administrative Change to Contract N00039-75-C-0207, by which an allotment of funds clause inadvertently omitted from the contract at time of issuance is incorporated. Other provisions are unchanged and the research entitled, "Nonlinear Acoustic Wave Fields and Parametric Receiving Array Studies," continues in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.
- 20. Modification P00009, 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, provides incremental funds allocation instructions inadvertently omitted from Modifications P00007 and P00008, without changing other provisions of the contract. The research entitled, "Sonar Instrumentation Development and AN/BQQ-3 Technical Support," continues in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.
- 21. Contract/Purchase Order N60530-75-M-0089, by which the Department of the Navy, Naval Weapons Center, China Lake, California, provides \$7,950 (Travis County) for support of research entitled, "KU- and L-Band Radar Data Analysis." The contract/purchase order is effective for the period February 7, 1975 through May 30, 1975, and performance will be in Applied Research Laboratories under the direction of Dr. Chester M. Mc Kinney, Jr., Director.
- 22. Modification P00004, Supplemental Agreement to Contract N60921-74-C-0217, by which the Department of the Navy, Naval Surface Weapons Center, White Oak Laboratory, Silver Spring, Maryland, provides \$50,000 additional funds (Travis County) and increases the total estimated cost from \$350,000 to \$400,000 and extends the period of the contract (March 8, 1974 through March 7, 1975) through September 9, 1975. The research entitled, "Acoustic Mine Mechanism Research and Development," continues in Applied Research Laboratories under the direction of Dr. Chester M. Mc Kinney, Jr., Director.

- Modification P00002, Supplemental Agreement to Contract N61339-74-C-0031, by which the Department of the Navy, Naval Training Equipment Center, Orlando, Florida, provides \$131,385 additional funds (Travis County) and increases the total estimated cost to \$339,885. The contract period is extended through February 21, 1976, and the research entitled, "High Definition Sonar Technology Studies," continues in Applied Research Laboratories under the direction of Dr. Chester M. Mc Kinney, Jr., Director.
- 24. Modification P00003, Supplemental Agreement to Contract N61339-74-C-0167, by which the Department of the Navy, Naval Training Equipment Center, Orlando, Florida, provides certain government-furnished equipment by a specified date, without otherwise changing the contract. The research entitled, "AMS Sonar Design Study," continues in Applied Research Laboratories under the direction of Dr. Chester M. Mc Kinney, Jr., Director.
- 25. Contract N61339-75-C-0058, by which the Department of the Navy, Naval Training Equipment Center, Orlando, Florida, provides \$3,279,389 (Travis County) for support of research entitled, "Design and Development of a Shipborne Minehunting Sonar." Of the total award there is currently funded \$321,000 and the contract is effective for the period February 14, 1975 through June 13, 1978. The research will be performed in Applied Research Laboratories under the direction of Dr. Chester M. Mc Kinney, Jr., Director.
- 26. Contract NAS 5-20946, by which National Aeronautics and Space Administration, Goddard Space Flight Center, Greenbelt, Maryland, provides \$38,458 (Travis County) for support of research entitled, "Methods for GTDS Modification and the Study of Relative Satellite Motion Determination and Prediction." The contract is effective for the period February 12, 1975 through February 11, 1976, and the research will be under the direction of Dr. Byron D. Tapley, Professor of Aerospace Engineering and Engineering Mechanics; Dr. Bob E. Schutz, Assistant Professor of Aerospace Engineering and Engineering Mechanics; and Dr. Wallace Fowler, Associate Professor of Aerospace Engineering and Engineering Mechanics.
- 27. Modification No. 2 to Contract NAS8-30622, by which National Aeronautics and Space Administration, George C. Marshall Space Flight Center, Alabama, makes certain revisions in the General Provisions of the contract. The research entitled, "Acquisition and Verification of TEXGAP Computer Program," continues under the direction of Dr. Eric B. Becker, Associate Professor of Aerospace Engineering and Engineering Mechanics, and Dr. Robert S. Dunham, Assistant Professor of Civil Engineering.
- 28. Modification No. 6C to Contract NAS 9-10976, by which National Aeronautics and Space Administration, Lyndon B. Johnson Space Center, Houston, Texas, makes certain administrative changes for close-out responsibility for the contract. The research entitled, "The Influence of Fuselage Nose Bluntness on Aerothermodynamic Environment Around Space Shuttle Configurations," was directed by Dr. John J. Bertin, Associate Professor of Aerospace Engineering and Engineering Mechanics.
- 29. Modification No. 1 to Contract NAS 9-13865, by which National Aeronautics and Space Administration, Lyndon B. Johnson Space Center, Houston, Texas, extends the contract through May 31, 1975, without additional funds. The research entitled, "Characterization of Typical Platelet Injector Flow Configurations," continues under the direction of Dr. C. E. Hickox, Assistant Professor of Aerospace Engineering and Engineering Mechanics.

- 30. Contract NAS 9-14405, by which National Aeronautics and Space Administration, Lyndon B. Johnson Space Center, Houston, Texas, provides \$43,850 (Travis County) for support of research entitled, "Lunar Seismic Profiling Experiment Natural Activity Study." The contract is effective for the period January 1, 1975 through April 30, 1976, and the research will be under the direction of Dr. Frederick K. Duennebier, The University of Texas Marine Science Institute, Geophysics Laboratory, Galveston, Texas.
- 31. Contract NAS 9-14491, by which National Aeronautics and Space Administration, Lyndon B. Johnson Space Center, Houston, Texas, provides \$49,241 (Travis County) for support of research entitled, "Adsorption Pumping Cryogenic Refrigerator Studies." The contract is effective for the period January 31, 1975 through January 30, 1976, and the research will be under the direction of Dr. William II. Hartwig, Professor of Electrical Engineering, and Dr. Hugo Steinfink, Professor of Chemical Engineering.
- 32. Supplement No. 1 to Grant NGR 44-012-260, by which National Aeronautics and Space Administration, Goddard Space Flight Center, Greenbelt, Maryland, provides \$3,002 additional funds (Travis County) and extends the grant for the period March 1, 1975 through June 30, 1975. The research entitled, "Investigation of a High Resolution Spectrograph for the Large Space Telescope," continues under the direction of Dr. Robert G. Tull, Research Scientist, Department of Astronomy, McDonald Observatory (Research).
- 33. Supplement No. 1 to Grant NGR 44-012-283, by which National Aeronautics and Space Administration, Goddard Space Center, Greenbelt, Maryland, provides \$29,276 additional funds (Travis County) and extends the grant for the period March 14, 1975 through March 13, 1976. The research entitled, "A Study of Tracking Station Determination and Nonequilibrium Earth Dynamics," continues under the direction of Dr. Byron D. Tapley, Professor of Aerospace Engineering and Engineering Mechanics, and Dr. Bob E. Schutz, Assistant Professor of Aerospace Engineering and Engineering Mechanics.
- 34. Grant Letter dated 8 January 1975, by which National Aeronautics and Space Administration, Goddard Space Flight Center, Greenbelt, Maryland, extends Grant NGR 44-012-283, without additional funds. The research entitled, "Precision Orbit Determination for Near-Earth Satellites," continues under the direction of Dr. Byron D. Tapley, Professor of Aerospace Engineering and Engineering Mechanics, and Dr. Bob E. Schutz, Assistant Professor of Aerospace Engineering and Engineering Mechanics.
- 35. Purchase Order No. 1070-TX-SCS-75, by which the U. S. Department of Agriculture, Soil Conservation Service, Temple, Texas, provides \$1,100 (Travis County) for archeological inventory data on counties involved in the Red River-above-Denison Dam and the Texas Coastal Basins Survey in Texas. The purchase order is effective beginning February 17, 1975, and the archeological inventory will be under the direction of Dr. Dee Ann Story, Associate Professor of Anthropology.
- Modification No. 3 to Grant No. 21-48-74-24, by which the U.S. Department of Labor, Manpower Administration, Washington, D.C., extends the period of the grant through February 28, 1975, without additional funds. The research entitled, "Industrialization and Poverty in Nonmetropolitan Labor Markets of the South," continues under the direction of Dr. F. Ray Marshall, Professor of Economics.

- 37. Modification No. 1 to Grant No.21-48-75-02, by which the U.S. Department of Labor, Manpower Administration, Washington, D.C., extends the period of the grant through August 31, 1975, without additional funds. The research entitled, "Cooperative Dispersed Urban Area Manpower Planning for Nonmetropolitan Populations," continues under the direction of Dr. Niles M. Hansen, Professor of Economics.
- 38. Contract No. 08550-CT5-17, by which the U.S. Department of the Interior, Bureau of Land Management, Washington, D.C., provides \$655,744 (Travis County) for support of research entitled, "Chemical and Biological Survey Component of the Environmental Assessment of the South Texas Outer Continental Shelf." The contract is effective for the period October 30, 1974 through October 31, 1975, with the final report due March 1, 1976. The research will be under the direction of Dr. Patrick L. Parker, Professor of Chemistry, and Director, The University of Texas at Austin Marine Science Institute, The Marine Science Laboratory at Port Aransas.
- 39. Modification No. 2 to Contract DOT-OS-40117, by which the Department of Transportation, Procurement Operations Division, Washington, D. C., extends the period of the grant through March 23, 1975, without additional funds. The research entitled, "Study of Nonlinear Effects on Jet Noise Propagation," continues in Applied Research Laboratories under the direction Dr. Chester M. McKinney, Jr., Director.
- 40. Amendment No. 1 to Grant No. 1069-587075, by which the Department of State, Washington, D. C., provides \$7,200 additional funds (Travis County) for support of additional participants in the project entitled, "Orientation and Academic Programs for Groups of Portuguese Teachers," within the current period August 1, 1974 through August 31, 1975, which continues under the direction of Dr. Joe W. Neal, Professor of Speech Communication, and Director, International Office.
- 41. Grant R50-32-35, by which National Endowment for the Arts, Washington, D. C., provides \$20,000 (Travis County) for support of a project entitled, "E. P. Conkle Workshop for Playwrights." The grant is effective for the period June 1, 1975 through July 15, 1975, and the project will be under the direction of Frank Gagliano, Lecturer, Drama Department.
- 42. Grant FS-21902-75-245, by which National Endowment for the Humanities, Washington, D. C., provides \$40,792 (Travis County) for support of research entitled, "Contemporary German Literature: A Resurgent Humanism." The grant is effective for the period January 1, 1975 through December 31, 1975, and the research will be under the direction of Dr. A. Leslie Willson, Professor of Germanic Languages.
- 43. Modification No. 2, to Contract SBA-1897-PMA-75, by which the U.S. Small Business Administration, Washington, D. C., provides \$1,250 additional funds (Travis County) for the current contract period September 1, 1974 through May 31, 1975. The program for management counseling and technical assistance to small business concerns continues under the direction of Seymour Schwartz, Assistant Dean, College of Business Administration.

- 44. Revision No. 3 to Grant NE-G-0-72-3943, by which the Department of Health, Education, and Welfare, National Institute of Education, Washington, D. C., extends the period of the grant through June 30, 1975, without additional funds. The research entitled, "An Ethnographic Comparison of Multicultural Curricular Approaches for Mexican Americans," continues under the direction of Dr. Douglas E. Foley, Assistant Professor of Cultural Foundations of Education and of Anthropology.
- 45. Amendment No. 2 to Training Grant No. 44-P-30067/6-10, by which the Department of Health, Education, and Welfare, Social and Rehabilitation Service, Rehabilitation Services Administration-Region VI, Dallas, Texas, decreases the amount of the award by \$547 (Travis County reduction) due to unobligated balance from the prior budget period. The rehabilitation counselor training program continues under the direction of Dr. Carl E. Hansen, Associate Professor of Special Education.
- 46. Grant DA01215, by which the Department of Health, Education, and Welfare, Public Health Service, National Institute on Drug Disease, Bethesda, Maryland, provides \$3,400 (Travis County) for support of research entitled, "Phenobarbital Dependence in Mice," for the total project period April 1, 1975 through March 31, 1976. The research will be under the direction of Dr. John K. Belknap, Assistant Professor of Psychology.
- 47. Grant K04-ES70088-04, Development Award-Research Career Program, by which the Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, 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, 1975 through March 31, 1976, 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).
- 48. Grant MH 13849-01, by which the Department of Health, Education, and Welfare, Public Health Service, National Institute of Mental Health, Bethesda, Maryland, provides \$12,772 (Travis County) for support of a project entitled, "National Training Conference in Community Psychology, effective February 15, 1975 through June 30, 1975, the total project period. The project will be under the direction of Dr. Ira Iscoe, Professor of Psychology and Education.
- 49. Grant T01 GM00836-13, by which the Department of Health, Education, and Welfare, Public Health Service, National Institute of General Medical Sciences, Bethesda, Maryland, provides \$16,944 (Travis County) for support of a training program entitled, "Physiology and Biophysics," for the period July 1, 1975 through June 30, 1976. The total project period is July 1, 1969 through June 30, 1976, and the program continues under the direction of Dr. A. R. Schrank, Professor of Zoology.
- 50. Modification No. 3, Supplemental Agreement to Contract N01-HD-32708, by which the Department of Health, Education, and Welfare, Public Health Service, National Institute of Child Health and Human Development, Bethesda, Maryland, provides \$5,071 additional funds (Travis County) and extends the contract for the period March 1, 1975 through June 29, 1975. The research entitled, "Demography of the Black Population," continues under the direction of Dr. Daniel O. Price, Professor of Sociology.

- Fig. Revised Grant RR00729-03, by which the Department of Health, Education, and Welfare, Public Health Service, Division of Research Resources, Bethesda, Maryland, increases grant funds by \$12,047 (Travis County) to a new total of \$44,047 for support of research entitled, "The Drosophila Species Facility, Austin, Texas," for the current period October 1, 1974 through September 30, 1975, by changing certain budget categories. The total project period is October 1, 1972 through September 30, 1977, and the research continues under the direction of Dr. R. H. Richardson, Associate Professor of Zoology.
- 52. Amendment A01, to Grant BMS74-02341 (formerly GB-43349X) by which National Science Foundation, Washington, D. C., extends the grant through October 31, 1976, without additional funds. The research entitled, "Comparative Ecology and Demography of Isolated Populations of a Lizard," continues under the direction of Dr. Eric R. Pianka, Associate Professor of Zoology.
- 53. Amendment A01, to Grant DCR 72-03749 (formerly GJ-36424), by which National Science Foundation, Washington, D. C., extends the grant through December 31, 1975, without additional funds. The research entitled, "Structure, Content, and Performance of Computer Programs: Computational Modeling and Correctness," continues under the direction of Dr. James C. Browne, Professor of Computer Sciences and of Physics.
- 54. Grant DCR 74-13302, by which National Science Foundation, Washington, D. C., provides \$30,100 (Travis County) for support of research entitled, "Centralized Computer Networks." The grant is effective for the period February 1, 1975 through July 31, 1977, and the research will be under the direction of Dr. K. M. Chandy, Associate Professor of Computer Sciences.
- 55. Amendment A01, to Grant DMR 74-01809 (formerly GH-42960), by which National Science Foundation, Washington, D. C., authorizes the University to enter into subcontract with Michigan Technological University in the amount of \$17,486. The research entitled, "Microstructural Stability in Thermal Gradients," continues under the direction of Dr. J. P. Stark, Professor of Mechanical Engineering.
- 56. Amendment A01, to Grant ENG 72-04056 (formerly GK-35467) by which National Science Foundation, Washington, D. C., extends the period of the grant through August 31, 1975, without additional funds. The research entitled, "Time Dependent Deformation of Embankments on Soft Clays: Numerical Analyses and Comparison with Field Measurements," continues under the direction of Dr. Roy E. Olson, Professor of Civil Engineering, and Dr. Robert S. Dunham, Assistant Professor of Civil Engineering.
- 57. Grant DMR 75-07828, by which National Science Foundation, Washington, D. C., provides \$28,000 (Travis County) for support of research entitled, "Phase Transitions, Clustering Tendencies and Electronic Properties of Non-Crystalline Materials." The grant is effective for the period March 1, 1975 through August 31, 1976, and the research will be under the direction of Dr. James C. Thompson, Professor of Physics.

- 58. Grant ENG 74-01785, by which National Science Foundation, Washington, D. C., provides \$93,600 (Travis County) for support of research entitled, "Engineering Studies on Very Dense, High Temperature Gaseous Plasmas Produced with High-Power Lasers in Super-High Pressure Gases." The grant is effective for the period February 15, 1975 through July 31, 1977, and the research will be under the direction of Dr. Arwin A. Dougal, Professor of Electrical Engineering.
- 59. Amendment A02, to Grant MPS 73-04829 (formerly GP-40396X) by which National Science Foundation, Washington, D. C. provides \$18,000 (Travis County) for the current grant period September 1, 1974, through February 29, 1976. The research entitled, "An Experimental Study of Strong Current-Driven Plasma Turbulence," continues under the direction of Dr. Kenneth W. Gentle, Associate Professor of Physics.
- 60. Amendment A01, to Grant MPS 74-12498 (formerly GP-43844X), by which National Science Foundation, Washington, D. C., provides funds of \$46,000 (Travis County) for the period June 1, 1975 through November 30, 1976. The research entitled, "Relativity and Gravitational Theories," continues under the direction of Dr. Alfred Schild, Ashbel Smith Professor of Physics; Dr. Richard A. Matzner, Associate Professor of Physics; and Dr. Lawrence C. Shepley, Associate Professor of Physics.
- 61. Grant MPS 74-23210, by which National Science Foundation, Washington, D. C., provides \$99,600 (Travis County) for support of research entitled, "Solar Energy Utilization by Photosensitized Electrode Processes at Semiconductor Electrodes." The grant is effective for the period February 15, 1975 through July 31, 1977, and the research will be under the direction of Dr. Allen J. Bard, Professor of Chemistry.
- 62. Grant MPS 75-03344, by which National Science Foundation, Washington, D. C., provides \$32,200 (Travis County) for support of research entitled, "Some Aspects of Organometallic Chemistry." The grant is effective for the period March 1, 1975 through August 31, 1976, and the research will be under the direction of Dr. Rowland Pettit, Professor of Chemistry.
- 63. Grant MPS 75-03368, by which National Science Foundation, Washington, D. C., provides \$35,900 (Travis County) for support of a project entitled, "Revised Reference Catalogue of Bright Galaxies." The grant is effective for the period February 15, 1975 through January 31, 1976, and the project will be under the direction of Dr. G. H. de Vaucouleurs, Professor of Astronomy.
- 64. Grant MPS 75-08088, by which National Science Foundation Washington, D. C., provides \$6,700 (Travis County) for support of research entitled, "Structure of Group Rings." The grant is effective for the period June 1, 1975 through November 30, 1976, and the research will be under the direction of Dr. Martha K. Smith, Assistant Professor of Mathematics.
- 65. Amendment A05, to Grant BMS 71-00719 (formerly GB-27493), by which National Science Foundation, Washington, D. C., extends the grant through June 30, 1976, without additional funds. The research entitled, "Coordination of Integrated Research Programs in Environmental Management Component of the U.S./International Biological Program," continues under the direction of Dr. W. Frank Blair, Professor of Zoology.

- 66. Grant MPS75-09833 (formerly GP-23566), by which National Science Foundation, Washington, D. C., provides \$14,000 (Travis County) for support of research entitled, "Approximation Theory and Functional Analysis." The grant is effective for the period June 1, 1975 through November 30, 1976, and the research continues under the direction of Dr. G. G. Lorentz, Professor of Mathematics.
- 67. Grant OIP 75-09783, by which National Science Foundation, Washington, D. C., provides \$1,600 (Travis County) for a "Travel Grant for Scientific Visits for the Purpose of Advancing Research in Relativity and Gravitational Theories at the Autonomous University of Mexico." The grant is effective for the period January 15, 1975 through August 31, 1975, and will be under the direction of Dr. Richard A. Matzner and Dr. Lawrence C. Shepley, Associate Professors of Physics.
- Modification A02, to Grant SOC73-09162 (formerly GS-37977X), by which National Science Foundation, Washington, D. C., provides \$37,400 additional funds (Travis County) and extends the grant for the period May 1, 1975 through October 31, 1976. The research entitled, "Collaborative Research on Determinants of Reactions to Stigmatized Groups," continues under the direction of Dr.David C. Glass, Professor of Psychology.

THE UNIVERSITY OF TEXAS AT AUSTIN AMENDMENTS TO THE 1974-75 OPERATING BUDGET BOARD OF REGENTS MEETING - APRIL 28, 1975

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 payment of salaries, unless otherwise shown, is the departmental salaries account.

Full-time Salary
Period of % No.
Appointment Time Mos. Rate

Item, Department, Title, Name

Item, Department, IItle, Name

GENERAL ADMINISTRATION AND STUDENT SERVICES

Office of the Vice President for Student Affairs

Interdepartmental Transfer

1. Amount of Transfer - \$2,200

To: Office of the Vice President for Student Affairs - Classified Personnel

From: Counseling-Psychological Services Center - Wages

To provide the additional support needed for the salary of an Audio-Visual Education Specialist II in the Office of the Vice President for Student Affairs.

(RBC# 2886)

Office of Personnel Services and Employee Relations

Transfer Between Dissimilar Appropriations

2. Amount of Transfer - \$7,662

To: Maintenance and Operation

From: Computer Rental and Purchased Services

Reallocation of funds to provide for the purchase of office equipment and for costs incurred by the frequent issue of Personnel-O-Grams. (RBC# 2760)

Office of the Dean of Students

Transfer Between Dissimilar Appropriations

3. Amount of Transfer - \$2,310

To: Computer Rental and Purchased Services

From: Maintenance and Operation

To return funds previously transferred in error. (RBC# 2960)

Counseling-Psychological Services Center

Transfer Between Dissimilar Appropriations

4. Amount of Transfer - \$880

To: Classified Personnel

From: Administrative and Professional Salaries

Reallocation of salary funds to provide for temporary clerical help. (RBC# 2885)

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

GENERAL ADMINISTRATION AND STUDENT SERVICES (Continued)

Office of Admissions

Transfer Between Dissimilar Appropriations

5. Amount of Transfer - \$1,703

To: Computer Rental and Purchased Services

From: Maintenance and Operation

To transfer to the appropriate account funds budgeted for computer terminals.

(RBC# 2887)

Office of the Registrar - Registration Supervision

Interdepartmental Transfer

6. Amount of Transfer - \$3,000

To: Office of the Registrar - Registration Supervision - Wages

From: Office of Admissions - Salaries

To provide for part-time help needed for Summer Orientation programs, Add/Drop Day, etc. (RBC# 2815)

Central Receiving and Delivery

Transfer of Funds

7. Amount of Transfer - \$2,600

To: Central Receiving and Delivery - Classified Personnel

From: Unallocated Classified Salaries

To provide for reclassification of personnel in the Central Receiving and Delivery office in accordance with a job audit conducted by the Office of Personnel Services and Employee Relations. (RBC# 2698)

GENERAL INSTITUTIONAL EXPENSE

Longhorn Band				
Resignation Assistant Director, Longhorn Band 8. John J. Hammerle	6/1 - 8/31	100	12	\$ 15,608
Date of Resignation (RBC# 2915)	5/31/75			
University Development Office				
Appointment Assistant Director 9. John C. Halton, III (RBC# 2925)	2/20 - 8/31	100	12	12,000
Resignation Assistant Director 10. Duane C. Arneson	9/1 - 8/31	100	12	13,450
Date of Resignation (RBC# 2753, 2809)	2/19/75			

				ಿ
	Period of	9/ /o	Full-t	ime Salary
Item, Department, Title, Name	Appointment	Time	Mos.	Rate
GENERAL INSTITUTIONAL EXPENSE (Continued)				
University Development Office (Continued)				
Resignation Assistant Director 11. Charles E. White	9/1 - 8/31	100	12	\$ 13,450
Date of Resignation (RBC# 2929)	3/16/75			
Office of Institutional Studies				
Transfer of Funds 12. Amount of Transfer - \$1,500				
To: Office of Institutional Stud	lies - Travel			
From: Unallocated Travel				
Travel expenses incurred by this of (RBC# 3012)	ffice have been	greate	r than a	nticipated.
Transfer of Funds 13. Amount of Transfer - \$3,000 To: Miscellaneous General Instit From: Unallocated Maintenance and On Campus has been larger and more	Operation expensive to pr	rođuce t	than ant	
additional funds are needed to cont during the long session and monthly (RBC# 2772)			on a wee	kly basis
SCHOOL OF ARCHITECTURE				
Architecture and Planning				
Appointment Instructor 14. Roxanne K. Williamson (Non-tenure)	1/16 - 5/31	50	9	10,040
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2565, 2595)				
Lecturer				
15. Anant D. Raje (Non-tenure)	2/1 - 2/28	100	9	18,000
Source of Funds: Transfer from				

Source of Funds: Transfer from

Unallocated Faculty Salaries

(RBC# 2864, 2854)

16. Thomas M. Leach (Non-tenure)

Lecturer

1/16 - 2/14 100 9

18,000

Item, Department, Title, Name	Period of Appointment	% <u>Time</u>	Full-t No. Mos.	ime Salary Rate
SCHOOL OF ARCHITECTURE (Continued)				
Architecture and Planning (Continued)				
Appointment Instructor 17. Edward D. Lee (Non-tenure) Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2564, 2595)	1/16 - 5/31	75	9	\$ 10,040
Visiting Professor 18. Michael E. Graves (Non-tenure) Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2705, 2725)	1/16 - 2/17	98	9	27,000

COLLEGE OF HUMANITIES

Office of the Dean

Transfer of Funds

19. Amount of Transfer - \$1,869

Transfers were made from the Dean's Academic Development Fund to the various departmental Academic Development Funds as follows:

- (1) French and Italian \$ 100 (4) Slavic Languages \$306 (RBC# 2829) (RBC# 3006)

 (2) Germanic Languages \$1,363 (5) Spanish and Portuguese \$ 50 (RBC# 3027, 2694, 2702, 3031)

 (3) Philosophy \$ 50 (RBC# 2769)
- 20. Amount of Transfer \$400

Transfers were made from the Dean's Visiting Lecturers and Consultants Account to the various departmental Visiting Lecturers and Consultants accounts as follows:

- (1) Classics \$100 (3) Slavic Languages \$100 (RBC# 3037) (RBC# 2862)
- (2) French and Italian \$200 (RBC# 2863)

Classics

Transfer Between Dissimilar Appropriations

21. Amount of Transfer - \$400

To: Travel

From: Classified Personnel

To provide the additional funds needed for several trips by members of the Classics faculty who will be representing U. T. Austin at regional meetings.

(RBC# 3005)

			Full-time Salary		
Item, Department, Title, Name	Period of Appointment	% <u>Time</u>	No. Mos.	Rate	
COLLEGE OF HUMANITIES (Continued)				,	
English					
Resignation					
Professor 22. Clarence L. Cline (Tenure)	9/1 - 5/31	LWOP	9	(\$ 26,000)	
Date of Retirement	1/15/75	HWOI		(4 20,000)	
Concurrent Employment:	,, ,				
University Research Institute					
Professor (English) Faculty Research Assignment (RBC# 2978)	9/1 - 1/15	100	9	26,000	
(KDCr 2970)					
Assistant Instructor 23. Helen Dry (Non-tenure)	1/16 - 5/31	25	9	8,800	
Date of Resignation	1/15/75	_5		0,000	
(RBC# 2742)	, .,				
Transfer of Funds 24. Amount of Transfer - \$10,804					
To: English - Teaching Assistants	5				
From: Unallocated Faculty Salaries					
Funds were used for Teaching Assistate offerings. (RBC# 2675)	ants needed to	staff	Spring c	ourse	
English and Ethnic Studies: African and Afro-American					
Reappointment Visiting Professor 25. Dennis V. Brutus (Non-tenure)					
English	1/16 - 5/31	50	9	20,000	
Ethnic Studies: African and Afro-American	1/16 - 5/31	50	9	20,000	
Source of Funds: Transfer from Unallocated Faculty Salaries					
Previous appointments for the Fall Semester were at the same rate.					
(RBC# 2749, 2555, 2981, 3038)					
French and Italian					
Appointment					
Assistant Professor 26. Andrew G. Suozzo, Jr. (Non-tenure)	2/10 - 5/31	100	9	11,600	
Source of Funds: Departmental Faculty Salaries and Transfer from Unallocated Faculty Salaries (RBC# 2818, 2807)					
Visiting Professor 27. Rene Girard (Non-tenure) (RBC# 2848)	2/7 - 2/20	100	9	36,000	

	m . 1 . 6	¢I		ime Salary
Item, Department, Title, Name	Period of Appointment	% <u>Time</u>	No. Mos.	Rate
COLLEGE OF HUMANITIES (Continued)				
French and Italian (Continued)				
Resignation Instructor (Terminal) 28. Giovanni M. DiNicola (Non-tenure) Date of Resignation (RBC# 2751)	9/1 - 5/31 2/7/75	100	9	\$ 11,110
Germanic Languages				
Appointment Lecturer 29. Barbara Konig (Non-tenure)	1/16 - 5/31	100	9	16,000
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2666, 2691)				
Spanish and Portuguese				
Appointment Visiting Professor 30. Edward M. Wilson (Non-tenure)	1/16 - 5/31	100	9	24,000
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2665, 2690)				
COLLEGE OF SOCIAL AND BEHAVIORAL SCIENCES				
Office of the Dean				
Resignation				
Assistant Dean 31. Cookie W. Stephan	6/1 - 8/31	50	12	\$ 18,940
Date of Resignation	5/31/75			
Academic Status: Assistant Professor (Sociology) (RBC# 2998)				
Anthropology				
Appointment Assistant Professor	1/16 - 5/31	100	0	000 41
32. Louanna F. Losee (Non-tenure) Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2664, 2689)	1/10 - 3/31	100	9	14,900
Transfer of Funds 33. Amount of Transfer - \$745				
To: Anthropology - Teaching Ass:	istants			
From: Unallocated Faculty Salarie	S			
Funds were used for the appointment for the Social Science Computer Lal (RBC# 2677)		Assist	ant need	ed

Full-time Salary % Period of No. Item, Department, Title, Name Appointment Time Mos. Rate COLLEGE OF SOCIAL AND BEHAVIORAL SCIENCES (Continued) Anthropology (Continued) Interdepartmental Transfer 34. Amount of Transfer - \$556 To: Anthropology - Wages From: Plan II - Administrative and Professional Salaries Funds were needed for a grader to assist Professor Oliver of the Anthropology Department who is teaching Social Science 301 (Plan II) during the Spring Semester. (RBC# 2701) Economics Appointment Visiting Professor 1/16 - 5/31 100 \$ 26,000 35. William Breit (Non-tenure) 9 Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2663, 2688) 36. Stuart J. Greenfield (Non-tenure) 1/16 - 5/3150 9 9,000 Instructor Source of Funds: Transfer from Unallocated Faculty Salaries Social Science Research 1/16 - 5/31 9,000 Associate (Faculty) 50 Source of Funds: NSF Grant (RBC# 2619, 2757, 2774) Transfer of Funds 37. Amount of Transfer - \$300 To: Economics - Visiting Lecturers and Consultants From: Office of the Dean - Visiting Lecturers and Consultants To provide stipends for visiting lecturers. (RBC# 3011) Government Edward L. Tinker Visiting Professor of Latin American Studies and Visiting Professor of Government 30,000 1/16 - 5/31 100 9 Osvaldo Sunkel (Non-tenure)

Source of Funds: Transfer from Unallocated Faculty Salaries to Government Faculty Salaries

(RBC# 2635, 2075)

Full-time Salary

Period of % No.

Item, Department, Title, Name

Appointment Time Mos. Rate

COLLEGE OF SOCIAL AND BEHAVIORAL SCIENCES (Continued)

Government (Continued)

Interdepartmental Transfer

39. Amount of Transfer - \$280

To: Government - Travel

From: Office of the Dean - Travel

To provide travel funds for Professor Herbert Hirsch of the Government Department to attend the meeting of the Western Political Science Association in Seattle, Washington on March 21-23, 1975. (RBC# 2699)

Government and Ethnic Studies: African

and Afro-American

Appointment and Leave of Absence

Instructor

40. Donn J. Davis (Non-tenure)

9/1 - 5/31 LWOP (\$13,000)

(RBC# 2650, 2651, 2625, 2626)

Linguistics

Transfer of Funds

41. Amount of Transfer - \$1,750

To: Linguistics - Teaching Assistants

From: Unallocated Faculty Salaries

To provide salary funds for a Teaching Assistant needed for the Spring Semester. (RBC# 2676)

Psychology

Leave of Absence

Assistant Professor

9/1 - 5/31 James M. Swanson (Non-tenure) 100 14,370 42.

Term of Leave 1/16 - 5/31(RBC# 2643)

Transfer of Funds

43. Amount of Transfer - \$1,500

To: Psychology - Academic Development Funds

From: Office of the Dean - Academic Development Funds

Funds will be used for departmental development. (RBC# 3022)

COLLEGE OF NATURAL SCIENCES

Office of the Dean

Transfer of Funds

44. Amount of Transfer - \$7,590

To: Office of the Dean - Special Equipment

From: Unallocated Teaching Equipment, Research Equipment, and

Research Collections

To provide the additional funds needed to purchase a gamma ray counter and a Raman Spectroscopy and for the renovation of an Electron Probe Microanalyzer.

(RBC# 2999, 3000, 3026)

Botany

Appointment

Visiting Associate Professor

45. Janis Antonovics (Non-tenure) 2/17 - 3/4 100 9 \$ 17,750 (RBC# 2939)

Transfer of Funds

46. Amount of Transfer - \$11,324

To: Botany - Teaching Assistants (\$8,549)

Faculty Salaries (\$2,775)

From: Unallocated Faculty Salaries (\$8,549)

Dean's Reserve for Faculty Salaries (\$2,775)

To provide for Spring Semester appointments of Teaching Assistants and for salaries of visiting faculty participating in the Population Biology Program.

(RBC# 2782, 3025)

Botany and Comparative Studies

Reappointment

Assistant Professor

47. Neil J. Carman (Non-tenure)

Botany 1/16 - 5/31 --- 9 (11,750) Comparative Studies 1/16 - 5/31 50 9 11,750

Source of Funds: Transfer from Unallocated Faculty Salaries

Previous appointment as Assistant Professor (Botany) for the Fall Semester was at the same rate. (RBC# 2919, 2920, 3021)

Biological Sciences

Transfer of Funds

48. Amount of Transfer - \$6,214

To: Biological Sciences - Teaching Assistants

From: Unallocated Faculty Salaries

Funds were used for Spring Semester appointments of Teaching Assistants.

(RBC# 2778)

	F1111-t			Full-time Salary	
Item, Department, Title, Name	Period of Appointment	% <u>Time</u>	No. Mos.	Rate	
COLLEGE OF NATURAL SCIENCES (Continued)					
Chemistry					
Appointment					
Assistant Instructor 49. Stephen H. Tedder (Non-tenure) (RBC# 2877)	1/16 - 5/31	50	9	\$ 8,000	
Visiting Professor 50. Mark S. Ptashne (Non-tenure)	3/1 - 3/15	50	9	22,320	
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2926, 3019)					
Visiting Professor 51. Stuart A. Rice (Non-tenure)	1/16 - 1/29	100	9	19,926	
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2756, 2773)					
Visiting Professor 52. William Klemperer (Non-tenure)	1/16 - 1/29	100	9	19,926	
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2744, 2764)					
Assistant Instructor 53. Robert E. Lade (Non-tenure)	1/16 - 5/31	17.5	9	8,000	
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2875, 2773)					
Assistant Instructor 54. Janet K. Meisenheimer (Non-tenure)	1/16 - 5/31	17.5	9	8,000	
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2876, 2773)					
Visiting Professor 55. Orville L. Chapman (Non-tenure)	2/15 - 2/28	50	9	25,200	
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2861, 2927, 3019)					
Assistant Instructor 56. Eric deRouffignac (Non-tenure)	1/16 - 5/31	50	9	8,000	
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2903, 2905, 3019)					
Visiting Professor 57. M. Frederick Hawthorne (Non-tenure)	2/15 - 2/28	50	9	25,200	
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2860, 2928, 3019)					

	_ , , , ,	~.		ime Salary
Item, Department, Title, Name	Period of Appointment	% Time	No. Mos.	Rate
COLLEGE OF NATURAL SCIENCES (Continued)				
Chemistry (Continued)				
Appointment Assistant Instructor 58. Ira J. Hessel (Non-tenure)	1/16 - 5/31	17.5	9	\$ 8,000
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2878, 2773)				
Resignation Assistant Instructor 59. Terry L. Welsher (Non-tenure)	9/1 - 5/31	50	9	8,000
Date of Resignation (RBC# 2649)	1/15/75			
Transfer of Funds 60. Amount of Transfer - \$35,029				
To: Chemistry - Teaching Assista	nts			
From: Unallocated Faculty Salaries				
To provide for Spring Semester Teac (RBC# 2781)	hing Assistants	s appoi	ntments.	
Computer Sciences Reappointment Visiting Associate Professor 61. Sanat K. Basu (Non-tenure)	1/16 - 5/31	100	9	16,550
Previous appointment was at the same rate (RBC# 2629)				·
Change of Status Assistant Professor 62. Lynne C. J. Baldwin (Non-tenure)				
To:	1/16 - 5/31	100	9	13,000
From: (RBC# 2726)	1/16 - 5/31	50	9	13,000
Computer Sciences and Center for Middle Eastern Studies				
Appointment 63. Victorine C. Abboud (Non-tenure)				
Computer Sciences Assistant Professor	1/16 - 5/31	42	9	12,820
Center for Middle Eastern Studies Assistant Professor	1/16 - 5/31	58	9	12,820
Source of Funds: Transfer from Unallocated Faculty Salaries				
Research Associate (Faculty) (RBC# 2683, 2656, 2630, 2321)	1/16 - 5/31		9	(12,820)

Full-time Salary Period of % No. Item, Department, Title, Name Appointment Time Mos. Rate COLLEGE OF NATURAL SCIENCES (Continued) Geological Sciences Transfer of Funds 64. Amount of Transfer - \$5,945 To: Geological Sciences - Teaching Assistants From: Unallocated Faculty Salaries To provide for appointments of Teaching Assistants needed for the Spring Semester. (RBC# 2678, 2784) Home Economics Appointment Instructor 65. Diane L. Baylor (Non-tenure) 3/31 - 4/11100 9 \$ 10,000 (RBC# 2731) Reappointment Instructor (1974-75 Only) 1/16 - 5/3166. Brenda P. Roberts (Non-tenure) 100 9,620 Source of Funds: Transfer from Unallocated Faculty Salaries Previous appointment for the Fall Semester was at the same rate. (RBC# 2454, 2455, 2662, 2687) Transfer of Funds Amount of Transfer - \$8,623 To: Home Economics - Faculty Salaries (\$7,303) Teaching Assistants (\$1,328) From: Unallocated Faculty Salaries To provide for the salaries of part-time Assistant Instructors and a Teaching Assistant needed to staff Spring course offerings. Interdepartmental Transfer 68. Amount of Transfer - \$361 To: Home Economics - Travel From: Office of the Dean - Travel To provide travel funds for Dr. Carl Hall to attend the Annual Meeting of the American Council on Consumer Interests in Kansas City, Missouri, and a meeting on consumer education at the White House. (RBC# 3003) Mathematics Appointment Instructor Abraham Nelson, Jr. (Non-tenure) 2/1 - 5/31100 9,000 9 (RBC# 2859) Instructor (Spring 1975 Only) 70. David P. Wright (Non-tenure) 1/16 - 5/31 100 9 9,500 (RBC# 2637)

	~ · · · · · ·	α <i>l</i>		ime Salary
Item, Department, Title, Name	Period of Appointment	% Time	No. Mos.	Rate
COLLEGE OF NATURAL SCIENCES (Continued)				
Microbiology				
Appointment				
Instructor (Spring 1975 Only) 71. Shanti J. Aggarwal (Non-tenure)	1/16 - 5/31	75	9	\$ 10,700
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2660, 2686)				
Reappointment Instructor (1974-75 Only) 72. Alice G. Reinarz (Non-tenure)	1/16 - 5/31	75	9	10,700
Previous appointment	2,20 3,02	, -	-	,,,,,,,
was at the same rate (RBC# 2634)				
Transfer of Funds 73. Amount of Transfer - \$1,181				
To: Microbiology - Teaching Assi	stants			
From: Unallocated Faculty Salaries				
To provide the additional funds need Semester Teaching Assistants. (RBC# 2779)	ded for appoin	tments	of Spring	g
Physics				
Appointment				
Visiting Professor 74. Herman Feshback (Non-tenure)	2/24 - 3/10	100	9	36,000
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2918, 3017)				
Reappointment				
Instructor (1974-75 Only) 75. John M. Lohr (Non-tenure)	1/16 - 5/31		9	(11,151)
Previous appointment was at the same rate (RBC# 2937, 2845)				
Appointment and Salary Increase				
<pre>Instructor 76. Shelby R. Hillis (Non-tenure)</pre>	1/16 - 5/31	44	9	9,000
Source of Funds: Transfer from Unallocated Faculty Salaries				
Concurrent Employment: Science Education Center				
Social Science Research Associate II	9/1 - 5/31	40	12 9	9,972 7,479
			(equiv.	
Rate Increase (RBC# 2659, 2685)			9	1,521

Item, Department, Title, Name	Period of Appointment	% <u>Time</u>	Full-to No. Mos.	ime Salary Rate
COLLEGE OF NATURAL SCIENCES (Continued)				
Physics and Applied Research Laboratories				
Appointment 77. Alick C. Kibblewhite (Non-tenure)				
Physics Visiting Professor	1/16 - 5/31	e e	gage ton	
Applied Research Laboratories - Government Contract, Payroll Clearing Account Funds Research Scientist (Faculty) (RBC# 2627, 2494)	1/1 - 8/31	80	12	\$ 16,260

Zoology

Transfer of Funds

78. Amount of Transfer - \$230

To: Zoology - Academic Development Fund

From: Office of the Dean - Academic Development Funds

Funds were used to purchase three films needed for class instruction. (RBC# 2693)

DIVISION OF GENERAL AND COMPARATIVE STUDIES

Office of the Dean

Transfer Between Dissimilar Appropriations

79. Amount of Transfer - \$9,150

To: Maintenance and Operation

From: Administrative and Professional Salaries

To cover additional expenses due to the growth and increased activity of the Health Professions Office. (RBC# 3032)

Comparative Studies

Comparative Studies				
Appointment Visiting Associate Professor 80. Clinton F. Fink (Non-tenure)	1/16 - 5/31	50	9	16,900
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2655, 2712)				
Visiting Professor 81. Wolf Lepenies (Non-tenure)	1/16 - 5/31	100	9	20,000
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2916, 2917, 3004)				

Transfer Between Dissimilar Appropriations

82. Amount of Transfer - \$408

To: Classified Personnel

From: Travel (\$200)

Maintenance and Operation (\$208)

Funds were used for the reclassification of a member of the classified staff. (RBC $\!\!\!\!/\,$ 2647, 2648)

	Period of %			Full-time Salary		
Item, Department, Title, Name	Appointment	Time	Mos.	Rate		
DIVISION OF GENERAL AND COMPARATIVE STUDIES (Continued) American Studies						
Appointment Assistant Instructor 83. Suzanne S. Buckley (Non-tenure)	1/16 - 5/31	25	9	\$ 8,000		
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2738, 2681)						
Lecturer 84. Aida B. Close (Non-tenure) (RBC# 2938, 2940)	1/16 - 5/31	35	9	13,000		
Assistant Instructor 85. Stephen J. Pyne (Non-tenure)	1/16 - 5/31	25	9	8,000		
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2740, 2681)						
Reappointment						
Assistant Instructor 86. Herbert J. Hovenkamp (Non-tenure)	1/16 - 5/31	50	9	8,550		
Source of Funds: Transfer from Unallocated Faculty Salaries						
Previous appointment was at the same rate (RBC# 2681, 2737)						
Assistant Instructor 87. Edward J. Lundy (Non-tenure)	1/16 ~ 5/31	25	9	8,550		
Source of Funds: Transfer from Unallocated Faculty Salaries						
Previous appointment was at the same rate (RBC# 2741, 2681)						
Assistant Instructor 88. Jeffrey L. Meikle (Non-tenure)	1/16 - 5/31	25	9	8,550		
Source of Funds: Transfer from Unallocated Faculty Salaries						
Previous appointment was at the same rate (RBC# 2739, 2681)						

Ethnic Studies: African and Afro-American

Transfer Between Dissimilar Appropriations 89. Amount of Transfer - \$1,700

To: Wages (\$1,000)

Maintenance and Operation (\$700)

From: Program Development

Funds will be used for part-time secretarial help needed in connection with preparing materials for publication in the journal, Research in African Literatures and for operating expenses. (RBC# 2645, 3033)

Period of % No.

Item, Department, Title, Name

Appointment Time

Mos. Rate

DIVISION OF GENERAL AND COMPARATIVE STUDIES (Continued)

Ethnic Studies: African and Afro-American (Continued)

Interdepartmental Transfer

90. Amount of Transfer - \$150

To: Ethnic Studies: African and Afro-American - Visiting Lecturers and Consultants

From: Office of the Dean, College of Humanities - Program Development

Funds will be used for the stipend for a lecturer, Kofi Awoonor, who will speak on African Oral Literature and is sponsored jointly by the College of Humanities and Ethnic Studies: African and Afro-American Department.

(RBC# 2842)

Ethnic Studies: Mexican-American

Appointment

Instructor

91. Evey Chapa (Non-tenure)

1/16 - 5/31 50 9 \$ 14,000

Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2858, 2923, 3018)

Transfer Between Dissimilar Appropriations

92. Amount of Transfer - \$631

To: Wages

From: Program Development

Funds were used to provide this department with an Academic Assistant. (RBC# 2703)

Center for Middle Eastern Studies

Appointment

93. Elizabeth W. Fernea (Non-tenure)

Instructor 1/16 - 5/31 50 9 9,000

Research Associate 1/16 - 5/31 --- 9 (9,000)

Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2718, 2320, 2719, 2683)

Interdepartmental Transfer

94. Amount of Transfer - \$2,400

To: Center for Middle Eastern Studies - Academic Development Fund

From: Oriental and African Languages and Literatures - Academic Development Fund (\$1,500)

Office of the Dean - Academic Development Fund (\$900)

Funds were used for expenses of the Arab-Israeli Cultural Symbiosis Conference on March 2 - March 4, 1975. (RBC# 2700, 2874)

	D. C. L. C	Ċ1	***************************************	ime Salary
Item, Department, Title, Name	Period of Appointment	% <u>Time</u>	No. <u>Mos.</u>	Rate
DIVISION OF GENERAL AND COMPARATIVE STUDIES (Continued)				
Center for Middle Eastern Studies and Music				
Appointment Visiting Associate Professor 95. Hamza el-Din (Non-tenure)				
Center for Middle Eastern Studies	1/16 - 5/31	100	9	\$ 16,000
Source of Funds: Transfer from Unallocated Faculty Salaries				
Music (RBC# 2657, 2304, 2683)	1/16 - 5/31		9	(16,000)
COLLEGE OF BUSINESS ADMINISTRATION				
Office of the Dean				
Appointment Assistant to the Dean 96. Russell L. Welch (RBC# 2805, 2996)	2/12 - 8/31	100	12	13,368
Transfer of Funds 97. Amount of Transfer - \$3,300				
To: Office of the Dean - Visiting	g Lecturers and	i Consu	ltants	
From: Unallocated Visiting Lecture	rs and Consulta	ants		
To provide this College with addition (RBC# 2766)	onal visiting :	lecture:	r funds.	
Finance				
Salary Increase Assistant Professor 98. Stephen A. Pyhrr (Non-tenure)				
To:	2/1 - 2/28 3/1 - 5/31	100 100	9 9	17,658 19,458
From:	2/1 - 5/31	100	9	17,658
Salary Increase - 9 mos.			9	1,800
Sources of Funds: General Budget Funds 91%, and Current Restricted Funds - Texas Realtors Association 9%.				
Professor Pyhrr's academic rate in the Finance Department remains at \$17,658. (RBC# 2906, 2907)				
General Business and Educational Administration				
Leave of Absence				
Professor 98a. F. Lanier Cox (Tenure)	9/1 - 1/31 2/1 - 8/31	100 100	9 9	28,000 29,566
Term of Leave (RBC# 3114, 3115, 3116)	4/1 - 8/31			

	Danied of		***************************************	time Salary	
Item, Department, Title, Name	Period of Appointment	% <u>Time</u>	No. Mos.	Rate	
COLLEGE OF BUSINESS ADMINISTRATION (Continued)					
Management					
Change of Status Assistant Instructor 99. Vijay Mahajan (Non-tenure)					
To:	9/1 - 1/15 1/16 - 5/31	50 75	9	\$ 8,437	
From:	9/1 - 5/31	50	9	8,437	
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2735, 2646)					
Marketing Administration					
Change of Status Lecturer					
100. Ewalt A. Menn (Non-tenure)					
To:	9/1 - 1/15 1/16 - 5/31	75 100	9	14,000	
From: (RBC# 2638)	9/1 - 5/31	75	9	14,000	
SCHOOL OF COMMUNICATION					
Journalism					
Appointment Specialist (Graphics) 101. Pamela A. J. Clark (Non-tenure) (RBC# 2624)	1/16 - 5/31	33	9	9,000	
Transfer of Funds 102. Amount of Transfer - \$602					
To: Journalism - Teaching Assis	tants				
From: Dean's Reserve for Faculty	Salaries				
Additional funds were needed for To Spring Semester. (RBC# 2783)	eaching Assistar	nts for	the		
Radio/Television/Film					
Appointment Assistant Professor 103. Darlyn D. Davison (Non-tenure)	1/16 - 5/31	100	9	14,000	
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2652, 2679)					
Transfer of Funds 104. Amount of Transfer - \$325					
To: Radio/Television/Film - Tea	ching Assistants	5			
From: Dean's Reserve for Faculty	Salaries				
Additional funds were needed for To (RBC# 2761)	eaching Assistar	its.			

Item, Department, Title, Name	Period of Appointment	% <u>Time</u>	Full-t No. Mos.	ime Salary Rate
SCHOOL OF COMMUNICATION (Continued)				
Speech Communication				
Appointment Adjunct Assistant Professor 105. Joseph J. Smaldino (Non-tenure) (RBC# 2639)	1/16 - 5/31	ans use are	We See	.
Instructor 106. James S. Howze (Non-tenure)	1/16 - 5/31	33	9	\$ 9,000
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2654, 2684)				
Speech Communication and Ethnic Studies: African and Afro-American				
Appointment Assistant Professor 107. Larry G. Coleman (Non-tenure)				
Speech Communication	1/16 - 5/31	67	9	15,500
Source of Funds: Transfers from Unallocated Faculty Salaries				
Ethnic Studies: African and Afro-American	1/16 - 5/31	33	9	15,500
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2658, 2653, 540, 2680, 2684))			

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

COLLEGE OF EDUCATION

Office of the Dean

Transfer of Funds

108. Amount of Transfer - \$ 2,918

To: Office of the Dean - Wages (\$1,502)

Office of the Dean - Classified Personnel (\$1,416)

From: Office of the Dean - Maintenance and Operation (\$1,918)

Curriculum and Instruction - Maintenance and Operation (\$1,000)

Funds were needed for the temporary employment of a Technical Staff Assistant V who worked in procurring and installing equipment in the new Education Building and for additional salary support of an Executive Assistant in the Dean's Office.

(RBC# 3007, 3010, 2770)

Cultural Foundations of Education

Transfer of Funds

109. Amount of Transfer - \$700

To: Cultural Foundations of Education - Computation Center Charge

From: Office of the Dean, College of Education - Maintenance and Operation

To provide for computation charges and computer supplies for the Center for History of Education.

(RBC# 2768)

Curriculum and Instruction

Appointment

Instructor
110. William C. Bailey (Non-tenure) 1/16 - 5/31 50 9 \$ 9,000 (RBC# 2622)

Specialist (Student Teaching)
111. Leila M. R. Dumas (Non-tenure) 1/16 - 5/31 25 9 9,000
(RBC# 2623)

Interdepartmental Transfer

112. Amount of Transfer - \$ 360

To: Curriculum and Instruction - Travel

From: Office of the Dean - Travel

To provide for travel expenses incurred in connection with student recruiting. (RBC# 3014)

Educational Psychology

Appointment

Visiting Professor

113. Dwight L. Goodwin (Non-tenure) 1/16 - 5/31 50 9 19,500

Source of Funds: Transfer from the Dean's Reserve (RBC# 2673, 2118)

	Period of	۵/5	Full-t	ime Salary
Item, Department, Title, Name	Appointment	Time	Mos.	Rate
COLLEGE OF EDUCATION (Continued)				
Educational Psychology (Continued)				
Appointment				
Visiting Professor 114. David G. Ryans (Non-tenure)	1/16 - 5/31	100	9	\$ 30,000
Source of Funds: Transfer	2,20 3,02	200		ų 30,000
from Unallocated Faculty Salaries (RBC# 2755, 2775)				
Reappointment				
Assistant Instructor 115. Kathleen M. Daubek (Non-tenure)	1/16 - 5/31	67.5	9	8,000
Source of Funds: Transfer from Unallocated Faculty Salaries				
Previous appointment was at the same rate. (RBC# 2827, 2775)				
Change of Status Assistant Instructor 116. Claire E. Weinstein (Non-tenure)				
To:	1/16 - 5/31	37.5	9	8,000
From:	1/16 - 5/31	25	9	8,000
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2828, 2775)				
Assistant Professor 117. Authella M. Bessent (Non-tenure)				
To:	9/1 - 1/15 1/16 - 5/31	50 67	9	12,000
From:	9/1 - 5/31	50	9	12,000
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2754, 2775)				
Health, Physical Education and Recreation				
Appointment Specialist (Physical Activity) 118. Lyn G. DeLaney (Non-tenure)	1/16 - 5/31	75	9	9,000
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2728, 2706)	, - 3, - 4		·	.,

			<u>Full-t</u>	ime Salary
	Period of	%	No.	
Item, Department, Title, Name	Appointment	<u>Time</u>	Mos.	Rate
COLLEGE OF EDUCATION (Continued)				
Health, Physical Education and Recreation (Continued)				
Appointment				
Instructor				
119. Marian L. Upchurch (Non-tenure)	1/16 - 5/31	100	9	\$ 10,000
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2730, 2706)				
Resignation				
Lecturer				
120. Joe R. Reneau (Non-tenure)	1/16 - 5/31	25	9	13,890
Date of Resignation (RBC# 2640)	1/15/75			
Special Education				
Change of Status Adjunct Assistant Professor 121. Betty W. Pells (Non-tenure)				
To:	9/1 - 1/15 1/16 - 5/31		9	12,000
From:	9/1 - 5/31	25	9	12,000
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2722, 2704)				

COLLEGE OF ENGINEERING

Office of the Dean

Transfer of Funds

122. Amount of Transfer - \$ 1,200

To: Office of the Dean - Special Equipment

From: Unallocated Teaching Equipment, Research Equipment and Research Collections

Funds were used for equipment for Theoretical and Experimental Modeling at Airport Approach and Landing Problems. (RBC# 3009)

Aerospace Engineering and Engineering Mechanics

Appointment

Visiting Associate Professor

123. Roger A. Broucke (Non-tenure) 1/16 - 5/31 100 9 21,000

Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2707, 2715)

			<u>Full-t</u>	ime Salary
	Period of	%	No.	
Item, Department, Title, Name	<u>Appointment</u>	Time	Mos.	Rate

COLLEGE OF ENGINEERING (Continued)

<u>Aerospace Engineering and</u> <u>Engineering Mechanics</u> (Continued)

Interdepartmental Transfer

124. Amount of Transfer - \$ 6,900

To: Aerospace Engineering and Engineering Mechanics - Teaching Assistants

From: Aerospace Engineering and Engineering Mechanics, Engineering Mechanics Division - Faculty Salaries

To provide funds for Teaching Assistant appointments in Aerospace Engineering for the Spring Semester.

(RBV# 3023)

Aerospace Engineering and Engineering Mechanics - Engineering Mechanics Division				
Appointment				
Assistant Instructor				
125. James S. Gibson (Non-tenure)	1/16 ~ 5/31	50	9	\$ 8,000
(RBC# 2734)				,
,				
Assistant Instructor				
126. Paul A. Erickson (Non-tenure)	1/16 - 5/31	50	9	8,000
(RBC# 2733)				
Civil Engineering				
Appointment				
Assistant Professor				
127. Shin J. Chang (Non-tenure)	1/16 - 5/31	25	9	12,000
Source of Funds: Transfer				
from Unallocated Faculty				
Salaries				
Concurrent Employment:				
Center for Research in Water				
Resources				
Research Scientist Associate IV	9/1 - 1/15	100	12	14,376
	1/16 - 5/31		12	14,376
	,			uiv.)10,782
Rate Increase				
(RBC# 2942, 2941, 3016)			<u>_2</u>	$\frac{1,218}{}$
(KBO# 2942, 2941, 3010)				
Visiting Professor				
128. Donald J. O'Connor (Non-tenure)	1/16 - 5/31	81	9	26,000
Source of Funds: Transfer				
from Unallocated Faculty				
Salaries				
(RBC# 2847, 2922, 3016)				
(44				
Change of Status				
Professor				
129. Clyde E. Lee (Tenure)				
To:	9/1 - 1/15	67	9	20,600
***	1/16 - 5/31	100		, , , , ,
Tream	9/1 - 5/31	67	9	20,600
From:	9/1 - 3/31	07	2	20,000
Source of Funds: Transfer from				
Unallocated Faculty Salaries				
Concurrent Employment:				
Center for Highway Research				
Director	9/1 - 1/15	33	9	20,600
(RBC# 2795, 2750, 2849, 2834)				

	Period of	%	Full-t	ime Salary
Item, Department, Title, Name	Appointment	Time	Mos.	Rate
COLLEGE OF ENGINEERING (Continued)				
Civil Engineering and Bureau of Engineering Research				
Reappointment and Change of Status 130. Clayford T. Grimm (Non-tenure)				
Change of Status: Civil Engineering Lecturer				
To:	1/16 - 5/31 1/16 - 5/31			\$ 18,510
From:	1/10 - 3/31	50	9	18,510
Source of Funds: Transfer from Unallocatated Faculty Salaries				
Reappointment: Bureau of Engineering Research Managing Director	1/1 - 1/15 1/16 - 3/31		9	18,510
Source of Funds: State of Wisconsin Grant				
Previous appointments were at the same rate (RBC# 2716, 2813, 2502, 2708)				
Civil Engineering and Division of Research in Transportation				
Reappointment 131. John H. Shortreed (Non-tenure)				
Civil Engineering Visiting Associate Professor	1/16 - 5/31	25	9	16,000
Division of Research in Transportation - U. S. Department of Transportation Contract Funds Research Associate (Faculty)	1/16 - 5/31	25	9	16,000
Previous appointments were	1/10 - 5/51	23	7	10,000
at the same rate (RBC# 2642, 2260)				
Electrical Engineering			:	
Appointment Assistant Instructor 132. Charles J. Campbell (Non-tenure)	1/16 - 5/31	50	9	8,000
Source of Funds - Transfer from Unallocated Faculty Salaries	,			
Concurrent Employment: Mechanical Engineering Assistant Instructor (RBC# 2901, 2904, 3020)	9/1 - 5/31	50	9	8,000
Lecturer 133. Emery C. Garth (Non-tenure)	1/16 - 5/31	33	9	19,504
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2852, 2851, 2833)				

	Period of	%	Full-t	ime Salary
Item, Department, Title, Name	Appointment	Time	Mos.	Rate
COLLEGE OF ENGINEERING (Continued)				
Mechanical Engineering				
Appointment				
Assistant Professor 134. Theodore A. Parish (Non-tenure)	1/16 - 5/31	25	9	\$ 15,075
Concurrent Employment: Energy Resources Program Research Engineer Associate V (RBC# 2671)	1/16 - 5/31	75	12	20,100
Change of Status Assistant Instructor 135. William G. Beazley (Non-tenure)				
To:	9/1 - 1/15 1/16 - 5/31		9	8,000
From: (RBC# 2736)	9/1 - 5/31	62.5	9	8,000
Assistant Professor 136. Ali H. Dogru (Non-tenure)				
To:	9/1 - 1/15 1/16 - 5/31		9	12,500
From:	9/1 - 5/31	60	9	12,500
Source of Funds: Transfer from Unallocated Faculty Salaries				
Concurrent Employment: Mechanical Engineering Research Engineer (Faculty) (RBC# 2717, 2710)	9/1 - 1/15	40	9	12,500
Petroleum Engineering				
Appointment Professor (Modified Service) 137. Sylvain J. Pirson (Non-tenure)	1/16 - 5/31	33	9	20,370
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2743, 2763)				
COLLEGE OF FINE ARTS				
Office of the Dean				
Reappointment				
Graphic Designer 138. George P. Lennox	7/16 - 8/31	100	9	14,170
Academic Status: Lecturer (Art) (RBC# 2982)				

						Full-t	ime Salary
				Period of	%	No.	
Item,	Department,	Title,	Name	Appointment	<u>Time</u>	Mos.	<u>Rate</u>

COLLEGE OF FINE ARTS (Continued)

Office of the Dean - Fine Arts Projects

Transfer of Funds

139. Amount of Transfer - \$ 2,901

To: Office of the Dean - Fine Arts Projects - Maintenance and Operation

From: Unallocated Maintenance and Operation

Transfer to the Fine Arts Projects - Maintenance and Operation account and amount equal to the box office receipts from the Prague Chamber Orchestra Concert (\$1,897) and the American Brass and Bach Aria concerts (\$1,004). These funds were deposited to General Budget Income but are needed now in the Fine Arts Projects Maintenance and Operation account to defray expenses incurred in the presentation of these concerts. (RBC# 2835, 2771)

Art

<u> Line C</u>				
Appointment Assistant Instructor				
140. Karen K. Gould (Non-tenure) (RBC# 2732)	1/16 - 5/31	50	9	\$ 9,620
Reappointment				
Instructor	1/16 ~ 5/31	50	0	0.620
141. Mamie J. Walters (Non-tenure)	1/10 ~ 3/31	50	9	9,620
Previous appointment was at the same rate (RBC# 2670)				
Leave of Absence Associate Professor 142. Mort Baranoff (Tenure)				
To:	9/1 - 5/31	LWOP	9	(15,700)
From:	9/1 - 1/15 1/16 - 5/31		9 9	(15,700) 15,700
(RBC# 2801)	, ,			,

Drama

Transfer of Funds

143. Amount of Transfer - \$ 498

To: Drama - Teaching Assistants

From: Dean's Reserve for Faculty Salaries

To provide the additional salary support needed for a teaching assistant for Drama 203. (RBC# 2762)

Music

Change of Status

Assistant Instructor

144. Robert L. Curtis (Non-tenure)

To:	9/1 - 1/15 1/16 - 5/31	50 75	9	8,550
From: (RBC# 2879, 2902)	9/1 - 5/31	50	9	8,550

	Period of	%	Full-t	ime Salary
Item, Department, Title, Name	Appointment	Time	<u>Mos.</u>	Rate
SCHOOL OF LAW				
Appointment Visiting Associate Professor 145. Beverly M. Carl (Non-tenure)	1/16 - 5/31	48	9	\$ 31,250
Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2721, 2711)				
GRADUATE SCHOOL OF LIBRARY SCIENCE				
Appointment Professor				
146. Roy M. Mersky (Tenure)	1/16 ~ 5/31	33	9	25,575
Source of Funds: Transfer from Unallocated Faculty Salaries				
Concurrent Employment: School of Law Professor	9/1 - 5/31	33	9	25,575
Law Library Law Librarian	9/1 - 1/15 1/16 - 5/31	67 33	9	25,575
(RBC# 2383, 2384, 2335, 2669)	1, 20 3, 01	00		
GRADUATE SCHOOL OF SOCIAL WORK				
Appointment				
Lecturer 147. Herman B. Steingraph (Non-tenure)	1/16 - 5/31	no em em	9	(18,000)
Concurrent Employment: Graduate School of Social Work Senior Research Associate for				
Program Design (RBC# 2944, 2943)	9/1 - 8/31	100	12	24,000
Remove from Budget Professor				
148. Charles W. Laughton (Tenure)	9/1 - 5/31	100	9 .	22,840
Deceased - Remove from Budget (RBC# 2668)	1/8/75			

ATTENDANCE AT PROFESSIONAL MEETINGS

Transfer of Funds

149. Amount of Transfer - \$ 10,000

To: Attendance at Professional Meetings

From: Unallocated Travel

To provide additional travel funds needed for faculty to attend professional meetings. (RBC# 3008)

	per la companya di salah s		Ful1-t	ime Salary
	Period of	%	No.	· .
Item, Department, Title, Name	<u>Appointment</u>	Time	<u>Mos.</u>	<u>Rate</u>
LIBRARY				
Appointment and Salary Increase Librarian, Cataloging Department 150. Naomi J. Rosner	1/29 - 8/31	100	12	\$ 11,400
Privious appointment: Library Librarian, Monographic Cataloging	9/1 - 11/5	100	12	10,450
Rate Increase (RBC# 2987, 2988)	,		12	950
Change of Status Professional Librarian 151. Ralph L. Elder				
To: Library	11/1 - 8/31	100	12	9,720
From: Humanities Research Center	11/1 - 8/31	100	12	9,720
Source of Funds: Transfer from Unallocated Classified Salaries and Humanities Research Center Administrative and Professional Salaries (RBC# 2883, 2882, 2949, 2951, 295	0, 2948)			
Resignation Librarian, Undergraduate Library 152. Marcia R. Braun Date of Resignation (RBC# 2985)	12/1 - 8/31 3/14/75	100	12	10,330
•				

ORGANIZED RESEARCH

Anthropological Laboratories

Transfer Between Dissimilar Appropriations 153. Amount of Transfer - \$ 2,179

To: Wages

From: Administrative and Professional Salaries

Funds released by the change in time assignment of a member of the professional staff were used to hire additional laboratory assistants.

(RBC# 2890)

Center for Nuclear Studies

Transfer Between Dissimilar Appropriations 154. Amount of Transfer - \$ 1,000

To: Maintenance and Operation

From: Travel

Unused travel funds were needed for maintenance and operation due to unanticipated printing and mailing expenses. (RBC# 2865)

Center for Teaching Effectiveness

Appointment Consultant

155. Joan K. Allaire 1/16 - 5/31 25 9 12,000 (RBC# 2900, 2800)

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

ORGANIZED RESEARCH (Continued)

Center for Relativity Theory

Transfer Between Dissimilar Appropriations 156. Amount of Transfer - \$ 252

To: Maintenance and Operation

From: Classified Personnel

Reallocation of funds to provide for anticipated miscellaneous operational expenses.
(RBC# 2787)

Center for Intercultural Studies in Folklore and Oral History

Transfer Between Dissimilar Appropriations

157. Amount of Transfer - \$ 1,391

To: Wages

From: Maintenance and Operation

Funds will be used to hire two graduate students to do basic research in the folklore archives, cataloging of materials and primary analysis of other scholarly materials.

(RBC# 2674)

<u>Laborarory for Computer-Assisted</u> Instruction and Educational Psychology

Reappointment and Change of Status 158. Wilson A. Judd (Non-tenure)

Laboratory for Computer-Assisted Instruction - Current Restricted Funds 25 Research Scientist (Faculty) 1/1 - 1/159 \$ 14,710 Change of Status: Educational Psychology Assistant Professor To: 9/1 - 1/1575 14,710 1/16 - 5/31 100 From: 9/1 - 5/3175 14,710 Laboratory for Computer-Assisted Instruction Co-Director To: 7/16 - 8/31 100 16,034 6/1 - 8/3150 9 16,034 From: (RBC# 2582, 2461, 2344, 2343)

Humanities Research Center

Transfer Between Dissimilar Appropriations 159. Amount of Transfer - \$ 1,712

To: Wages

From: Administrative and Professional Salaries

To support payment of hourly wages. (RBC# 2767)

Full-time Salary

Period of

%

No.

Mos.

Appointment Time

Rate

ORGANIZED RESEARCH (Continued)

Office of the Director of Special Collections

Item, Department, Title, Name

Transfer of Funds

160. Amount of Transfer - \$ 41,303

To: Office of the Director of Special Collections Administrative and Professional Salaries (\$30,960)
Classified Salaries (\$8,160)
Maintenance and Operation (\$1,000)

Travel (\$1,183)

From: Humanities Research Center -

Administrative and Professional Salaries (\$30,960)

Classified Salaries (\$8,160)

Travel (\$1,183)

Unallocated Maintenance and Operation (\$1,000)

To transfer the Director of Special Collections, Mr. William R. Keast, and an Administrative Secretary from the Humanities Research Center to the Office of the Director of Special Collections effective 9/1/74, and to provide travel and operating funds for this new office.

(RBC# 2952, 2953, 2954, 2955, 2956, 2957, 2884, 2881, 2838, 2839)

PHYSICAL PLANT

Balcones Research Center -

<u>Administration</u>

Interdepartmental Transfer

161. Amount of Transfer - \$ 1,586

To: Balcones Research Center - Administration - Wages

From: Balcones Research Center - Building Maintenance - Classified Personnel

Funds were used to hire a clerk-typist needed in the Administration Section for the period 3/1 - 8/31. (RBC# 3029)

<u>Utilities - Communications</u>

and Projections

Transfer Between Dissimilar Appropriations

162. Amount of Transfer - \$ 10,000

To: Wages

From: Maintenance and Operation

To provide for anticipated wages expenditures for the remainder of the fiscal year.
(RBC# 2958)

Buildings and Grounds - Custodial Services

Transfer Between Dissimilar Appropriations 163. Amount of Transfer - \$ 28,296

To: Maintenance and Operation

From: Classified Personnel (\$6,048)

Maintenance and Operation (\$22,248)

To cover anticipated operating expenses for the remainder of the fiscal year.

(RBC# 2785, 2786)

		Period of	%	Full-t	ime Salary
	Item, Department, Title, Name	Appointment	Time	Mos.	Rate
SPECIAL	ITEMS				
	hips and Scholarships - ool of Public Affairs				
	r Between Dissimilar Appropriations Amount of Transfer - \$ 45,000				
	To: Fellowships and Scholarships	- LBJ School	of Publ	ic Affai	rs
	From: LBJ School of Public Affairs	- Faculty Sala Administrat Salaries	ive and	Profess	ional
	To provide the additional funds needs (RBC# 3028)	ed for fellows	hips.		
Texas M	emorial Museum				
Appoint	ment				
Consul	tant Marion W. Bell	7/16 - 8/31	100	9	\$ 16,906
	Academic Status: Visiting Associate Professor (School of Architecture) (RBC# 2633)				
LBJ Sch	ool of Public Affairs				
Appoint	ment and Salary Increase Kenneth W. Tolo (Tenure)				
	Appointment: Associate Dean	3/1 - 5/31 6/1 - 8/31	50 100	12	25,600
	Academic Rate Increase: Associate Professor	0/3 0/00	300	0	17 005
	To:	2/1 - 2/28 3/1 - 5/31	100 50	9 9	17,985 19,200
	From:	2/1 - 5/31	100	9	<u>17,985</u>
	Rate Increase			<u>9</u>	1,215
	To conform Dr. Tolo's academic rate to his 12 months rate as Associate Dean. (RBC# 2908, 2909, 2910)				
Appoint	ment				
	ate Special Projects Officer	2/1 - 8/31	50	12	36,000
Resigna	tion				
Association 168.		2/1 - 8/31	50	12	36,000
	Date of Resignation (RBC# 3113)	3/31/75			

	Period of	%	<u>Full-ti</u>	me Salary
Item, Department, Title, Name	Appointment	Time	Mos.	Rate
SPECIAL ITEMS (Continued)				
Marine Science Institute - Galveston				
Reappointment Research Scientist 169. Toshimatsu Matsumoto (RBC# 2745)	2/1 - 8/31	100	12	\$ 23,307
Transfer Between Dissimilar Appropriations 170. Amount of Transfer - \$ 6,000				
To: Wages				
From: Administrative and Profession	nal Salaries			
Funds were needed for part-time emplo	yees.			
SERVICE DEPARTMENTS AND REVOLVING FUNDS				
Industrial and Business Training Bureau				
Appointment				
Instructor 171. Jim C. Cates	1/30 - 8/31	100	12	17,400
Source of Funds: Revolving Training Fund (RBC# 2748, 2810)				
Change of Status 172. Gussie M. P. Wright	9/1 - 8/31	100	12	6,672
Change Title, Only:				
To: Teaching Specialist I				
From: Instructor				
Effective Date - 2/1/75 (RBC# 2812)				
Leave of Absence				
Instructor 173. Mary H. P. Patrenella	9/1 - 8/31	100	9	7,500
Change Term of Leave of Absence:				
To:	12/1 - 2/3			
From: (RBC# 2746)	12/1 - 2/28			
SPONSORED PROJECTS				
Economics				
Appointment Project Director (Faculty) 174. Vernon M. Briggs, Jr.	6/1 - 6/30	100	9	21,766
Source of Funds: Southern Rural Labor Force Study				
Academic Status: Professor (Economics) (RBC# 2989)				

				<u>Full-t</u>	ime Salary
-	Item, Department, Title, Name	Period of Appointment	% Time	No. Mos.	Rate
	ED PROJECTS (Continued)			22450	
Astronom	ny				
Reappoin	ntment				
	ch Scientist James D. Wray	2/1 - 6/30	100	12	\$ 23,217
2,50	Source of Funds: NASA Contract (RBC# 2963, 2964)	_,,			,,
Chemist	с <u>у</u>				
Appointm					
	ch Scientist (Faculty) Neil D. Jesperson	6/1 - 7/15	100	9	14,715
	Source of Funds: NIH Grant				·
	Academic Status: Assistant Professor (Chemistry) (RBC# 2814)			,	
Finance					
Appointm					
	ant Professor Robert W. Boatler	6/1 - 8/31	100	9	16,960
	Source of Funds: Ford Foundation Grant (RBC# 2572)				
Special	Education				
Reappoir	ntment				
Instruc	ctor Gene L. Healy (Non-tenure)	1/16 - 5/31	25	9	9,000
_, _,	Source of Funds: Office of Education Contract	., ., .,		-	,,
	Previous appointment was at the same rate (RBC# 2897, 2793)				
Resignat	ion				
Lecture	er Robert A. Montgomery (Non-tenure)	1/16 ~ 5/31	25	9	13,890
- 2.2.0	Date of Resignation (RBC# 2790)	1/15/75			•
Assista	unt Professor				
	Patricia W. Prewitt	9/1 - 5/31	100	9	12,000
	Date of Resignation (RBC# 2617)	1/15/75			
Applied	Research Laboratories				
Appointm					
	ch Scientist Arthur O. Williams, Jr. (RBC# 2825)	2/1 - 6/15	100	12	30,100

	D1-35	Ø)		ime Salary
Item, Department, Title, Name	Period of Appointment	% <u>Time</u>	No. <u>Mos.</u>	Rate
SPONSORED PROJECTS (Continued)				
Center for Research in Water Resources				
Appointment Research Engineer (Faculty) 182. Benjamin J. Olufeagba	1/1 - 5/31	50	9	\$ 13,000
Source of Funds: NSF Grant				
Concurrent Employment: Electrical Engineering Assistant Professor (RBC# 2870, 2983)	9/1 - 5/31	50	9	13,000
Electronics Research Center				
Reappointment Research Engineer (Faculty) Assistant Director of Electronics Research Center 183. Otto M. Friedrich, Jr.	2/1 - 3/31	50	12	23,108
Source of Funds: U.S. Air Force Contract				
Concurrent Employment: Applied Research Laboratories Research Engineer (RBC# 2797)	2/1 - 8/31	50	12	23,108
Research and Development Center for Teacher Education				
Reappointment Project Director (Faculty) 184. Gene E. Hall	2/1 - 8/31	100	12	23,675
Source of Funds: Office of Education Contract (RBC# 2872)				
Research Scientist (Faculty) 185. Jere E. Brophy	1/16 - 5/31	50	9	15,920
Source of Funds: Office of Education Contract				
Concurrent Employment: Educational Psychology Associate Professor (RBC# 2822, 2792)	9/1 - 5/31	50	9	15,920
Marine Science Institute - Galveston				
Appointment Research Scientist 186. David R. Lammlein	3/1 - 8/31	100	12	18,534
Source of Funds: NASA Contract (RBC# 2990)				
Reappointment Research Scientist 187. Frederick K. Duennebier	2/1 - 6/30 7/1 - 8/31	100 50	12	18,534
Source of Funds: NASA Contract (RBC# 2788, 2789)				

Full-time Salary

Period of % No.

Item, Department, Title, Name Appointment Time Mos. Rate

SPONSORED PROJECTS (Continued)

<u>Marine Science Institute</u> - <u>Galveston</u> (Continued)

Reappointment

Research Scientist

188. Yosio Nakamura 2/1 - 8/31 100 12 25,609

Source of Funds: NASA Contract

(RBC# 2826)

AUXILIARY ENTERPRISES

Senior Cabinet and Student Councils

Transfer of Funds

189. Amount of Transfer - \$ 1,793

To: Senior Cabinet - Operating Expenses (\$200)

Humanities Council (\$480)

Social and Behavioral Sciences Council (\$362)

Business Administration Council (\$150)

Communication Council (\$601)

From: Senior Cabinet - Allocation for Budget Adjustments (\$1,000)

Senior Cabinet and Student Councils (\$793)

To provide for programs planned by the Senior Cabinet and the various student councils.

(RBC# 2836, 2820)

Student, Faculty and Staff ID Cards

Transfer Between Dissimilar Appropriations

190. Amount of Transfer - \$ 1,600

To: Salaries and Wages

From: Other Expenses

Funds were used for part-time clerical assistants and registration workers.

OIREIS. (RBC# 2837)

Special Concessions

Transfer Between Dissimilar Appropriations

191. Amount of Transfer - \$ 5,000

To: Tutoring Programs

From: Showcase

To provide additional funds for tutoring services.

(RBC# 2759)

192. Amount of Transfer - \$ 1,500

To: Project Info: Law

From: Vice-President for Student Affairs - Special Projects

To provide additional operating funds for the Law School Project Info program.

(RBC# 2830)

Item, Department, Title, Name	Period of Appointment	% <u>Time</u>	Full-to	me Salary Rate
AUXILIARY ENTERPRISES (Continued)				
Student Health Center				
Appointment Physician, General Medicine 193. Neil G. Trachtman (RBC# 2889)	3/1 - 8/31	100	12	\$ 21,500
Resignation Physician, General Medicine 194. John L. Sullivan	9/1 - 8/31	50	12	24,200
Date of Retirement (RBC# 2888)	3/10/75			

CURRENT RESTRICTED FUNDS

Botany

Transfer of Funds

195. Amount of Transfer - \$ 500

To: Botany - Various Donors, Various Purposes

From: Office of the Dean, College of Natural Sciences - Various Donors, Various Purposes

Funds were used to support the electron microscopy training course during the Spring Semester.
(RBC# 2831)

Geological Sciences

Transfer of Funds

196. Amount of Transfer - \$ 1,000

To: Geology Foundation, Scholarships

From: Geology Foundation - Various Donors, Various Purposes

Funds were used for partial support of a fellowship. (RBC# 2832)

Office of the Dean, College of Engineering

Appointment Assistant to the Dean 197. Claude R. Hocott	1/16 - 5/31	22	12	24,000
Source of Funds: Engineering Foundation Funds				
Concurrent Employment: Chemical Engineering Visiting Professor	1/16 - 5/31	11	9	18,000
Petroleum Engineering Visiting Professor	1/16 - 5/31	50	9	18,000
Center for Energy Studies Research Engineer (Faculty) (RBC# 2328, 2720, 2496, 2523)	1/16 - 5/31	17	12	24,000

Full-time Salary % Period of No. Item, Department, Title, Name Appointment Time Mos. Rate CURRENT RESTRICTED FUNDS (Continued) College of Pharmacy Appointment Assistant Professor 198. William L. Hightower 1/16 - 5/31 100 9 \$ 13,350 Source of Funds: Pharmaceutical Foundation, Various Donors,

LOAN FUNDS

Office of Accounting

Transfer of Funds

199. Amount of Transfer - \$ 29,650

Various Purposes (RBC# 2752, 2804)

To: Matching Funds for NSDL Program

From: Auxiliary Administration - Unallocated

To provide the matching funds needed for this program. (RBC# 2961)

PLANT FUNDS

Major Repairs and Rehabilitation Projects (Available University Fund)

Transfer of Funds

200. Amount of Transfer - \$ 20,000

To: Repairs to Solar Tile Panels at Central Chilling Station No. 4

From: Allotment Account

To provide funds to complete the repair of collapsed tile at CCS No. 4. (RBC# 2880)

AGENCY FUNDS

Faculty Center

Reappointment

Manager
201. Laurence K. Hannon
(RBC# 2803, 2995)

2/1 - 3/31 100 12

16,906

1974-75 OPERATING 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.	Olusegun K. Agagu			
	Bureau of Economic Geology	Research Scientist Assistant I (1/2T)	Research Scientist Associate II (F.T.)	
	Salary Rate (RBC# 2628)	\$ 8,436	\$ 12,168	1/1/75
2.	Bruce E. Aldridge			
	Applied Research Laboratories	Laboratory Research Assistant II (1/2T)	Technical Staff Assistant III (F.T.)	
	Salary Rate	\$ 5,640	\$ 7,896 (Includes 25% Antarctica Differential)	1/13/75
	Source of Funds: Government Contract - Payroll Clearing Account (RBC# 2798)			
3.	Barbara T. Bard (Non-tenure)			
	Speech Communication	Social Science Research Associate IV (3/8T)	Visiting Associate Professor (1/3T)	
	Salary Rate - 12 mos.	\$ 12,168		
	Academic Rate - 9 mos.	9,126 (equiv) \$ 13,200	1/16/75
	Source of Funds: Office of Education Contract (RBC# 2618)			
4.	Jane A. Bedford (Non-tenure)			
	Health, Physical Education and Recreation	Teaching Assistant (1/2T)	Specialist (Physical Activity) (F.T.)	
	Academic Rate	\$ 6,800	\$ 9,000	1/16/75
	Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2729, 2706)			

	Item No. and Explanation	Present Status	Proposed Status	Effective Dates
5.	John F. Betak (Non-tenure)			
	Council for Advanced Transportation Studies	Assistant Director (F.T.)	Assistant Director (71%T)	
	Salary Rate - 12 mos.	\$ 14,868	\$ 14,868	
	School of Architecture		Lecturer (29%T)	
	Academic Rate - 9 mos.	11,151 (equiv)	14,000	1/16/75
	Source of Funds: Trans- fer from Unallocated Faculty Salaries (RBC# 2507, 2508, 2724, 27	705)		
6.	Robert W. Boehm			
	Office of Institutional Studies	Administrative Clerk (part-time)	Research Scientist Associate I (F.T.)	
	Salary Rate (RBC# 2631)	\$ 7,380	\$ 10,656	1/22/75
7.	Thomas K. Butler			
	Applied Research Laboratories	Laboratory Research Assistant II (1/2T)	Research Engineer Associate I (F.T.)	
	Salary Rate	\$ 5,460	\$ 11,388	1/16/75
	Source of Funds: Government Contract - Payroll Clearing Account (RBC# 2791)			
8.	Elizabeth R. F. Eubanks (Non-tenure)			
	Microbiology	Postdoctoral Research Associate (F.T.)	Instructor (1974-75 Only) (3/4T)	
	Salary Rate - 12 mos.	\$ 9,024		
	Academic Rate - 9 mos.	6,768 (equiv)	\$ 10,700	1/16/75
	Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2661, 2686)			

1	tem No. and Explanation	Present Status	Proposed Status	Effective Dates
9.	Mary T. Fowler (Non-tenure) Health, Physical Education and Recreation	Teaching Assistant (1/4T)	Specialist (Physical Activity) (F.T.)	
	Academic Rate Source of Funds: Transfer from Unallocated Faculty Salaries (RBC# 2706, 2727)	\$ 6,000	\$ 9,000	1/16/75
10.	Jo Anne Hawkins Library Salary Rate (RBC# 2986)	Head Librarian, Inter Library Service \$ 14,928	Head Librarian, Circulation Services \$ 16,932	2/3/75
11.	Eldon W. Husband (Non-tenure) Electrical Engineering Academic Rate (RBC# 2672)	Teaching Assistant (1/2T) \$ 7,262	Assistant Professor (F.T.) \$ 13,000	1/16/75
12.	John Britton Kauffman Population Research Center Bureau of Business Research Salary Rate Source of Funds: Printing Publication Fund (RBC# 2580, 2924)	Computer Programmer Assistant I (1/2T)	Computer Programmer I (F.T.) \$ 12,168	2/1/75
13.	Research and Development Center for Teacher Education Salary Rate Source of Funds: Office of Education Contract (RBC# 2947)	Computer Programmer Assistant I (1/4T) \$ 7,800	Computer Programmer I (1/4T) \$ 11,772	2/1/75

ï	Item No. and Explanation	Present Status	Proposed Status	Effective Dates
14.	Verna L. H. Paynor Research and Development Center for Teacher Education	Social Science Research	Social Science Research	
		Assistant II	Assistant IV	
	Salary Rate Source of Funds: Office of Education Contract (RBC# 2871)	\$ 10,200	\$ 13,452	2/1/75
15.	Bhaskara Penumalli (Non-tenure)			
	Electronics Research Center	Research Engineer Assistant III (1/2T)		
	Salary Rate - 12 mos.	\$ 9,972		
	Electrical Engineering		Assistant Professor (1/2T)	
	Academic Rate - 9 mos.	7,479 (equiv)	\$ 13,000	1/16/75
	Source of Funds: Transfer from Unalloca- ted Faculty Salaries (RBC# 2747, 2833)			
16.	Robert L. Taube (Non-tenure)			
	Counseling-Psychological Services Center	Psychologist I (55%T)	Psychologist I (55%T)	
	Salary Rate - 12 mos.	\$ 7,632	\$ 7,632	
	Health, Physical Educa- tion, and Recreation		Assistant Instructor (1/4T)	
	Academic Rate - 9 mos.	5,724 (equiv)	\$ 8,000	1/16/75
	Source of Funds: Trans- fer from Unallocated Faculty Salaries (RBC# 2758, 2808, 2817, 2	2706)		
17.	Larry J. Wigginton			
	Applied Research Laboratories	Technical Staff Assistant III	Technical Staff Assistant V	
	Salary Rate	\$ 7,140	\$ 12,576 (Includes 25% Antarctica differential)	1/13/75
	Source of Funds: Government Contract - Payroll Clearing Account (RBC# 2824)			

Item No. and Explanation	Present Status	Proposed Status	Effective Dates
18. Fay L. Woo (Non-tenure)			
College of Pharmacy	Teaching Assistant I (1/2T)	Instructor (F.T.)	
Academic Rate	\$ 6,408	\$ 9,000	1/16/75
Sources of Funds: Trans- fer from the Dean's Reserve to Pharmacy Teaching Salaries (1/3) and Government Contract - USPHS Funds (2/3) (RBC# 2667, 2714, 2695)			

AMENDMENTS TO THE 1974-75 PARKING AND TRAFFIC REGULATIONS AND INFORMA Amend the 1974-1975 Parking and Traffic Regulations and Information, The University of Texas at Austin, as follows: Amend the last sentence of Section III on Page 5 to read as follows: ALL OTHER PARKING REGULATIONS ARE IN EFFECT AT ALL TIMES. [Ali-other-parking-regulations-are-in-effect-at-ali-times.] Amend Section IV on Page 5 by adding the following (2) sentence: Permits will be issued to only those members of the FACULTY and STAFF who are employed on campus. Amend Subsection D of Section IV on Page 7 by deleting (3) the following sentence: [Refunds-for-students-holding-class-"A"-or-class-"B"-permits will-be-based-on-the-number-of-full-months-remaining-in-the

University's-fiscal-year.]

Amend Subsection D of Section IV on Page 7 by adding (4)the following sentence:

A request for a refund will not be honored when a person's privilege to park and drive on campus has been suspended.

Amend Subsection F of Section IV on Page 7 by adding the following sentences:

Class "D" permits may be issued to students upon certification by the Director of the Student Health Center.

Class "D" permits may be issued to members of the faculty and staff upon certification by the attending physician.

Amend Subsection 6 of Section IV on Page 7 by deleting the following last sentence:

[At-other-times-"F"-permit-holders-may-park-in-any-"F";-"A"; or-"C"-parking-area.]

Amend the first sentence of Subsection M of Section IV on Page 8 to read as follows:

Car Pool means an arrangement for the use of two or more vehicles by persons not having the same domicile [A-car pool-includes-an-arrangement-for-the-use-of-two-or-more vehieles].



OFFICE OF THE PRESIDENT

THE UNIVERSITY OF TEXAS AT DALLAS

March 27, 1975

Chancellor Charles A. LeMaistre The University of Texas System 601 Colorado Street Austin, TX 78701

Dear Chancellor LeMaistre:

The docket for the April 28, 1975 meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.

Sincerely,

Bryce Jordan / President

BJ:jwm

Attachment

ABSENCE FROM USUAL AND REGUALR 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 recommend, and the Chancellor's Office has approved, the following request for absence from usual and regular duties:

- Dr. Hans Bremer for the period March 9, 1975 thru March 23, 1975, to Hamburg, Germany due to a family illness there. No state funds are involved.
- 2. Dr. Claud S. Rupert for the period April 12, 1975 thru April 19, 1975, to attend meetings of Joint Working Group on Radiation Quantitites of the International Commission on Radiation Units and Measurements (ICRU), Comite International de Photobiologie (CIP), and Comite International de l'Eclairage (CIE) to be held at International Bureau of Weights and Measures, Paris, FRANCE 14-18 April 1975 as a representative for CIP. No state funds are involved.

GRANTS, CONTRACTS AND AGREEMENTS (FEDERAL)

BOARD OF REGENTS MEETING - APRIL 28, 1975

4 x to

The following contracts, grants and amendments have been signed by the appropriate official upon the recommendation of the respective technical directors, fiscal officers, and the Assistant Director of the Center for Advanced Studies.

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: Department of the Air Force (AFOSR)

Grant No.: AFOSR-73-2505, Modification No. D (UTD E1328-02)

/ Principal
Investigator: P. Kusch

New Funds: None
Date: 1 April 1975 - 31 March 1977

Description: Optical Molecular Spectroscopy

County of Expenditure: Dallas/Collin

2. Agency: NASA/Ames Research Center

Contract No.: NAS2-7865, Modification No. 5 (UTD E1336-01)

Principal

Investigator: J. H. Hoffman New Funds: \$107,979

Date: 3 October 1973 - 31 March 1975

Description: Design and Development of a Large Probe

Neutral Mass Spectrometer

County of

Expenditure: Dallas/Collin

3. Agency: NASA/Goddard Space Flight Center

Contract No.: NAS5-11406; Modification No. 12 (UTD E1678-01)

Principal

Investigator: J. H. Hoffman

New Funds: \$35,000

Date: 6 April 1971 - 30 June 1975

Description: Atmosphere Explorer Magnetic Ion Mass Spectrometer Experiment

County of

Expenditure: Dallas/Collin

4. Agency: NASA/Langley Research Center

Contract No.: NAS1-9699, Modification No. 14 (UTD E1665)

Principal

Investigator: W. B. Hanson New Funds: \$8,500

Date: 8 April 1970 - 30 June 1975

Description: Science Planning for Viking 1975 Missions (Entry Science)

County of

Expenditure: Dallas/Collin



GRANTS, CONTRACTS AND AGREEMENTS (FEDERAL) (continued)

5. Agency: National Aeronautics and Space Administration/Headquarters Grant No.: NGR 44-004-120, Supplement No. 4 (UTD E1457-05)

Principal

Investigator: W. B. Hanson and A. B. Christensen

∠ New Funds: \$160,000

Date: 1 February 1975 - 31 January 1976
Description: Rocket/Satellite Program in Aeronomy

County of

Expenditure: Dallas/Collin

6. Agency: National Science Foundation

Grant No.: MPS74-06945, Amendment A01 (E1346-02)

Principal

Investigator: John W. Van Ness

New Funds: \$10,800

Date: 1 April 1974 - 30 September 1976

Description: Multivariate and Time Series Analysis and Applications

County of

Expenditure: Dallas/Collin

7. Agency: National Science Foundation

Grant No.: OEP74-03709, Amendment A01 (UTD E1350-01)

Principal

Investigator: Robert E. Fielder

New Funds: None

Date: 1 May 1975 - 30 November 1975

Description: Restructuring the Undergraduate Learning Environment (RULE)

County of

Expenditure: Dallas/Collin

8. Agency: National Science Foundation

Grant No.: OPP71-04028, Amendment A03 (UTD E1654-03)

Principal

Investigator: Martin Halpern

New Funds: None

/ Date: 1 April 1975 - 30 June 1975

Description: Geochronologic-Geologic Studies in the Scotia

Arc-Antarctic Peninsula Area, Antarctica

County of

Expenditure: Dallas/Collin

9. Agency: Office of Naval Research

Contract No.: N00014-75-C-0787

Principal

Investigator: S. C. Fallis

New Funds: None

Date: 1 March 1975 - (Open)
Description: Facilities Contract

County of Expenditure:

GRANTS, CONTRACTS AND AGREEMENTS (FEDERAL) (continued)

10. Agency:

United States Environmental Protection Agency R803642-01-0 (UTD E1375-01) Grant No.:

Principal

Investigator: G. F. Lee New Funds: \$11,000

Date: 1 April 1975 - 31 March 1976

Description: Algal Nutrient Availability and Limitations in

Lake Ontario during IFYGL

County of

Expenditure: Dallas/Collin

AMENDMENTS TO THE 1974/75 OPERATING BUDGET

BOARD OF REGENTS MEETING - APRIL 28, 1975

GENERAL ADMINISTRATION

Admissions and Registration

1. Transfer of Funds

Amount of Transfer - \$ 10,901

From: Unallocated Resident Instruction
Maintenance and Operation \$ 7,716
Unallocated Resident Instruction
Lecturers \$ 3,185

To: Maintenance and Operation \$ 7,716
Classified Salaries \$ 3,185

To provide for salaries, supplies and equipment rentals required in support of the undergraduate concurrent admissions program. (D105)

2. Transfer of Funds

Amount of Transfer - \$ 600

From: Office of the Vice President for Academic Affairs Travel \$ 600

To: Travel \$ 600

To provide for travel to other campuses to examine model registration procedures and space allocation requirements. (D123)

Personnel

3. Transfer of Funds

Amount of Transfer - \$ 1,217

From: Unallocated General Administration
Maintenance and Operation \$ 1,217

To: Classified Salaries \$ 1,217

To provide for the establishment of a temporary clerk position to work on the Affirmative Action System. (D104)

AMENDMENTS TO THE 1974/75 OPERATING BUDGET (continued)

GENERAL INSTITUTIONAL

Development and University Relations

4. Transfer of Funds

Amount of Transfer - \$ 5,446

From: Classified Salaries \$ 4,305
Wages \$ 145
Student Services Classified Salaries \$ 996
To: Classified Salaries \$ 5,446

To provide for the establishment of an Administrative Assistant II position. (D122)

Information and Referral Service

5. Transfer of Funds

Amount of Transfer - \$ 3,288

From: Unallocated General Administration

Maintenance and Operation \$ 3,288

To: Classified Salaries \$ 3,288

To provide for full-time manning of the Information and Referral booth. (D110)

6. Transfer of Funds

Amount of Transfer - \$ 3,767

From: Classified Salaries \$ 3,767

To: Staff Services \$ 3,767

To provide for a reorganization whereby the Information and Referral function is to be performed by Staff Services. (D130)

RESIDENT INSTRUCTION

Office of the Executive Dean for Undergraduate Studies

7. Transfer of Funds

Amount of Transfer - \$ 5,628

From: Classified Salaries \$ 4,452
Undergraduate College Classified Salaries \$ 1,176

To: Classified Salaries \$ 5,628

To provide for the establishment of an Administrative Assistant II position. (D124)

AMENDMENTS TO THE 1974/75 OPERATING BUDGET (continued)

RESIDENT INSTRUCTION (continued)

Graduate Program in Communication Disorders

8. Appoint John J. Godfrey, Assistant Professor, without tenure, to the Graduate Program in Communication Disorders, 100% time for the period 1/01/75 thru 5/31/75, academic salary rate \$12,825. Funds for this appointment available from Faculty Salaries. (D101)

Graduate Program in Environmental Science

- 9. Appoint J. Rodger Chipman, Lecturer, without tenure, to the Graduate Program in Environmental Science, 25% time for the period 1/16/75 thru 5/31/75, academic salary rate \$8,000. Funds for this appointment available from Faculty Salaries. (D99)
- 10. Appoint Martin H. Kelley, Lecturer, without tenure, to the Graduate Program in Environmental Science, 45% time for the period 1/16/75 thru 5/31/75, academic salary rate \$8,900. Funds for this appointment available from Faculty Salaries. (D115)
- 11. Reappoint Kenneth B. McCool, Lecturer, without tenure, to the Graduate Program in Environmental Science, 25% time for the period 1/16/75 thru 5/31/75, academic salary rate \$8,100. Funds for this appointment available from Faculty Salaries. (D120)
- 12. Reappoint Ronald V. Thurman, Lecturer, without tenure, to the Graduate Program in Environmental Science, 25% time for the period 1/16/75 thru 2/28/75, academic salary rate \$8,100. Funds for this appointment available from Faculty Salaries. (D121)
- 13. Appoint L. Dan Tucker, Lecturer, without tenure, to the Graduate Program in Environmental Science, 25% time for the period 3/01/75 thru 5/31/75, academic salary rate \$8,100. Funds for this appointment available from Lecturers and Faculty Salaries. (D132)

Graduate Program in Geological Sciences

- 14. Appoint Richard J. Moiola, Lecturer, without tenure, to the Graduate Program in Geological Sciences, 25% time for the period 1/16/75 thru 5/31/75, academic salary rate \$7,200. Funds for this appointment available from Unallocated Resident Instruction Lecturers. (D106)
- 15. Transfer of Funds
 Amount of Transfer \$ 2,000

From: Graduate Program in Environmental Science

Computer Services \$ 2,000

To: Computer Services \$ 2,000

To provide additional computing services for the Graduate Program in Geological Science. (D131)

AMENDMENTS TO THE 1974/75 OPERATING BUDGET (continued)

RESIDENT INSTRUCTION (continued)

Graduate Program in Management and Administrative Sciences

16. Transfer of Funds

Amount of Transfer - \$ 1,688

From: Office of the Vice President for Academic

Affairs Administrative and Professional

Salaries \$ 1,688

To: Lecturers \$ 1,688

To transfer James E. Moore from the Office of the Vice President for Academic Affairs to the Graduate Program in Management and Administrative Sciences to more properly reflect the actual duties involved. (D109)

17. Appoint Price Pritchett, Lecturer, without tenure, to the Graduate Program in Management and Administrative Sciences, 25% time for the period 1/16/75 thru 5/31/75, academic salary rate \$7,200. Funds for this appointment available from Lecturers and Faculty Salaries. (D111)

Graduate Program in Mathematical Science

- 18. Reappoint John H. Davis, Lecturer, without tenure, to the Graduate Program in Mathematical Science, 25% time for the period 1/16/75 thru 5/31/75, academic salary rate \$8,000. Funds for this appointment available from Lecturers and Faculty Salaries. (D107)
- 19. Appoint Vytas B. Gylys, Lecturer, without tenure, to the Graduate Program in Mathematical Science, 25% time for the period 1/16/75 thru 5/31/75, academic salary rate \$8,000. Funds for this appointment available from Faculty Salaries. (D112)
- 20. Reappoint Carl M. Peters, Lecturer, without tenure, in the Graduate Program in Mathematical Science, 50% time for the period 1/16/75 thru 5/31/75, academic salary rate \$15,202.50. Mr. Peter's time in Computer Services is to be reduced accordingly. Funds for this appointment available from Faculty Salaries. (D119)
- 21. Appoint A. Taylor Pohlman, Lecturer, without tenure, to the Graduate Program in Mathematical Science, 25% time for the period 1/16/75 thru 5/31/75, academic salary rate \$8,000. Funds for this appointment available from Faculty Salaries. (D113)
- 22. Reappoint Raymond L. Veenkant, Lecturer, without tenure, to the Graduate Program in Mathematical Science, 25% time for the period 1/16/75 thru 5/31/75, academic salary rate \$8,000. Funds for this appointment available from Lecturers. (D103)

AMENDMENTS TO THE 1974/75 OPERATING BUDGET (continued)

RESIDENT INSTRUCTION (continued)

Graduate Program in Physics

23. Transfer of Funds

Amount of Transfer - \$ 10,000

From:

Unallocated Resident Instruction

Computer Services

\$ 10,000

To:

Computer Services

\$ 10,000

To provide computing services for the Graduate Program in Physics. (D127)

Graduate Program in Science Education

24. Reappoint Frederick L. Fifer, Lecturer, without tenure, to the Graduate Program in Science Education, 25% time for the period 1/16/75 thru 5/31/75, academic salary rate \$8,000. Funds for this appointment available from Lecturers. (D100)

Faculty Roster

- 25. Enter leave of absence for Wolfgang A. Rindler, Professor with tenure, in the Mathematical Science Faculty, for the period March 1, 1975 thru May 31, 1975, academic salary rate \$23,480. (D114)
- 26. Appoint Henry Fuchs, Assistant Professor, without tenure, to the Mathematical Science Faculty, 100% time for the period 1/09/75 thru 5/31/75, academic salary rate \$18,000. Funds for this appointment available from faculty salaries. (D117)

ORGANIZED RESEARCH

Institute for Geological Science

27. Transfer of Funds

Amount of Transfer - \$ 1,897

From: Administrative and Professional Salaries

\$ 1,897

To:

Classified Salaries

1,897

To provide for the establishment of a classified engineering position. (D108)

AMENDMENTS TO THE 1974/75 OPERATING BUDGET (continued)

ORGANIZED RESEARCH (continued)

Institute for Management Sciences

28. Transfer of Funds

Amount of Transfer - \$ 300

From: Unallocated Organized Research

Computer Services \$ 300

To: Computer Services \$ 300

To provide additional computing services for the Institute for Management Sciences. (D102)

Institute for Physical Science

29. Transfer of Funds

Amount of Transfer - \$ 5,000

From: Unallocated Organized Research

Computer Services \$ 5,000

To: Computer Services \$ 5,000

To provide additional computing services for the Institute for Physical Science. (D126)

Institute for Special Programs

30. Transfer of Funds

Amount of Transfer - \$ 9,562

From: Accreditation Administrative and Pro-

fessional Salaries \$ 1,125

Faculty Recruiting Administrative and

Professional Salaries \$ 1,125

The Office of the Vice President for Academic Affairs Administrative and

Professional Salaries \$ 7,312

To: Administrative and Professional Salaries \$ 9,562

To transfer James E. Moore from the Office of the Vice President for Academic Affairs to the Institute for Special Programs to more properly reflect the actual duties involved. (D109)

AMENDMENTS TO THE 1974/75 OPERATING BUDGET (continued)

UNIVERSITY LIBRARY

- 31. Adjustment in salary for Mary R. Taylor effective 2/01/75 from \$13,776 to \$14,376, a rate comparable to that paid other individuals within the Library holding positions of similar responsibility. Funds for this adjustment are available from Administrative and Professional Salaries and Maintenance and Operation. (D118)
- 32. Transfer of Funds

Amount of Transfer - \$ 612

From: Capital Outlay \$ 612

To: University Library Wages \$ 612

To provide for an hourly position. (D129)

CONTRACTS AND GRANTS

Institute for Geological Science

33. Appoint Stephen R. Hammond, Research Associate, Class Code 1000, to the Institute for Geological Science Contracts and Grants without salary for the period 2/01/75 thru 8/31/75, annual salary rate \$16,000. (D128)

Institute for Physical Science

34. Revise appointment for David A. Storm, Research Scientist, Class Code 1000, in the Institute for Physical Science, 100% from 1/01/75 thru 8/31/75, to leave of absence from 1/01/75 thru 1/31/75 and 75% from 2/01/75 thru 8/31/75, annual salary rate \$11,270. Funds for this appointment available from the Institute for Physical Science Contracts and Grants. (D116)

1975 SUMMER SESSION

The following Summer Session is allocated within funds set aside in the original budgets previously approved by the Board for this purpose. Salary calculations are <u>pro rata</u> based on the nine-month academic rate (as adjusted by Senate Bill 1). No salary rate increases are permitted in the Summer Session Budget.

Appropriation for 1975 Summer Session (See Budget adopted by the Board Regents, Page 54).		\$ 90,860
		3 90,000
Plus: Transfer from:		
Academic Development Facu	lty Salaries	63,009
Graduate Program in Commu Faculty Salaries	nication Disorders	5,200
Graduate Program in Chemic	cal Science Lecture	rs 1,200
Graduate Program in Science	ce Education Lectur	ers 4,000
Additional Appropriations resulting f	rom Senate Bill 1.	13,632
Subtotal		\$177,901
Allocations for 1975 Summer Session Resident Instruction - Faculty Sala	aries and Lecturers	
Graduate Program in Biology	\$19	,236
Graduate Program in Chemistry	12	,263
Graduate Program in Communicati	on Disorders 18	,464
Graduate Program in Environment	al Sciences 19	,449
Graduate Program in Geosciences	22	, 388
Graduate Program in Management Administrative Sciences		,942
Graduate Program in Mathematics	1 Sciences 33	,679
Graduate Program in Physics	15	,435
Graduate Program in Science Edu	cation 6	,045
Subtotal	e e e e e e e e e e e e e e e e e e e	\$177,901

SUMMER BUDGET FOR 1974/75 (continued)

Graduate Program in Biology

Item	Title		Academic Rate		Effectiv	e Dates	
No.	<u>Name</u>	Tenure	(9-Month)	Pct.	From	<u>Thru</u>	Amount
	Associate Professor					· · · · · · · · · · · · · · · · · · ·	
1.	Edmund W. Guttes	T	\$17,595	100%	6/01/75	8/31/75	\$ 5,865
2.	Harold Werbin	T	19,872	75%	8/01/75	8/31/75	1,656
	Assistant Professor						
3.	Richard G. Cutler		14,913	100%	6/01/75	8/31/75	4,971
4.	Donald M. Gray		15,957	100%	8/01/75	8/31/75	1,773
5.	Jost Kemper		14,913	100%	6/01/75	8/31/75	4,971
	TOTAL GRADUATE PI	ROGRAM IN	BIOLOGY				-S\$19,236

Graduate Program in Chemistry

Item	Title Name	Tenure	Academic Rate (9-Month)	Pct.	Effectiv From	e Dates Thru	Amount
	Professor						
6.	Donald Rapp	Т	\$19,161	52%	6/01/75	8/31/75	\$ 3,321
	Associate Professor						
7.	Richard A. Caldwell	Т	16,659	55%	6/01/75	8/31/75	3,054
					,		
	Assistant Professor						
8.	Lynn A. Melton		13,077	43%	6/01/75	8/31/75	1,874
9.	Christopher A. Parr		12,330	9%	6/01/75	8/31/75	370
10.	William R. Thompson		11,826	62%	6/01/75	8/31/75	2,444
	7						
	Lecturer						
11.			9,600	38%	6/01/75	8/31/75	1,200
	TOTAL GRADUATE PR	OGRAM IN	CHEMISTRY				- \$12,263

SUMMER BUDGET FOR 1974/75 (continued)

Graduate Program in Communication Disorders

Item No.	Title Name	Tenure	Academic Rate (9-Month)	Pct.	Effectiv From	ve Dates Thru	Amount
	Professor						
12.	Aram Glorig		\$25,353	40%	6/01/75	8/31/75	\$ 3,380
	Associate Professor						
13.	Hanna K. Ulatowska		17,460	100%	6/01/75	8/31/75	5,820
	Assistant Professor						
14.	Alan K. Bird		13,815	100%	6/01/75	8/31/75	4,605
15.	John J. Godfrey		13,977	100%	6/01/75	8/31/75	4,659
	TOTAL GRADUATE PI	ROGRAM IN	COMMUNICATION D	ISORDE	RS		- \$18,464
Gradu	ate Program in Environ	nental Sci	lences				
Item No.	Title Name	Tenure	Academic Rate (9-Month)	Pct.	Effectiv From	e Dates Thru	Amount
		Tenure		Pct.			Amount
	<u>Name</u>	<u>Tenure</u> T		Pct.	From		<u>Amount</u> \$ 7,896
No.	Name Professor		(9-Month)		From 6/01/75	Thru	***************************************
No	Name Professor Ervin Fenyves G. Fred Lee		(9-Month) \$23,688	100%	From 6/01/75	Thru 8/31/75	\$ 7,896
No	Name Professor Ervin Fenyves		(9-Month) \$23,688	100%	From 6/01/75	8/31/75 8/31/75	\$ 7,896
No. 16. 17.	Name Professor Ervin Fenyves G. Fred Lee Associate Professor William Manton	T	(9-Month) \$23,688 25,560	100%	From 6/01/75 6/01/75	8/31/75 8/31/75	\$ 7,896 4,260
No. 16. 17.	Name Professor Ervin Fenyves G. Fred Lee Associate Professor	T	(9-Month) \$23,688 25,560	100%	From 6/01/75 6/01/75	8/31/75 8/31/75	\$ 7,896 4,260
No. 16. 17.	Name Professor Ervin Fenyves G. Fred Lee Associate Professor William Manton	T	(9-Month) \$23,688 25,560	100%	From 6/01/75 6/01/75	8/31/75 8/31/75	\$ 7,896 4,260
No. 16. 17.	Name Professor Ervin Fenyves G. Fred Lee Associate Professor William Manton Lecturer	T	(9-Month) \$23,688 25,560	100% 50%	From 6/01/75 6/01/75 7/16/75	8/31/75 8/31/75 8/31/75	\$ 7,896 4,260 2,544
No. 16. 17. 18.	Name Professor Ervin Fenyves G. Fred Lee Associate Professor William Manton Lecturer Alan Kvanli	T	(9-Month) \$23,688 25,560 15,264	100% 50% 100% 100% 75%	From 6/01/75 6/01/75 7/16/75 6/01/75	Thru 8/31/75 8/31/75 8/31/75	\$ 7,896 4,260 2,544 2,493 1,128

SUMMER BUDGET FOR 1974/75 (continued)

Graduate Program in Geosciences

Item	Title		Academic Rate		Effectiv	e Dates	
No.	Name	<u>Tenure</u>	(9-Month)	Pct.	From	Thru	Amount
	Professor						
22.	Martin Halpern	T	\$18,531	50%	8/01/75	8/31/75	\$ 1,030
23.	Charles E. Helsley	Т	22,761	39%	6/01/75	8/31/75	2,959
24.	Mark Landisman	T	22,761	75%	6/01/75	8/31/75	5,690
	Associate Professor						
25.	James B. Combs		16,353	41%	6/01/75	8/31/75	2,235
26.	Richard M. Mitterer	Т	15,264	100%	6/01/75	8/31/75	5,088
27.	James B. Urban	Т	15,957	50%	6/01/75	8/31/75	2,660
	<u>Assistant Professor</u>						
28.	Ronald W. Ward		16,353	50%	6/01/75	8/31/75	2,726
	TOTAL GRADUATE	PROGRAM IN	GEOSCIENCES				- \$22,388

Graduate Program in Management and Administrative Sciences

Item	Title	Academic Rate Effective		e Dates	2 Dates		
No.	Name	Tenure	(9-Month)	Pct.	From	Thru	Amount
29.	Professor Raymond P. Lutz	Т	\$22,968	100%	6/01/75	8/31/75	\$ 7,656
	Assistant Professor						
30.	Laurence Madeo		17,460	100%	6/01/75	8/31/75	5,820
31.	Larry J. Merville		18,036	100%	6/01/75	8/31/75	6,012
32.	Asger M. Nielsen		16,353	100%	6/01/75	8/31/75	5,451
33.	Klaus Truemper		17,460	50%	6/01/75	8/31/75	2,910
	Lecturer						
34.		•	8,136	38%	6/01/75	8/31/75	1,031
35.			8,136	38%	6/01/75	8/31/75	1,031
36.			8,136	38%	6/01/75	8/31/75	1,031

TOTAL GRADUATE PROGRAM IN MANAGEMENT AND ADMINISTRATIVE SCIENCES - \$30,942

SUMMER BUDGET FOR 1974/75 (continued)

Graduate Program in Mathematical Sciences

Item <u>No.</u>	Title Name	Tenure	Academic Rate (9-Month)	Pct.	Effective Dates From Thru		Amount
	Professor						
37.	Istvan Ozsvath	Т	\$25,038	100%	6/01/75	8/31/75	\$ 8,346
38.	Ivor Robinson	Т	30,519	100%	6/01/75	8/31/75	10,173
	Associate Professor						
39.	John W. Van Ness	T	21,519	50%	6/01/75	7/31/75	2,391
	Assistant Professor						
40.	Henry Fuchs		18,000	100%	6/01/75	8/31/75	6,000
	Lecturer						
41.	Vytas B. Gylys		9,027	75%	6/01/75	8/31/75	2,257
42.			9,027	75%	6/01/75	7/15/75	1,128
43.	***************************************		9,027	75%	6/01/75	7/15/75	1,128
44.			9,027	75%	7/16/75	8/31/75	1,128
45.			9,027	75%	7/16/75	8/31/75	1,128
	TOTAL GRADUATE PI	ROGRAM IN	MATHEMATICAL SC	IENCES			- \$33,679
Graduate Program in Physics							
Item No.	TitleName	Tenure	Academic Rate (9-Month)	Pct.	Effective Dates From Thru		Amount
	Professor						
46.	C. B. Collins	T	\$19,872	100%	6/01/75	6/30/75	\$ 2,208
	Assistant Professor						
47.	R. C. Chaney		14,499	100%	6/01/75	8/31/75	4,833
48.	A. J. Cunningham		12,753	100%	6/01/75	8/31/75	4,251
49.	S. M. Curry		12,429	100%	6/01/75	8/31/75	4,143
TOTAL GRADUATE PROGRAM IN PHYSICS \$15,435							

THE UNIVERSITY OF TEXAS AT DALLAS

SUMMER BUDGET FOR 1974/75 (continued)

Graduate Program in Science Education

Item No.	Title Name	Tenure	Academic Rate (9-Month)	Pct.	Effectiv From	e Dates Thru	Amount
	Associate Professor						
50.	James B. Urban	T	\$15,957	50%	6/01/75	8/31/75	\$ 2,660
	Lecturer						
51.	Nancy Lutz		9,027	75%	6/01/75	7/15/75	1,128
52.	Fred Fifer		9,027	75%	6/01/75	8/31/75	2,257
	TOTAL GRADUATE P	ROGRAM IN	SCIENCE EDUCATION	on			- \$ 6,045

THE BULLETIN OF THE UNIVERSITY OF TEXAS AT DALLAS

Graduate Catalog Issue June, $\underline{1975}$ [$\underline{4974}$], Volume $\underline{11}$ [$\underline{10}$], Number 5A

Published in October, December, February, April and two issues in June, with additional supplements in July and August

Send correspondence to The University of Texas at Dallas, P.O. Box 688, Richardson, Texas 75080.

General Offices of The University of Texas at Dallas are located at 2201 North Waterview Parkway, Richardson, Texas 75080.

Second Class postage is paid at Richardson, Texas. SEND FORM 3579 to Box 688, Richardson, Texas 75080.

Printed in the United States of America.

BOARD OF REGENTS THE UNIVERSITY OF TEXAS SYSTEM

OFFICERS

Allan Shivers, Chairman
[A.-G.-MeNeese, -Jr., - Chairman]
Dan C. Williams, Vice-Chairman
Betty Anne Thedford, Secretary

MEMBERS

[Terms-Expire-January,-1975]

[Frank-GErwinJr				
Dan-GWilliams				
Terms Expire January, 1977				
Mrs. Lyndon B. Johnson Stonewall A. G. McNeese, Jr Houston Joe T. Nelson, M.D Weatherford				
Terms Expire January, 1979				
James E. Bauerle, D.D.S.San AntonioEdward ClarkAustinAllan ShiversAustin				
Terms Expire January 1981				
Thos. H. Law				
THE UNIVERSITY OF TEXAS SYSTEM				
Officers of the Administration				
Charles A. LeMaistre, M.D				
Everitt Donald Walker, M.B.A., C.P.A Deputy Chancellor				

THE UNIVERSITY OF TEXAS AT DALLAS Officers of Central Administration

Bryce Jordan, Ph.D
Academic Affairs [Lee-HSmith,-Ph.Dviee-President-for Aeademie-Affairs]
Stewart C. Fallis, B.S Vice President for Business Affairs
James L. Crowson, LL.B
Development and University Relations James T. Dodson, M.S University Librarian
Officers of Academic Administration
Alexander L. Clark, Ph.D Acting Dean, Social Sciences
Aram Glorig, M.D Dean, Human Development Regina M.J. Kyle, Ph.D Executive Dean of Undergraduate Studies
Acting Dean. Arts & Humanities
Raymond P. Lutz, Ph.D Acting Dean, Management & Administrative
Sciences W. Roy Naugle, M.S Director of Admissions and Registrar
Patrick L. Odell, Ph.D Executive Dean of Graduate Studies
Claud S. Rupert, Ph.D Acting Dean, Natural Sciences &
Mathematics
[Patriek-LOdell-,-Ph.D
Acting-Head; -Graduate-Program-in-Environmental-Sciences;
Aeting-Head,-Graduate-Program-in-Special-Education
Regina-M.JKyle,-Ph.Deexecutive-Dean
of-Undergraduate-Studies
Example S. Johnson - Ph.D
Francis-SJohnson,-Ph.DExecutive-Dixector,-Center
for-Advanced-Studies David-WGanham,-M-A
for-Advanced-Studies Bavid-WGenham,-M-A
for-Advanced-Studies Bavid-W-Genhem,-M-A
for-Advanced-Studies Bavid-W-Ganham,-M-A
for-Advanced-Studies Bavid-W-Genham,-M-A
for-Advanced-Studies David-W-Ganham, MrA
for-Advanced-Studies David-WGenham,-M-A
for-Advanced-Studies David-W-Ganham, M-A
for-Advanced-Studies David-W-Ganham, MA
for-Advanced-Studies David-W-Ganham, M.A
for-Advanced-Studies David-W-Genham, M.A
for-Advanced-Studies David-W-Ganham, M.A
for-Advanced-Studies David-W-Genham, M.A
for-Advanced-Studies David-W-Ganham,-M.A
Jor-Advanced-Studies David-W-Genham, M.A
Joh-Advanced Studies David-W-Ganham, M.A
Jor-Advanced-Studies David-W-Genham, M.A
David-WGanham, M-A
Gor-Advanced-Studies Devid-W-Genham,-M-A
Gor-Advanced-Studies Devid-W-Genham,-M-A
Gor-Advanced-Studies Devid-W-Genham,-M-A
Gor-Advanced-Studies David-WGenham, M.A. Assistant-Director, Genter for Advanced-Studies Allan-Watson, Ph.D. Gor-Academic - Affairs - and -Director - of Admissions - and -Registrat Robert-EFielder, Ed.D. Robert-EFielder, Ed.D. Richard-AGaldwell, Ph.D. Chemistry-Director, Institute for Chemical Sciences Royston-GGlowes, Ph.D., D.Se. Androwed - Arabitate - Arabitate - Arabitate - Program - in Biology; Director, Institute for Molecular Biology Garl-BGolling, Jr., Ph.D. Charles-EHelsley, Ph.D. Geosciences; Director, Institute William-BHanson, Ph.D. Director, Institute for England in Geosciences Gr-Fred-Lee, Ph.D. Director, Institute for England in Geosciences Gryus-DLundell, Ph.D. Director, Institute for England in Geosciences Gr-Fred-Lee, Ph.D. Director, Institute for England in Thistitute Anagement-Studies; Head, Graduate - Program in Institute Graduate - Program in Geosciences Gryus-DLundell, Ph.D. Management-Studies; Head, Graduate - Program in International Management-Studies; Head, Graduate - Program in International Management-Studies; Head, Graduate - Program in Management And-Administrative-Sciences - Director, Institute-for Management-Administrative-Sciences

Other Officers of Administration

THE UNIVERSITY OF TEXAS AT DALLAS 1975-76 [1974-75]

TABLE OF CONTENTS

Administration	[4]
Information Directory	[6]
The University Calendar	[9]
Introduction	[11]
The Meaning of Graduate Education	[11]
History	[±±]
Academic Plan for 1975-76 [1974-75]	[±±]
Academic Program Structure	
Teacher Preparation and Professional Development	[12]
The Faculties	[12]
	[12]
[Admission-to-the-Undergraduate-Programs	
	[14]
Projected Graduate Programs	L 1
General Information	
The Southwestern Legal Foundation	[47]
Center for Continuing and Community Education	[,]
[Community Service Programs	+71
	[47]
	[18]
Marine Sciences Cooperative Program	~ ~
The University of Texas Regional Computer	[TO]
Center in North Texas	[10]
Campus Activities Programs	[20]
Counseling and Health Services	
International Students	
Living Arrangements	
Placement Services	- 18]
Special Activities	
· · · · · · · · · · · · · · · · · · ·	[23]
	[25]
	[85]
	[32]
	[37]
Graduate Program in Chemistry	[37]
Graduate Program in Communication Disorders	[**]
Graduate Instruction in Education	r / 1
Graduate Program in Environmental Sciences	[47]
Graduate Program in General Studies	r = 0 3
Graduate Program in Geosciences	[55]
Graduate Program in Human Development	
Graduate Program in Humanities	
Graduate Program in International Management Studies	
Graduate Program in Management & Administrative Sciences	
ofdeed and Order and the contract of the contr	[75]
Graduate Program in Molecular Biology	
2101000 1 x 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	[91]
Graduate Program in Political Economy	
Graduate Program in Science Education	[99]
Graduate Program in Special Education	103]
Faculty	107]
Research Scientists[113]
Research Associates[±±4]

INFORMATION DIRECTORY

OFFICES:	WRITE TO:	WHERE:
Admissions	Director of Admissions	McDermott Library
Financial Aid & Scholarships	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 & Career Planning	Coordinator of Placement	McDermott Library
Registration	Registrar	McDermott Library
Resident Status	Registrar	McDermott Library
Selective Service & Veterans Affairs	Registrar	McDermott Library
Student Employment	Coordinator of Financial Aid	McDermott Library
Student Health & 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

Telephone 690-

Admissions - Ext. 2341
Registrar - Ext. 2348
Other offices as listed - Ext. 2281

[INFORMATION-DIRECTORY]

[Graduate-Admission

Gontact-the-Director-of-Admissions-and-Registrar,-Ext--2341

Undergraduate-Admission

Gontact-the-Director-of-Admissions-and-Registrar,-Ext--2342

Foreign-Students/Student-Visas

Gontact-the-Director-of-Admissions-and-Registrar,-Ext.-2348

Housing

Gontact-the-Director-of-Student-Services,-Ext.-2281

Advice-on-Course-Registration

See-the-Graduate-Adviser-in-the-appropriate-Program

Loans-and-Scholarships

Gontact-the-Director-of-Student-Services,-Ext-2282]

[Employment

Gontact-the-Director-of-Student-Services,-Ext,-2282

Medical-Services

Gontact-the-Director-of-Student-Services,-Ext.-2282

Assistantships

Contact-the-appropriate-Program-Head

Transcripts-of-Records

Gentaet-the-Director-of-Admissions-and-Registrar,-Ext.-2348

Adding-and-Dropping-Courses

Gentaet-the-Director-of-Admissions-and-Registrer,-Ext.-2348

Veterans-Affairs

Contact-the-Director-of-Admissions-and-Registrery-Ext--2348]

Location and Address

Location - The 634 [608]-acre campus of The University of Texas at Dallas is situated approximately two miles west of North Central Expressway (U.S. Highway 75, Exit 26) and one mile east of Coit Road. The campus fronts on Floyd [Gampbell] Road where the main entrance[s] to the campus is[are] located. The University of Texas at Dallas is in the City of Richardson immediately north of the City of Dallas.

The Director of Admissions and Registrar's office is located in the McDermott Library. [Berkner-Hall]

Mailing Address - Post Office Box 688, Richardson, Texas 75080 Telephone - (214) 690-2341

Office Hours - Monday through Thursday, 8:30 a.m. - 7 p.m.; Friday, 8:30 a.m. - 5 p.m.; Saturday, 9 a.m. - 12 noon.

THE UNIVERSITY OF TEXAS AT DALLAS

OFFICE OF THE DIRECTOR OF ADMISSIONS AND REGISTRAR CALENDAR OF THE LONG SESSION OF 1975-1976

Fall Semester (15 Class Weeks) Plus One Week for Finals

	(15 blass meeks) 11ds one week 101 11dals
September 4-6	Thursday - Saturday. Registration, orientation, and advisement
	for the Fall Semester.
September 6	Saturday. Last day for registration without payment of a late
	registration fee.
September 8	Monday. Classes begin.
September 23	Tuesday. Twelith class day and date on which the official enroll-
	ment is taken.
September 29	Monday. Last day for making application for a graduate degree.
October 29	Wednesday. Last day for dropping courses with an automatic grade
	of W.
November 27-29	Thursday - Saturday. Thanksgiving Holidays.
December 10	Wednesday. Last day for presenting final copies of the Master's
	Thesis or Doctoral Dissertation, approved by Committee, to the
	Graduate Dean.
December 16	Tuesday. Last day of classes.
December 17-20	Wednesday - Saturday. Fall Semester final examinations. (Note:
December 17-20	Wednesday - Saturday, Fall Semester I Had examinations, (Note:
*>	Evening class examinations December 17 - 23, Wednesday - Tuesday).
December 24	Wednesday. Graduation Day. (No public exercise).
	Spring Semester
	(15 Class Weeks) Plus One Week for Finals
January 6-8	Tuesday - Thursday. Advisement and registration for the Spring
	Semester.
January 6-8 January 8	Semester. Thursday. Last day for registration without late registration
January 8	Semester. Thursday. Last day for registration without late registration charge.
January 8 January 12	Semester. Thursday. Last day for registration without late registration charge. Monday. Classes begin.
January 8	Semester. Thursday. Last day for registration without late registration charge. Monday. Classes begin. Tuesday. Twelfth class day and the date on which the official
January 8 January 12 January 27	Semester. Thursday. Last day for registration without late registration charge. Monday. Classes begin. Tuesday. Twelfth class day and the date on which the official enrollment count is taken.
January 8 January 12 January 27 January 30	Semester. Thursday. Last day for registration without late registration charge. Monday. Classes begin. Tuesday. Twelfth class day and the date on which the official enrollment count is taken. Friday. Last day for making application for a degree.
January 8 January 12 January 27 January 30 March 2	Semester. Thursday. Last day for registration without late registration charge. Monday. Classes begin. Tuesday. Twelfth class day and the date on which the official enrollment count is taken. Friday. Last day for making application for a degree. Tuesday. Last day for dropping courses with automatic grade of W.
January 8 January 12 January 27 January 30	Semester. Thursday. Last day for registration without late registration charge. Monday. Classes begin. Tuesday. Twelfth class day and the date on which the official enrollment count is taken. Friday. Last day for making application for a degree. Tuesday. Last day for dropping courses with automatic grade of W. Monday - Saturday, inclusive. Spring Break (Easter: April 18)
January 8 January 12 January 27 January 30 March 2	Semester. Thursday. Last day for registration without late registration charge. Monday. Classes begin. Tuesday. Twelfth class day and the date on which the official enrollment count is taken. Friday. Last day for making application for a degree. Tuesday. Last day for dropping courses with automatic grade of W. Monday - Saturday, inclusive. Spring Break (Easter: April 18)
January 8 January 12 January 27 January 30 March 2 March 15-20	Semester. Thursday. Last day for registration without late registration charge. Monday. Classes begin. Tuesday. Twelfth class day and the date on which the official enrollment count is taken. Friday. Last day for making application for a degree. Tuesday. Last day for dropping courses with automatic grade of W. Monday - Saturday, inclusive. Spring Break (Easter: April 18) Friday. Last day for presenting final copies of the Master's
January 8 January 12 January 27 January 30 March 2 March 15-20	Semester. Thursday. Last day for registration without late registration charge. Monday. Classes begin. Tuesday. Twelfth class day and the date on which the official enrollment count is taken. Friday. Last day for making application for a degree. Tuesday. Last day for dropping courses with automatic grade of W. Monday - Saturday, inclusive. Spring Break (Easter: April 18) Friday. Last day for presenting final copies of the Master's Thesis or Doctoral Dissertation, approved by Committee, to the
January 8 January 12 January 27 January 30 March 2 March 15-20 April 16	Semester. Thursday. Last day for registration without late registration charge. Monday. Classes begin. Tuesday. Twelfth class day and the date on which the official enrollment count is taken. Friday. Last day for making application for a degree. Tuesday. Last day for dropping courses with automatic grade of W. Monday - Saturday, inclusive. Spring Break (Easter: April 18) Friday. Last day for presenting final copies of the Master's Thesis or Doctoral Dissertation, approved by Committee, to the Graduate Dean.
January 8 January 12 January 27 January 30 March 2 March 15-20 April 16 May 1	Semester. Thursday. Last day for registration without late registration charge. Monday. Classes begin. Tuesday. Twelfth class day and the date on which the official enrollment count is taken. Friday. Last day for making application for a degree. Tuesday. Last day for dropping courses with automatic grade of W. Monday - Saturday, inclusive. Spring Break (Easter: April 18) Friday. Last day for presenting final copies of the Master's Thesis or Doctoral Dissertation, approved by Committee, to the Graduate Dean. Saturday. Last day of classes.
January 8 January 12 January 27 January 30 March 2 March 15-20 April 16 May 1 May 3-4	Semester. Thursday. Last day for registration without late registration charge. Monday. Classes begin. Tuesday. Twelfth class day and the date on which the official enrollment count is taken. Friday. Last day for making application for a degree. Tuesday. Last day for dropping courses with automatic grade of W. Monday - Saturday, inclusive. Spring Break (Easter: April 18) Friday. Last day for presenting final copies of the Master's Thesis or Doctoral Dissertation, approved by Committee, to the Graduate Dean. Saturday. Last day of classes. Monday - Tuesday. Reading Period.
January 8 January 12 January 27 January 30 March 2 March 15-20 April 16 May 1	Semester. Thursday. Last day for registration without late registration charge. Monday. Classes begin. Tuesday. Twelfth class day and the date on which the official enrollment count is taken. Friday. Last day for making application for a degree. Tuesday. Last day for dropping courses with automatic grade of W. Monday - Saturday, inclusive. Spring Break (Easter: April 18) Friday. Last day for presenting final copies of the Master's Thesis or Doctoral Dissertation, approved by Committee, to the Graduate Dean. Saturday. Last day of classes. Monday - Tuesday. Reading Period. Wednesday - Friday. Spring Semester final examinations.
January 8 January 12 January 27 January 30 March 2 March 15-20 April 16 May 1 May 3-4 May 5-7	Semester. Thursday. Last day for registration without late registration charge. Monday. Classes begin. Tuesday. Twelfth class day and the date on which the official enrollment count is taken. Friday. Last day for making application for a degree. Tuesday. Last day for dropping courses with automatic grade of W. Monday - Saturday, inclusive. Spring Break (Easter: April 18) Friday. Last day for presenting final copies of the Master's Thesis or Doctoral Dissertation, approved by Committee, to the Graduate Dean. Saturday. Last day of classes. Monday - Tuesday. Reading Period. Wednesday - Friday. Spring Semester final examinations. (Note: Evening class examinations Monday - Friday, May 3-7).
January 8 January 12 January 27 January 30 March 2 March 15-20 April 16 May 1 May 3-4	Semester. Thursday. Last day for registration without late registration charge. Monday. Classes begin. Tuesday. Twelfth class day and the date on which the official enrollment count is taken. Friday. Last day for making application for a degree. Tuesday. Last day for dropping courses with automatic grade of W. Monday - Saturday, inclusive. Spring Break (Easter: April 18) Friday. Last day for presenting final copies of the Master's Thesis or Doctoral Dissertation, approved by Committee, to the Graduate Dean. Saturday. Last day of classes. Monday - Tuesday. Reading Period. Wednesday - Friday. Spring Semester final examinations.
January 8 January 12 January 27 January 30 March 2 March 15-20 April 16 May 1 May 3-4 May 5-7	Semester. Thursday. Last day for registration without late registration charge. Monday. Classes begin. Tuesday. Twelfth class day and the date on which the official enrollment count is taken. Friday. Last day for making application for a degree. Tuesday. Last day for dropping courses with automatic grade of W. Monday - Saturday, inclusive. Spring Break (Easter: April 18) Friday. Last day for presenting final copies of the Master's Thesis or Doctoral Dissertation, approved by Committee, to the Graduate Dean. Saturday. Last day of classes. Monday - Tuesday. Reading Period. Wednesday - Friday. Spring Semester final examinations. (Note: Evening class examinations Monday - Friday, May 3-7). Saturday. Commencement (Public exercises)
January 8 January 12 January 27 January 30 March 2 March 15-20 April 16 May 1 May 3-4 May 5-7	Semester. Thursday. Last day for registration without late registration charge. Monday. Classes begin. Tuesday. Twelfth class day and the date on which the official enrollment count is taken. Friday. Last day for making application for a degree. Tuesday. Last day for dropping courses with automatic grade of W. Monday - Saturday, inclusive. Spring Break (Easter: April 18) Friday. Last day for presenting final copies of the Master's Thesis or Doctoral Dissertation, approved by Committee, to the Graduate Dean. Saturday. Last day of classes. Monday - Tuesday. Reading Period. Wednesday - Friday. Spring Semester final examinations. (Note: Evening class examinations Monday - Friday, May 3-7).
January 8 January 12 January 27 January 30 March 2 March 15-20 April 16 May 1 May 3-4 May 5-7	Semester. Thursday. Last day for registration without late registration charge. Monday. Classes begin. Tuesday. Twelfth class day and the date on which the official enrollment count is taken. Friday. Last day for making application for a degree. Tuesday. Last day for dropping courses with automatic grade of W. Monday - Saturday, inclusive. Spring Break (Easter: April 18) Friday. Last day for presenting final copies of the Master's Thesis or Doctoral Dissertation, approved by Committee, to the Graduate Dean. Saturday. Last day of classes. Monday - Tuesday. Reading Period. Wednesday - Friday. Spring Semester final examinations. (Note: Evening class examinations Monday - Friday, May 3-7). Saturday. Commencement (Public exercises)
January 8 January 12 January 27 January 30 March 2 March 15-20 April 16 May 1 May 3-4 May 5-7	Semester. Thursday. Last day for registration without late registration charge. Monday. Classes begin. Tuesday. Twelfth class day and the date on which the official enrollment count is taken. Friday. Last day for making application for a degree. Tuesday. Last day for dropping courses with automatic grade of W. Monday - Saturday, inclusive. Spring Break (Easter: April 18) Friday. Last day for presenting final copies of the Master's Thesis or Doctoral Dissertation, approved by Committee, to the Graduate Dean. Saturday. Last day of classes. Monday - Tuesday. Reading Period. Wednesday - Friday. Spring Semester final examinations. (Note: Evening class examinations Monday - Friday, May 3-7). Saturday. Commencement (Public exercises)

First Term (6 Weeks) - May 31 - July 9
Second Term (6 Weeks) - July 12 - August 20
Double Term (12 Weeks) - May 31 - August 20

May 31 Monday. Registration. Students registering for any course on May 31 may register and pay fees for all other courses to be taken during the entire Summer Session.

June 1	Tuesday. Classes begin.		
June 4	Friday. Fourth class day and the date on which the official		
	enrollment count is taken.		
June 14	Monday. Last day for making application for a degree.		
June 21	Monday. Last day for dropping First Term courses with automatic		
	grade of W.		
July 5	Monday. Independence Day. A holiday.		
July 6-7	Tuesday - Wednesday. Reading period for First Term courses.		
July 8-9	Thursday - Friday. Final examination for First Term courses.		
July 8-12	Thursday - Monday. Mid-Session vacation for Double Term courses.		
July 12	Monday. Registration for Second Term courses.		
July 13	Tuesday. Classes begin for Second Term courses.		
July 16	Friday. Fourth class day and the date on which the official		
	enrollment count is taken for Second Term courses.		
August 2	Monday. Last day for dropping Second or Double Term courses		
	with automatic grade of W.		
August 5	Thursday. Last day for presenting final copies of Master's		
	Thesis or Doctoral Dissertation, approved by Committee, to the		
	Graduate Dean.		
August 17-18	Tuesday - Wednesday. Reading period for Second Term and Double		
	Term courses.		
August 19-20	Thursday - Friday. Final examinations in Second Term and Double		
	Term courses.		
August 21	Saturday. Graduation day. (No public exercises)		

The Academic Calendar may be subject to change or modification.

[THE-UNIVERSITY-OF-TEXAS-AT-DALLAS Galendar-of-the-Long-Session-of-1974-1975

Fell-Semester (LS-Glass-Weeks)

August-28-29	Wednesday-ThursdayRegistration,-orientation-and-advisement
•	for-the-Fall-Samester-
August-29	Thereday best-day -for-registration-without-late-registration
S	epse es
	-Monday:Labor-Day:A-heliday:
	- Tuesday-Classes-seiges-
September-6	-Pridaybast-day-for-adding-courses,-registering-or-making-any
	ehanges-in-elass-schodule,-other-than-withdrawal-from-the
	- 2024-48-4-48-4-48-48-48-48-48-48-48-48-48-4
September-18	-WednesdayFwelfth-elass-day-and-the-date-on-which-the-official
	enrollment-esunt-is-taken.
September-23	-MondayLeet-day-fer-making-application-fer-a-graduate-degree-
September-30	-Mondaybast-day-for-dropping-courses-with-automatic-grade
0etober-28	-MondaysGourses-dropped-efter-this-dete-will-receive-an-auto- matic-grade-of-"WF";
November-28-30	
December-4	-WednesdayLest-day-for-presenting-final-copies-of-the-Masteris
	Theois-or-Dectoral-Dissertation,-approved-by-Committee,-to-the
	Gradusts-Dean-
December-12-14	-Thereday-SaturdayReading-period-
Becember-16-19	
	Evening-elass-examinations-Thursday-Wednesday,-December-12-18-)
December-20	-FridayCraduation-day(No-public-exercises+)]

[Spring-Somester (L5-Glass-Weeks)

```
January 8-9 --- Wednesday Thursday -- Advisement - and -registration - for - the - Spring
             Semester:
charge.
January-16-----Thursday. - Last-day for adding courses, - registering or making
             any-changes-in-class-schedule,-other-than-withdrawal-from-the
             University-or-from-a-particular-course.
enrollment-count-is-taken-
January-31-----Friday. -- Last-day-for-making-application-for-a-graduate-degree.
February-7----Friday---Last-day-Esr-dropping-cowrees-with-automatic-grade
             of-WPU,
matie-grade-of-"WF"
March-24-29------Monday-Saturday, -inelusive --- Spring-vaeation. -- (Easter: March-30.)
Thesis-or-Doctoral-Dissertation, -approved-by-Committee, -to-the
             Graduate-Bean.
May-5-6----Monday-Tuesday.--Reading-period.
Evening-elass-examinations-Monday-Friday,-May-5-9.)
Galendar-of-the-Summer-Session,-1975
                  First-Term-(6-Weeks)---June-2---July-L1
                  Second-Term-(6-Weeks)---July-l4---August-22
                 Double-Term-(12-Weeks)---June-2---August-22
June-2-----Monday:--Registration:--Students-registering-for-any-course-on
             June-2-will-register-end-psy-fees-for-all-other-sourses-to-be
             taken-during-the-entire-Summer-Session-
          ----Tuesday;---Glasses-begin;
June-5-----Thursday -- Last-day-for-adding-courses.
June-6------Friday -- Fourth-class-day-and-the-date-on-which-the-official
             enrollment-eount-is-taken-
        June-12----
             matte-grade-of-"WP".
June-16-----Monday:--Last-day-for-making-application-for-a-graduate-degree-
June-24------Tuesday:--First-Term-courses-dropped-after-this-date-will-re-
             eeive-an-automatie-grade-of-"WF"---Last-day-for-dropping-Double
             Term-eouroes-with-automatic-grade-of-"WP"-
July-4-----Friday---Independence-Day---A-holiday-
July-10-11-----Thursday-Friday--Final-examinations-for-First-Torm-courses-
July-10-14-----Thursday-Monday---Mid-Session-vecation-for-Double-Term-courses-
July-15-----Tuesday---Glasses-begin-for-Second-Term-courses-
July-17-----Thursday.--Last-day-for-adding-Second-Term-courses.--Double
             Term-courses-dropped-after-this-date-will-receive-an-automatic
             grade-of-"WF",
July-18------Friday.--Fourth-elaco-day-and-the-date-on-which-the-official
             earollment-count-io-taken-for-Second-Term-courses-
July-24---
        -----Thursday---Last-day-for-dropping-Second-Term-courses-with-auto-
             matie-grade-ef-"WP"-]
```

[A ugust - 5	wesday Second-Term-courses dropped-after this date will re-
e	e ive an automatic grade of "WF" -
August-7	hursdayLast-day-for-presenting-final-copies-of-Master's
177	hesis-or-Doctoral-Dissertation, approved by Committee, to the
G:	raduate Dean
August-19-20	wesday-WednesdayReading-period-for-Second-Torm-and-Double
Ŧ	
August -21-22T	hursday-Friday Final-examination-in-Second-Torm-and-Double
Ŧ	*************************************
August-23	aturdayGraduation-day(No-public-exercices.)]

INTRODUCTION

THE MEANING OF GRADUATE EDUCATION

From the dawn of mankind, the quest for knowledge has been fundamental to the human spirit. This endeavor eventually crystallized in the Middle Ages, as scholars handled together to form universities, which could, in an organized and stable manner, serve the goals of scholarship: preservation of knowledge, transmittal of knowledge to others, and acquisition of new knowledge.

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 convinced of the value of this activity that they willingly endure a multitude of discouragements, stemming from the elusiveness of truth, the uncompromising criticism of colleagues, and the skepticism of society. The quest for knowledge thus leads along a difficult path, requiring great perseverence and mental discipline. [Some-fall-beside-the-way, but-those-fortunate-enough to-be-able-to-press-on-gradually-persecive-horizons-of-vast-beauty, peace, and purpose.]

HISTORY

The University of Texas at Dallas was created in September, 1969, by Act of the 61st Texas Legislature, which enabled the transfer of the privately founded Southwest Center for Advanced Studies to the State of Texas.

Prior to becoming The University of Texas at Dallas, the Southwest Center for Advanced Studies had operated for approximately eight years as a privately supported research and teaching institution. The main academic thrust was in the fields of Atmospheric and Space Sciences, Geosciences, Molecular Biology, and General Relativity. As a private institution, SCAS engaged in many cooperative graduate-level activities with universities and colleges, both within its immediate geographic area as well as nationally and internationally. Ph.D. dissertation research opportunities were offered to graduate students from other institutions who later received doctorates from their "home" universities.

[Approximately-111-sponsored-research-projects-were-under-way-in-the-various Research-Institutes-of-The-University-of-Texas-at-Dallas-as-of-January-1,-1974---A significant-building-program-is-planned-through-1980.]

ACADEMIC PLAN FOR 1975-76

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 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.

Pursuant to this legislation, an Academic Plan has been developed for The University of Texas at Dallas. The plan is designed to carry out the wishes of the Legislature and also to afford innovative approaches to the basic task of providing a meaningful educational experience to students.

ACADEMIC PROGRAM STRUCTURE

As planned, The University of Texas at Dallas will be a university with several unique qualities. These will stem from an organization of people, facilities, and curricula which will provide for:

- Disciplinary integrity within an interdisciplinary context.
- The establishment of meaningful relationships between the student's specific curriculum and the entire world of work and ideas.
- A reduction in the scale of the undergraduate program, as it relates to the individual student, so that personalization occurs in a process which has in too many cases undergone severe depersonalization.

TEACHER PREPARATION AND PROFESSIONAL DEVELOPMENT

Special opportunities for teacher preparation and for the professional development of teachers are offered by the University of Texas at Dallas. These opportunities are designed in response to identified needs in the field and are built upon special strengths of the University. The degree of Master of Arts in Teaching (M.A.T.) is one which emphasizes subject-matter orientation. Its aim is to develop the master teacher whose competence in single or interdisciplinary areas is enhanced by the ability to encourage an environment and attitude conducive to learning. At present, this degree is offered in Mathematical Sciences, Science Education, Human Development, and Humanities. The M.A.T. will be offered in other areas in the future. In addition, a program leading to the Master of Science degree (M.S.) is offered in Special Education for teacher preparation in that field. Other post-baccalaureate programs in Special Education are 1) Language/Learning Disabilities Endorsement on a Provisional Certificate and 2) Generic Special Education Endorsement on a Provisional Certificate.

It is possible to fulfill requirements for the Professional Certificate concurrently with the earning of a Master's degree in Mathematical Sciences, Science Education, Humanities, Human Development, or Special Education. As a part of the coursework required by the individual program, the candidate for Professional Certification must include three semester hours in multi-cultural studies; this coursework emphasizes the multicultural characteristics of our society and the corresponding needs of children from culturally different backgrounds. 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).

This description is not intended to delimit the interests which the University has in teacher preparation. The planning of programs will continue to be sensitive to the needs of those confronted with both the challenge and the opportunity of teaching at all educational levels.

[PLANNED] UNDERGRADUATE PROGRAMS

Reenomico-and-Finance]

The undergraduate student at The University of Texas at Dallas will find his place as a member of a particular college. [{\frac{1}{2}-expected-that-eight-under-graduate-college: will-be-required-in-1975.}] The college is [will-be] the student's intellectual home on the campus. It will provide academic advisement, personal student services such as psychological and vocational counseling, and the base for most co- and extra-curricular activities. It will also provide a required interdisciplinary seminar which is planned as the capstone of all undergraduate degree programs. In short, it will guide the student through his undergraduate career to his degree.

Through the implementation of the [innovative] academic arrangement spelled out in the preceding section, The University of Texas at Dallas plans to offer course work and/or degree programs in the following areas at the beginning of the 1975-76 academic 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
[Anthropology	
A 150 52 and not one to the control of the control	
English	
French	
Geography	Dali≐ieal_Saiasaa
Geogeiences	
	Payehology
German	Paychology Russian
	Paychology Russian
German	Payehology Ruasian Sociology Spanioh
German	Payehology Russian Sociology Spanioh Educational-Media
German	Payehology Russian Sociology Spanioh Educational-Media
German	Payehology Ruasian Sociology Spanioh Educational-Media Special-Education
German	Payehology Russian Sociology Spanioh Educational-Media Special-Education Specch-Pathology-and

Information regarding the undergraduate programs is available through the office of the Director of Admissions. As a general rule, students preparing themselves for admission to The University of Texas at Dallas at the junior level in Fall, 1975, should adhere to the basic requirements for a bachelor's degree. Students should avoid, wherever possible, excessive concentration in a single discipline.

For further information about teacher preparation and Professional Certification, consult this Bulletin for details as follows:

Mathematical Sciences	(M.A.T.)	page
Science Education	(M.A.T.)	page
Human Development	(M.A.T.)	page
Humanities	(M.A.T.)	page
Special Education	(M.A.)	page
Special Education (End		page

[Special-opportunities-for-teacher-preparation-and-for-the-professional-development-of-teachers-are-offered-by-The-University-of-Texas-at-Dallas.—These-opportunities-are-designed-in-response-to-identified-needs-in-the-field-and-are-built upon-special-strengths-of-the-University.—The-degree-of-Master-of-Arts-in-Teaching (M.A.T.)—is-subject-matter-oriented.—Its-intent-is-to-develop-the-master-teacher whose-competence-in-single-or-interdisciplinary-areas-is-enhanced-by-the-ability-of the-individual-to-encourage-an-environment-and-an-attitude-within-the-classroom that-are-conducive-to-learning.—At-present,-this-degree-is-offered-in-Mathematical Sciences-and-Science-Education:—It-is-anticipated-that-it-will-be-offered-in-other areas-such-as-social-sciences-and-the-humanities-in-the-near-future.

A-program-leading-to-the-Master-of-Science-Degree-in-Special-Education-has been-approved-for-implementation---This-program-will-begin-no-later-than-September, 1975;-however,-students-may-initiate-application-at-any-time,-but-no-later-than January,-1975.

Other-graduate-programs-of-teacher-orientation-which-are-projected-at-The University-of-Texas-at-Dallas-include-a-graduate-program-for-educational-managers, and-M.A.T.-programs-in-the-Social-Sciences-and-in-the-Humanities.

At-the-undergraduate-level, beginning-in-1975, The-University-of-Texas-at Dallas-proposes-to-offer-innovative-and-relevant-educational-experiences-which-will assure-pre-service-teachers-of-competencies-appropriate-to-their-professional-roles. Such-competencies-will-assure-the-student-of-certification-to-teach-in-the-area-of his-subject-matter-concentration-as-it-may-be-appropriate-to-the-secondary-school curriculum.

This-description-is-not-intended-to-delimit-the-interests-which-the-university has-in-teacher-preparation---The-planning-of-programs-will-continue-to-be-sensitive to-the-needs-of-those-confronted-with-both-the-challenge-and-the-opportunity-of teaching-others-at-all-educational-levels-]

THE FACULTIES

At the heart of the academic program structure of The University of Texas at Dallas are the faculties. As used herein, the term faculty denotes the body of teachers and researchers who belong to a particular discipline, for instance, the [molecular] biology faculty. A faculty organizes itself, designates a chairman, and serves as the voice of its discipline on the campus. It does not constitute a department, since there are to be no departments within the University. The chairman is the convener of the faculty, and the spokesman for it.

ADMISSION-TO-THE-UNDERGRADUATE-PROCRAMS

Admission

Admission-by-transfer-is-the-primary-means-of-gaining-entrance-as-an-under-graduate-to-The-University-of-Texas-at-Dallas.--Any-student-with-fifty-four-(54) semester-hours-or-eighty-one-(81)-quarter-hours-of-lower-division-work-may-transfer from-an-institution-which-is-fully-approved-by-the-appropriate-regular-accrediting agency-to-The-University-of-Texas-at-Dallas-beginning-in-1975.--Such-students-must present-a-cumulative,-minimum-grade-point-average-of-2.0-on-a-4.0-system-and-have satisfied-the-necessary-prerequisites.

Concurrent-Admission

Goneurrent-Admission-is-a-unique-approach-to-the-needs-of-those-students
planning-to-enroll-as-upper-division-students-at-The-University-of-Texas-at-Dallas.
Its-intent-is-to-facilitate-the-smooth-transition-of-students,-through-counseling
and-academic-planning,-to-enrollment-at-the-junior-level-at-The-University-of-Texas
at-Dallas.

A.---Any-student-in-the-top-one-helf-of-hig-high-school-graduating-class,-ostab-lishing-a-score-of-800-on-the-Scholastic-Aptitude-Test-(SAT)-or-18-on-the-American Gollege-Test-(AGT),-is-cligible-for-Concurrent-Admission-to-The-University-of-Texas at-Dallas---Students-holding-Goneurrent-Admission-etatus-will-be-permitted-to-enroll for-upper-division-courses-at-The-University-of-Texas-at-Dallas-beginning-in-1975, subject-to-their-presenting-fifty-four-(54)-semester-hours-or-eighty-one-(81) quarter-hours-of-lower-division-work-with-a-cumulative-grade-point-average-of-2-0 on-a-4-0-system-for-all-lower-division-work-and-having-satisfied-the-necessary prerequisites-

B:---Students-who-do-not-meet-the-requirements-outlined-in-paragraph-"A"

(above)-will-be-eligible-for-Goneurrent-Admission-upon-presentation-of-twentyseven-(27)-semester-hours-eredit-with-a-cumulative-minimum-grade-point-average-of
2:5-on-a-4:0-system:--Students-holding-Goneurrent-Admission-status-will-be-permitted-to-enroll-for-upper-division-courses-at-The-University-of-Texas-at-Dallas
beginning-in-1975;-oubject-to-their-presenting-fifty-four-(54)-semester-hours-or
eighty-one-(81)-quarter-hours-of-lower-division-work-with-a-cumulative-grade-point
average-of-2:0-on-a-4:0-system-for-all-lower-division-work-and-having-satisfied
the-necessary-prerequisites-

Individual-Approval

The-Undergreducte-Committee-on-Admissions-may-review-the-educational-back-ground-and-experience-of-any-individual-and-grant-admission-to-junior-standing-at The-University-of-Texas-at-Dallas-beginning-in-1975.

Trial-Basis

Any-student-who-has-completed-at-least-fifty-four-(54)-semester-hours-or equivalent-quarter-hours-but-no-more-than-seventy-five-(75)-semester-hours-or equivalent-quarter-hours-of-college-level-work-may-be-admitted-on-a-trial-basis during-the-summer-session-at-The-University-of-Texas-at-Dallas-beginning-in-1976-A-student-admitted-on-a-trial-basis-must-successfully-complete-12-semester-hours of-course-work-with-a-grade-point-average-of-2-0-or-above-on-work-attempted-during the-summer--In-the-subsequent-semester-the-student-will-be-subject-to-the-same sendemic-requirements-as-regularly-admitted-students-to-remain-in-good-standing-]

GRADUATE PROGRAMS

The history of the present Graduate Programs at The University of Texas at Dallas is short but distinguished. As a result of research and study at the University and its predecessor, the Southwest Center for Advanced Studies, one or more Ph.D. or Master's degrees in physics, mathematics, geosciences, and biology have been awarded at Oklahoma State University, The University of Texas at Austin, The University of Brussels, Southern Methodist University, North Texas State University, Emory University, The University of Brazil, Texas A&M University, The University of Cologne, Tokyo Metropolitan University, the University of London, the Federal University of Rio de Janeiro, and the University of Witwatersrand in South Africa.

The University of Texas at Dallas has the opportunity, quite rare in higher education, of building from the top down; that is, the institution started with graduate and post-doctoral education. This permits the building of an especially strong nucleus for each faculty as the graduate offerings develop in new areas.

The organization of the Graduate Programs reflects programmatic function rather than academic departmentalization. The Graduate Programs of the University are the administrative and budgetary units which offer the graduate teaching and degrees. They may be interdisciplinary in nature (for example, environmental science[s]), or they may lie primarily within one discipline (for example, physics). Teachers are drawn from one or more faculties for the various Graduate Programs. Heads of Graduate Programs are responsible for the academic, administrative, and fiscal aspects of Graduate Programs. These administrators thus have the primary duty of seeing that their Graduate Programs attract good candidates, provide superior teaching, and produce graduates worthy of the discipline and the institution.

There has existed since the establishment of the Southwest Center for Advanced Studies, the predecessor of The University of Texas at Dallas, a distinguished and well-recognized program of research. The nature of this research has ranged widely, from the instrumentation of lunar exploration hardware to problems in the biochemical repair of animal cells. Such activity continues to represent a major thrust of The University of Texas at Dallas.

[Where-research-funding-is-available,] \underline{A} [aculty member will spend part of his time as a member of one of the research institutes within The University of Texas at Dallas' Center for Advanced Studies.

Present Graduate Programs

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.

Chemistry (M.S., Ph.D.)

Communication Disorders (M.S., Ph.D.)

Environmental Sciences (M.S., Ph.D.)

General Studies (M.G.S.)

Geosciences (M.S., Ph.D.)

Human Development (M.S., M.A.T.)

Humanities (M.A., M.A.T., Ph.D.)

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.)

Molecular Biology (M.S., Ph.D.)

Physics (M.S., 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).

[Chemistry-(M.S.)

Gommunication-Didorders-(M.S.,-Ph.D.)

Environmental-Sciences-(M.S.,-Ph.D.)

Geosciences-(M.S.,-Ph.D.)

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.)

Molecular-Biology-(M.S.,-Ph.D.)

Physics-(M.S.,-Ph.D.)

Science-Education-(M.A.T.)

Special-Education-(M.S.)

For-detailed-descriptions-of-these-Gaaduate-Pasgaams,-see-the-specific-entry-under Gaaduate-Pasgaams-(beginning-on-page-37-)]

Projected Graduate Programs

In expanding the scope of graduate offerings as provided in the 1969 Act of the Texas Legislature, The University of Texas at Dallas [has-ne-intention-of-dupli-eating] does not intend to duplicate graduate offerings which exist in other institutions simply to produce a standard set of degree curricula. Instead, consistent with constraints imposed by the need for high quality faculty in certain basic disciplines, the University will expand graduate offerings only into those areas where a need can be shown locally, regionally or nationally.

Pursuant to a rational plan of development, and considering the present University of Texas at Dallas programs as well as the needs of the North Central Texas Area, we hope to implement the following graduate degree programs in 1976-1977:

Industrial Biosciences (M.S., Ph.D.)

Landscape Architecture (M. in L.A.)

Design (M. in D.)

Planning (M. in P.)

Political Economy (M.A., M.A.T., Ph.D.)

[Humanities-(M.A., M.A.T., Ph.D.)

Phermacy-(Pherm.-D.)

Human-Behavieral-Systems-(M.A., M.A.T., Ph.D.)]

Summary of the Academic Program Structure

The faculties of the University will furnish intellectual and human resources appropriate to the needs of the institution as teachers of undergraduate courses, as members of the college faculties providing academic advisement and the required undergraduate interdisciplinary seminars, as teachers of graduate courses in Ghaduate Programs, or in all three capacities. [Where research funding is available,] A faculty member will also spend part of his time as a member of one of the research institutes within the Center for Advanced Studies. 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.

GENERAL INFORMATION

THE SOUTHWESTERN LEGAL FOUNDATION

One of the country's most prestigious organizations in continuing advanced education and research is [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 Oil and Gas Educational Center, the Southwestern Law Enforcement Institute, and the Municipal Legal Studies Center. For further information, write The Southwestern Legal Foundation, Box 688, Richardson, Texas 75080.

CENTER FOR CONTINUING AND COMMUNITY EDUCATION

The University offers a series of non-credit courses and seminars through its Center for Continuing and Community Education. These activities are structured to serve the adult education and professional upgrading needs for a broad spectrum of the citizens of North Texas. Further information is available from the office of the Center for Continuing and Community Education, The University of Texas at Dallas, Box 688, Richardson, Texas, 75080.

COMMUNITY-SERVICE-PROCRAMS

The-University-will-offer,-beginning-in-1974-75,-a-series-of-non-eredit-courses and-seminars-through-its-Community-Service-Programs.—These-activities-will-be structured-to-acrve-the-adult-education-needs-and-professional-upgrading-for-a broad-spectrum-of-the-citizens-of-North-Texas.—Further-information-is-available from-the-office-of-Community-Service-Programs,-The-University-of-Texas-at-Dallas, Richardson,-Texas,-75080.]

LIBRARY

The Eugene McDermott Library is an impressive new facility on the UT-Dallas campus. [The-Library-of-The-University-of-Texas-at-Dallas-is-temporarily-located on-the-second-floor-of-the-Lloyd-V.-Berkner-Hall-while-the-Eugene-McDermott-Library is-being-prepared-for-occupancy-in-1975.]

The library resource materials are growing rapidly to support the developing curriculum and continuing research efforts of the University.

Several notable collections have been acquired within 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 of Central and South American culture. The total collection of the Library numbers 125,000 volumes and is expected to grow to 350,000 volumes by September, 1975.

More than 2000 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.

The University Library maintains cooperative working arrangements locally with Southern Methodist University Library, Dallas Public Library, and libraries of members of the Interuniversity Council of North Texas. Library access through the IUC includes both academic and industrial collections.

Under a three-year contract, secured through efforts of the IUC, the Library has access to the shared data of the Ohio College Library Center through a computer terminal.

The library cooperates statewide in the Texas Information Exchange—an interlibrary exchange network among State—supported and private institutions. Library facilities are available on a regional basis through Regional Bibliographic Centers and the Regional Medical Library Program. Nationally the UT-Dallas Library has access to search—and—exchange facilities of the Library of Congress and to the Smithsonian Scientific Information Exchange.

In addition to the traditional services, the Library provides a variety of developing instructional and media services for the campus. Instructional design, evaluation and curriculum planning services are offered. Audiovisual 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.

LABORATORY AND SPECIAL FACILITIES

A listing of specific laboratory facilities at The University of Texas at Dallas is given in the individual Academic Program descriptions.

Other special facilities include: carpenter shop, glass-blowing shop, instrument shop, machine shop, printing and duplicating shop, drafting facility, engineering support groups. These areas are manned by skilled engineers, technicians, and craftsmen, who provide support to the academic and research activities of the institution. Many specialized services are available throughout the institution and within its institutes.

MARINE SCIENCES COOPERATIVE PROGRAM

The University of Texas Marine Sciences Institute (Galveston location), has joined with the Geosciences Program of The University of Texas at Dallas to offer graduate work in marine geophysics, marine geology and certain aspects of terrestrial and planetary geophysics.

THE UNIVERSITY OF TEXAS REGIONAL COMPUTER CENTER IN NORTH TEXAS

The University of Texas Health Sciences Center at Dallas and The University of Texas at Arlington have joined with The University of Texas at Dallas in the development of a Regional Computer Center Network. This centralizing effort yields significant advantages to the three institutions. [It-is-the-nature-of-electronic data-processing-that-well-conceived-centralization-results-in-reduced-processing costs;-improved-service;-and-increased-computing-power.]

The Regional center became operational in the Spring of 1973. The facility [computing hardware] includes an IBM 370/155 computer. [with-1-million-bytes-of core-storage-and-50-million-bytes-of-disk-storage-] Interactive and Remote Job Entry terminals, located on the three campuses, provide the means of submitting input to the regional facility.

CAMPUS ACTIVITIES PROGRAMS

The student representatives of Student Government through their various sub-committees assist in the development of programs of cultural, social, and recreational activities for the campus that are designed to make free time activities a valid part of the education process. All students are invited to serve on any of the committees and to lend their energies toward making campus life more meaningful and enjoyable.

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 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 and from the activity advisors.

COUNSELING AND HEALTH SERVICES

Counseling Services

The University Counseling office provides personal and social counseling on either an individual or group basis to enrolled students. The counselors will occasionally make referrals to community agencies for long-term therapy or specialized counseling. Both graduate and undergraduate students are encouraged to contact the office regarding any personal difficulty or concern.

The Reading, Writing, Study Skills Program offers assistance to students who wish to improve their abilities in these areas. Specific programs are available to aid in increasing vocabulary, improving reading, writing, and study techniques in specific academic areas. These programs are offered in the form of instructed short courses, guided self-paced programs, and independent work. For detailed information students are encouraged to contact personnel in the Reading Laboratory.

Health Center

The Student Health Center, located in the McDermott Library, is available to all regularly enrolled students. The Center's facilities, which are for outpatients only, are staffed by professionally trained medical personnel. Services provided will suffice for most routine health needs of students. Although hospitalization, surgery, intensive care, and elaborate diagnostic services are not available on campus, the staff will assist in making arrangements with family or other physicians for the care of serious illnesses. The Center is equipped to provide routine, minor medical care. Services include counseling on health matters.

No charge is made for the professional services by the medical personnel. Charges are made for medicine and any additional medical services required for minor treatment of students.

Information regarding insurance is available from the health service personnel.

<u>Health Records - Prior to registration, each student will be required to submit:</u>

- 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 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.

INTERNATIONAL STUDENTS

All Foreign Students are requested to register with the Office of Student Services upon their arrival at The University of Texas at Dallas. Foreign Students may apply through this office to participate in the "Host Family Program" in which an American family in the community invites the foreign student to join in family activities, particularly during the traditional holiday celebrations. The Office also sponsors several international student organizations and activities in which students may desire to participate.

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 an individual policy in their home country that would provide coverage while in the United States.

LIVING ARRANGEMENTS

UT-Dallas does not own or operate student housing facilities. In order to assist students in finding suitable living quarters in the community, the Office of Student Services maintains a list of off-campus housing. Included in this list are rooms in the homes of local families and apartment complexes within reasonable commuting distance.

PLACEMENT

The Office of Financial Aid and Placement will provide students assistance in finding employment. Students who register may obtain a listing of available positions and will have an opportunity to interview with recruiters from various companies, organizations and agencies.

Students may develop a credentials file which will, upon request, be reproduced and forwarded to each interested employer. There will be a \$1.00 fee to cover the costs of reproduction and postage each time the file is reproduced and mailed. Students may obtain assistance in the development of their resumes and other credentials from the Office of Financial Aid and Placement. A resume reproduction service is available for a nominal fee.

The Office of Financial Aid and Placement has also established a Career Planning Library which contains materials concerning career planning, careers with specific companies, organizations and agencies, salary information, careers in specific fields, and employment trends.

[STUDENT-AFFAIRS

At-present-the-student-population-of-The-University-of-Texas-at-Dallas-con-sists-of-a-relatively-small-number-of-highly-motivated-and-mature-graduate-students-Accordingly,-the-student-affairs-programs-are-of-a-different-nature-than-one-would find-on-the-usual-undergraduate-campus---Extensive-student-service-activities-are planned-beginning-in-the-fall-semester,-1975-

The Director of Student Services is in charge of extra-curricular activities and is available to assist students in adjusting to the university community. All students are invited and encouraged to turn to the Director for assistance and counsel in matters dealing with orientation, general information, housing, interpretation of University regulations, student activities, discipline, and other more personal affairs.

[Arts-and-Humanities

Am Arts and Homanities series, coordinated by a faculty student group in cooperation with the Office of Student Services, offers many and varied cultural activities including art exhibits, lectures on matters of public interest, musical events, and a wide range of film selections.

The Dallas Area

Dallas-is-a cosmopolitan city-with a variety-of-entertainments.—It-has-a large number-of-restaurants-specializing-in-international-cuisine.—There are many cultural-activities-including the musical-events-of-the-Dallas-Symphony-Orehestra, the-Dallas-Givic-Opera-Company, the-Dallas-Givic-Music-Association, and the-Dallas-Chamber-Music-organization.—Each group presents a number-of-concerts-and-performances-during-the-year, many-featuring-guest-artists.—A variety-of-dramatic shows-is-presented by-a number-of-theater-groups-in-Dallas, including-several-dinner-theaters.—The-Dallas-Theater-Center, the only-theater-designed by-Frank-Lloyd Wright, houses-a-permanent-drama-company.—Student-and-student-group-rates-are available-for-many-of-the-musical-and-theater-productions.—Available-also-in-the Dallas-area-are-art-galleries, including-the-Dallas-Museum-of-Fine-Arts, various museums, an aquarium, a-planetarium, a-zoo, and many-other-places-of-interest.

Sports and Recreation

The City of Richardson; adjacent to The University of Texas at Dallas campus, through its Parks and Recreation Department; offers a variety of outdoor and indoor recreational activities. Additionally, the Dallas Metropolitan Area offers a wide range of off campus activities. Dallas has professional baseball, seccer, football; and ice hockey teams. Sports and recreational facilities are widely available in the city, and include a large number of municipal swimming pools and tennis courts.

The average temperature in January is 45°, and in August 85°. The annual rainfall is 34 inches. The area is generally quite dry and skies are sunny. This encourages participation in such outdoor activities as horseback riding, flying, golf, and sailing. Many large lakes surround the city. The Culf of Mexico, the ski-areas of New Mexico and the border towns of Old Mexico are within reasonable distances:

Host-Family-Program-for-Foreign-Students

The Dallas Committee for Foreign Visitors, sponsored by the Dallas Council on World Affairs, has been instrumental in welcoming foreign students to the area. They are responsibile for a "Wost Family Program for Foreign Students" in which the host family invites the foreign student into its home and includes the student in family activities, particularly during the traditional holiday celebrations. Students should request a Wost Family through the Office of Student Services.

Living Arrangements

No student-housing-facilities-are owned or operated by The University of Texas at Dallas. Therefore, each student must make individual arrangements for suitable living quarters off campus. Living accommodations are available within a few minutes of the campus. Specific information may be obtained from the Office of the Director of Student Services.

[Fransportation

The University of Texas at Dallas student will be expected to provide his own transportation to and from the campus. Currently, no public transportation is available; however, the Dallas Transit System does provide commuter service into the center of Dallas from several places near the Richardson city limits. Bus schedules are available in the Office of Student Services.

Cafeteria

The-University-of-Texas-at-Dallas-operates-a-cafeteria-for-students,-faculty and-staff:-Current-hours-are-8-a:m:-to-1:30-p:m:,-weekdays-only,-with-soup-and sandwich-service-from-2-p:m:-to-9:30-p:m:

Health-Services

Because-of-the-present-small-number-of-students,-The-University-of-Texas-at Dallas-offers-no-on-campus-health-services.--Referrals-are-made-to-local-physicians when-the-student-is-in-need-of-health-care.

Counseling-Services

If-problems-arise-concerning-personal-adjustment;-students-are-encouraged-to take-up-the-matter-with-their-Graduate-Advisor-or-the-Director-of-Student-Services-Students-have-access-to-counseling-services-available-within-the-community-upon referral:--No-professional-counseling-service-is-available-on-the-campus-of-The University-of-Texas-at-Dallas.

Student-Government

Students-at-The-University-of-Texas-at-Dallas-have-adopted-a-Charter-for-the Graduate-Student-Congress-and-have-elected-officers-to-a-Graduate-Student-Council. Interested-students-should-contact-the-Office-of-Student-Services.]

SPECIAL ACTIVITIES

Clark Foundation Summer Program

This program offers highly selected students positions as Research Participants in on-going research programs at The University of Texas at Dallas. The chief objectives are to give each participant a realistic view of research and the opportunity to appraise his interest in a field of scholarly endeavor. For further information, contact:

Director UTD/Clark Foundation Summer Program The University of Texas at Dallas Box 688 Richardson, Texas 75080

Closed Circuit Inter-University Television (TAGER)

TAGER (The Association for Graduate Education and Research) was established as an independent, privately financed association of educational institutions to promote cooperative activities in academic programs. The principal facility of TAGER is a closed-circuit television teaching system which operates among colleges and universities in North Central Texas. The TAGER central switching and distribution system is located on The University of Texas at Dallas campus.

Currently seven private and two State institutions are interconnected by the TAGER network. Graduate-level credit courses originate on the campuses of the participant institutions for inter-campus exchange. Additionally, courses are made available at many industrial sites, so that students may pursue advanced educational career objectives without leaving their industrial locations.

TAGER provides a unique opportunity for graduate students in North Central Texas. The number of credit courses carried over the TAGER television network now exceeds 100 each semester. Graduate students registered at The University of Texas at Dallas may take advantage of these selected course offerings depending upon their regular academic load. Students must register for TAGER courses at the normal registration period for UT-Dallas and must have the approval of the Graduate Adviser and Registrar. Questions concerning the academic program of TAGER should be directed to the TAGER Campus Director [Mr.-Gaylin-S.-Fuller] of the University of Texas at Dallas.

The TAGER system is also used for a variety of other academically oriented activities that enrich the educational programs of all institutions; presentation of seminars, workshops, conferences, eminent guest lecturers and scholars, and similar activities.

EXPENSES

Tuition and General Fees

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.

In <u>accordance</u> [accord] 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. [Personal checks-for-amounts-in-excess-of-the total-registration-cost-may-not-be-accepted.]

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 table below, according to the number of semester hours for which registration is completed. [he-registers.]

It is the <u>students responsibility</u> [responsibility of each student] to establish, prior to registration, the correct residence classification. [his-residency of-classification.] This may be determined through the Office of the Director of Admissions and Registrar. [(See Appendix A.)]

14.00

TUITION AND GENERAL FEES*

REGULAR SESSION AND 12 WEEK SUMMER TERM

	Texas			
Semester	Resident	Non-Resident	Foreign	
Hours	Students	U.S. Citizens	Students	
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	
1 2 3 4 5 6 7 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 14	52.00	520.00	200.00	
14	56.00	560.00	200.00	
15	60.00	600.00	210.00	
Each				
Additional				
Hour	4.00	40.00	14.00	

*The above table includes tuition only since the Fall, 1975 Use Fees and Student Services Fee for UT-Dallas have not yet been established. Typically, Use Fees of \$4 - \$6 per hour and a Student Services Fee of \$2.50 per hour with a maximum of \$30.00 are assessed by U.T. System institutions. These fees may be established at the beginning of any semester or term as determined by the Board of Regents.

SUMMER SESSION (Six-Week Term)*

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 Additional Hour 4.00 40.00

^{*}The above table includes tuition only since the Fall, 1975 Use Fees and Student Services Fee for UT-Dallas have not yet been established. Typically, Use Fees of \$4 - \$6 per hour and a Student Services Fee of \$2.50 per hour with a maximum of \$15.00 are assessed by U.T. System institutions. These fees may be established at the beginning of any semester or term as determined by the Board of Regents.

	•			
				Y.S. Gitiznos
lemester			Foreign	
fours		-C itizens	S tuden ts	Spring, -1971
ong-Session				
1			\$ 200.00	
	50.00			
	50,00			
	50.00		200:00	68,0 0
5	50.00	200.00	299+00	
	50,00	240,-00	200+00	101.00
7	50:00	280.00	200-00	117,5 0
8	50,00	320.00	200:00	134.00
	50.00	360+00	200,00	159-50
	50,00	400:-00	200.00	167.00
	50.00	440,00	299.99	183-50
	50.00	489,-99	200+00	200-00
13	52.00	520,00	200+00	200-00
	56-09	560+00	200+00	200-00
	60.00	60000	210.00	290,-99
ammer-Sessi	on6-Week-Tern	2		
	25.00	49-99	199-99	50,-00
2	25:00	80*00		50,00
3	25+00	120.00	100,00	51+50
	25,00	260*00	100-00	68+90
5	25-00	200.00	100:00	84-50
6	25.00	240+90	190,90	
7	28+00	280-00	100-00	117-50
8			112.00	
9	36-00			

Refund of Tuition

Upon notification of official withdrawal from the Director of Admissions and Registrar, the business office shall make refund of tuition as follows:

For the Long Session (Fall and Spring Semesters):

- (a) during the first week of class work of a semester, a refund of 70 per cent of the applicable portion of the tuition;
- (b) during the second week, 60 per cent;
- (c) during the third week, 40 per cent;
- (d) during the fourth week, 20 per cent;
- (e) during the fifth week and thereafter, nothing.

For the Summer Session:

- (a) 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;
- (b) during the fourth, fifth and sixth day, 50 per cent; thereafter, nothing.

A student who registers at the beginning of the Summer Session 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.

An immediate refund cannot be made to a student who withdraws within fifteen days after payment of his fees; but, upon request, a check covering all refunds 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 tuition for the Spring Semester refunded.

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

OTHER CHARGES

Late Registration Charge

If the student registers late, a fee of \$5.00 must be paid for the first day, plus \$2.50 for each additional late day, with the maximum charge being \$15.00 for any one semester or term.

Laboratory Fee

A fee of \$8.00 shall be assessed for each laboratory course, 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.

Change of Schedule Fee

For every change in schedule initiated at the student's request, including change of section, the fee will be \$4.00.

Audit Fee

Students at UT-Dallas may, with the approval of the instructor and of the Registrar, audit courses. Auditing grants the privilege of hearing and observing only 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 at UT-Dallas 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 \$5.00 is charged for cap and gown rental and each degree candidate pays a \$2.50 diploma fee. A student who graduates in absentia pays a graduation fee of \$5.00. A student who completes degree requirements at another institution must pay a registration in absentia fee of \$15.00.

Transcript Fee

The fee for each official transcript is \$1.00. No partial or incomplete transcript or copies of documents from other universities will be issued.

See "Transcripts" entry under admission to the Graduate Programs 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; failure to return keys furnished by the University, or for damage to, or loss of, any other University property. When the 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 paying such charges immediately. Students having charges in excess of the deposit must pay the excess immediately. Pending payment, no credit shall be allowed on the work of that semester or term, and the student will not be permitted to register the following semester at UT-Dallas.

This deposit, less charges, will be returned to the student 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 on 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 Summer Session	4.00
Second Summer Session	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 Security Service.

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 Security Service (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 at the end of the Fall Semester or beginning of the Spring Semester may receive a partial refund of the parking fee provided they turn in the remnants of their decal at the campus police office 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 UT-Dallas a bad check is subject to being dropped from the University unless he or she makes it good within five days after official notification by the Bursar's Office.

Identification Cards

All students, faculty, and staff will be issued an identification card pack 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 non-transferrable. 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.

Books

Acquisition of appropriate textbooks and other literary materials will be the responsibility of each student.

[Refund-of-Tuition

Upon-notification-of-official-withdrawal-from-the-Director-of-Admiosions-and Registrar,-the-business-office-shall-make-refund-of-tuition-as-follows:--(a)-during the-first-week-of-class-work-of-a-semester,-a-refund-of-70-per-cent-of-the-applicable-portion-of-the-tuition;-(b)-during-the-second-week,-60-per-cent;-(c)-during the-third-week,-40-per-cent;-(d)-during-the-fourth-week,-20-per-cent;-(e)-during the-fifth-week-and-thereafter,-nothing.

In-no-case-shall-the-total-refund-reduce-the-registration-and-tuition-fee-paid to-less-than-the-minimum-prescribed-by-law.

An-immediate-refund-cannot-be-made-to-a-student-who-withdraws-within-fifteen days-after-payment-of-his-fees;-but,-upon-request,-a-check-covering-all-refunds-will be-mailed-to-the-address-left-with-the-Director-of-Admissions-and-Registrar-

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

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

Late-Registration-Fee

Any-student-registering-after-the-appointed-day(s)-for-registering-for-that semester-will-be-required-to-pay-a-special-charge-of-\$5.00-to-defray-the-costs-of the-extra-services-required-to-effect-his-late-registration-

Student-Services-Fee-(Required)

Every-student-who-registers-in-The-University-of-Texas-at-Dallas,-unless-he-is registered-in-absentia-(see-page-31),-shall-pay-the-Student-Services-Fee-(Required). The-fee-is-\$3.00-per-semester-hour-for-either-semester-of-the-long-session-or-the entire-twelve-week-Summer-Session-but-will-not-exceed-\$10.00-The-fee-is-\$1.50-per semester-hour-in-either-six-week-term-of-the-Summer-Session-but-will-not-exceed \$5.00-Refund-of-the-student-services-fee-is-made-on-the-same-basis-as-the-refund of-tuition-for-students-withdrawing-from-the-University,-as-outlined-above-

Laboratory-Fee

A-fee-of-\$8.00-shall-be-assessed-for-each-laboratory-course.

Change-of-Schedule-Fee

For-every-change-in-schedule-initiated-at-the-student-s-request,-including change-of-section,-the-student-shall-pay-a-fee-of-\$4.00.

[Audit-Fee

Auditing-of-courses-by-officially-admitted-students-is-permitted-with-the-ap-proval-of-the-Graduate-Adviser,-instructor,-and-the-Director-of-Admissions-and Registrar.--Auditing-grants-the-privilege-of-hearing-and-observing-only-and-does not-grant-credit.--When-approval-has-been-granted,-the-applicant-pays-a-fee-of \$5.00-for-each-course.--Withdrawal-from-an-audit-course-is-permissible,-but-with-out-refund:

Graduation-Fee

Every-student; -at-the-time-of-filing-for-graduation; -shall-pay-a-graduate-fee in-the-amount-of-\$25:00: -Should-the-student-not-graduate; -the-payment-will-be carried-forward:

Transcript-Fee

A-student-shall-pay-a-fee-of-\$1.00-for-each-official-transcript.--No-partial or-incomplete transcript-will-be-issued, nor-will-copies-of-documents-from-other universities.--See-"Transcripts"-entry-(page-25)-for-information-regarding-alteration-of-records.

General-Property-Deposit

Every-student-not-registered-Án-absentáa-must-make-a-general-property-deposit of-\$10.00.—This-deposit-is-subject-to-charges-for-property-loss,-damage-or-break-age,-or-violation-of-rules-in-any-University-library-or-laboratory;-failure-to-return-keys-furnished-by-the-University,-or-for-damage-to-or-loss-of-any-other University-property---When-the-student-no-longer-has-a-balance-in-his-property-de-posit-account,-he,-upon-notice-from-the-University,-will-be-required-to-restore the-deposit-to-the-original-amount-by-paying-such-charges-immediately---Students having-charges-in-excess-of-the-deposit-may-pay-the-excess-immediately---Pending payment,-no-eredit-will-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 to the student upon request at the end-of-his-career as a student 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 The University of Texas at Dallas shall be for feited, and the deposit shall become operative to the permanent use and purpose of the Student Property Deposit Scholarships,

Books

Acquisition-of-appropriate-textbooks-and-other-literary-materials-will-be-the responsibility-of-each-student-

Living-Expenses

Most-of-what-a-student-spends-will-depend-upon-his-own-desires-and-budgetary
limitations.--The-single-student-should-anticipate-something-like-\$250-00-per-monthThis-figure-would-include-housing,-food,-medical-incurance,-and-other-necessitiesIt-would-not-include-costs-for-entertainment-or-transportation-]

[Group Health Insurance

A-group health-insurance plan, in cooperation with The University of Texas-at Arlington, is available to students and their dependents on an optional basis.

Rates for health-insurance coverage depend upon the family status of each student.

FINANCIAL AID

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. Scholarships

1. State Scholarships and Tuition Waiver Programs

There are a variety of 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 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.

a. University Scholarship

Section 54.051(m) V.T.C.A. Education Code authorized the development of a scholarship account for needy students. The account is funded by taking twenty-five cents out of each hourly charge for resident students and \$1.50 out of each hourly charge for non-resident students. No assessment is made against the tuition paid by alien students, or graduate students enrolled for thesis or dissertation only where such credit is the final credit hour requirement for the degree in progress. Accordingly, these two categories of students are not eligible for this type of award.

To be considered for one of these awards, one must submit a general application for student financial assistance with the necessary documents to establish the family financial status.

b. Connally-Carillo Act

Under this 1967 Act of the 60th Texas Legislature, "citizens of Texas" under twenty-five years of age who graduated from an accredited high school in 1967 or subsequently, who were in the upper twenty-five per cent of their class or scored in the top twenty per cent of the national norm on the College Entrance Examination Board or American College Testing Program Examination, whose gross family income for the last tax year was not more than \$4,800, and who are not receiving other scholarship awards, may qualify for exemption from payment of tuition and certain fees.

Applications and complete details are available through the Office of Financial Aid and Placement upon request. There is no deadline for applying for these benefits, but applications should be submitted in advance of the registration Period to allow adequate time for review and notification of award.

2. Private Scholarships

There are several privately-funded scholarship programs available to students. Interested students should contact the Coordinator of Financial Aid and Placement for specific information and application forms for the following scholarship funds:

- 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 Scholarship of the University of Texas at Dallas

B. Long Term Loans

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 Program

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, must meet the academic requirements of the institution, and demonstrate financial need. The current interest rate for this program is seven percent per annum. 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 not exceed ten years. Application forms are available from the Coordinator of Financial Aid and Placement.

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 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 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. To apply the student should contact the Financial Aid and Placement Office.

4. Other Loan Programs

The Financial Aid and Placement Office maintains a listing of loan funds which are available from other sources such as private foundations. Students are encouraged to visit the Office of Financial Aid and Placement to review the information regarding these loan programs.

C. Short Term Emergency Loan Funds

Through this program funds are made available to students for emergency expenses. The loans from this program are to be repaid within the semester they are made. Contributions to these funds have been made by Mrs. Lloyd V. Berkner, Kiwanis Club of Richardson and Richardson Savings and Loan Association.

D. Employment Opportunities

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 applying for the College Work Study program must submit a Student's Financial Statement to the Office of Financial Aid and Placement. Information regarding part-time institutional employment is available through the Personnel Office.

E. Fellowships

The Financial Aid and Placement Office maintains a listing of many sources of fellowships for graduate education. Interested students may review the information available in the Office of Financial Aid and Placement.

[FINANCIAL-AID

General

Several-sources-of-financial-assistance-to-students-are-available,-including part-time-assistantships,-student-loan-funds,-and-partial-tuition-fee-exemptions. Students-should-contact-the-Coordinator-of-Financial-Aid-and-Student-Employment for-detailed-information-and-application-materials.]

[Part-Time-Employment

A-limited-number-of-part-time-assistantships-are-available-

In-order-for-a-student-to-be-eligible-for-an-assistantship, he must be-enrolled as-a-full-time-student, that is, for a minimum-of-nine-semester-hours-in-both-Fall and Spring-semesters, or six-semester-hours during-the-Summer-term.—Exceptions-must be-documented-and-approved-by-the-Program-Head-and-Graduate-Dean-

The-University-has-an-approved-Gollege-Work-Study-program-that-is-funded through-the-Department-of-Health,-Education,-and-Welfare.

Student-Loan-Funds

bong-term-student-loan-funds-are-available;

Wational-Direct-Student-Loan

NDSL-funds-provide-up-to-\$1,500-per-year-or-a-maximum-of-\$7,500-for graduate-students.—The-loans-bear-interest-at-the-rate-of-3%-per-annum and-repayment-of-principal-may-be-extended-ever-a-10-year-period-beginning-after-the-student-completes-his-education.—There-are-several-exeptions-whereby-up-to-50%-of-the-loan-may-be-eancelled.

Federally-Insured-Loans

The-Federally-Insured -Loan-Program-was-established-in-the-Wigher
Education-Act-of-1965. -- Under-this-program-a-student-may-berrow-from
a-bank-or-other-financial-institution-after-his-application-has-been
certified-by-the-University. -- The-major-objective-of-this-program-is-tomake-loans-available-to-otudento-from-middle-and-upper-income-families
who-may-not-be-able-to-qualify-for-one-of-the-other-programs-requiring
financial-need-for-eligibility. -- A-student-may-borrow-as-much-as-\$1,500
per-year-with-interest-at-the-rate-of-7%-per-annum-

Hinson-Hazlewood-Loan-Program

The-Hinson-Hazlewood-Loan-Program-was-established-by-the-State-of-Texas for-the-benefit-of-Texas-residents.--Graduate-students-may-borrow-up-to \$1,500-per-academic-year-up-to-a-total-of-\$7,500-with-interest-at-the rate-of-7%-per-annum---Thio-program-now-qualifies-under-the-Federally Insured-Loan-Program-referred-to-above-

A-limited-short-term-emergency-loan-fund-is-available-to-otudents-who-may need-temporary-assistance-with-loans-normally-to-be-repaid-within-the-semester-Gurrent-contributors-to-this-fund-include-Richardson-Savings-and-Loan-Association, Kiwanis-Glub-of-Richardson,-and-Mrs.-Lloyd-V.-Berkner-

Partial-Tuition-and-Fee-Exemption

As-a-State-supported-institution-of-higher-education-in-Ismae,-the-University is-authorized-to-award-partial-tuition-and-fee-exemptions-to-atudents-who-qualify-

Seholarships

The-University-of-Texas-et-Ballas-Womenls-Glub-spensors-the-Amelia-A--Lundell Textbook-Scholarship-Fund-which-makes-annual-awards-for-the-purchase-of-textbooks-]

[The-Richardson-Environmental-Action-League-Scholarship-Fund-provides scholarships-each-semester-to-students-whose-field-of-study-relates-to-the-environ-mental-sciences.

The-Strauss-Award-is-made-for-scholastic-achievement-and-leadership:--Addi-tional-scholarship-information-is-available-in-the-Office-of-Financial-Aids-

Vocational-Rehabilitation

The-Texas-Rehabilitation-Commission-offers-assistance-for-twition-and-non-refundable-fees-to-students-who-have-certain-disabling-conditions-provided-their vocational-objectives-have-been-approved-by-a-TRG-Counselor--Examples-of-such conditions-are-orthopedic-deformities,-emotional-disorders,-diabetee,-epilepsy, heat-conditions,-etc---Other-services-are-also-available-to-assist-the-handicapped student-to-become-employable---Application-for-such-service-should-be-made-at Texas-Rehabilitation-Commission,-4333-North-Central-Expressway,-Dallas,-Texas-1

ADMISSION TO THE GRADUATE PROGRAMS

Prospective students seeking admission should write to the Director of Admissions. An application form is included at the back of this catalog. The completed application must 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 ENROLLMENT THE FOLLOWING JANUARY, JUNE OR AUGUST. 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:*

- 1. A Bachelor's Degree from an accredited institution in the United States or its equivalent as determined and approved by the Executive Dean for Graduate Study.
- 2. Fluency in English. Foreign students must submit scores on the Test of English as a Foreign Language (TOEFL). (See page).

*It is important that students recognize that additional requirements must be met to qualify for admission to a Graduate Degree Program.

The requirements for admission to a Graduate Degree Program are:

- 1. Be admitted to graduate study.
- 2. In the student's major field and related fields, a grade average of B or better on upper-division (junior and senior level) and graduate work already taken.
- 3. Adequate subject preparation for the proposed graduate major.
- 4. Students are encouraged to take the Graduate Record Examination administered by the Education Testing Service, 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 must submit scores on the Admissions Test for Graduate Study in Business (ATGSB). (See page).

5. Acceptance by the Committee on Graduate Studies of the proposed major area.

[ADMISSION-TO-THE-GRADUATE-PROGRAMS

Prospective-students-seeking-admission-should-write-to-the-Director-of-Admissions--An-application-form-is-included-at-the-back-of-this-eatalog.--The-completed-application-must-be-returned-to-the-Director-of-Admissions.--Official-transcripts-of-all-academic-work-beyond-high-school-are-required.--STUDENTS-ARE-URCED TO-APPLY-BY-JANUARY-FOR-ENROLLMENT-THE-FOLLOWING-JUNE-OR-AUCUST.--Address-inquiries to:--Director-of-Admissions-and-Registrar,-or-to-a-specific-Program-Wead,-The University-of-Texas-at-Dallas,-P.O.-Box-688,-Richardson,-Texas--75080.

The-requirements-for-admission-to-Graduate-Study-are:

- 1.---A-Backelor-o-Degree-from-an-accredited-institution-in-the-United-States or-equivalent-training-in-a-foreign-institution.
- 3.---A-satisfactory-score-on-the-Graduate-Record-Examination-Aptitude-Test
 for-all-applicante-----with-the-single-exception-of-these-applying-for
 the-Graduate-Program-in-Management-and-Administrative-Sciences,-who-must
 submit-scores-on-the-Admission-Test-for-Graduate-Study-in-Business
 (ATGSB).--(See-below,-page-26).
- 4----Adequate-oubject-preparation-for-the-proposed-graduate-major-
- xojem-beaccerdy-the-Gemmittee-en-Graduste-Studies-Studies-cha-yd-sacamajor
- 6----Fluoney-in-English---Foreign-students-must-submit-scores-on-the-Test-of English-as-a-Foreign-Language-(TOEFL)-]

Transcripts

The term "transcript of records" is understood to refer 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. Unofficial transcripts, grade reports or copies of transcripts of one university issued by another university will not be accepted. Neither will copies of transcripts from other universities 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. [Transcripts-are-not-accepted-from-students-]

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."

The Graduate Record Examinations Aptitude Test

Students who are required to take the GRE will take the test at their own expense. The GRE is given six times a year, usually in October, December, January, February, April, and July. Test applications may be obtained from the Educational Testing Service (P.O. Box 1503, Berkeley, California 94701 or P.O. Box 995, Princeton, New Jersey 08540). Since applications for the test must be received approximately eighteen days before each testing date, applicants should secure the booklet and application blank at least a month in advance. Specify by both institution and code that your test score be sent to:

<u>Institution</u>
The University of Texas at Dallas

R-6897-3

[The -Graduate-Record-Examinations-Aptitude-Test

The Aptitude Test of the Graduate Record Examinations is designed to test preparation and aptitude for graduate study, and a caticfactory score must be submitted by everyone sceking admission to the Graduate Programs of The University of Texas at Dallas. Issued from the Educational Testing Service, and taken at the applicant's own expense, it is given six times a year, usually in October, December, January, February, April, and July. Test applications may be obtained from the Educational Testing Service (P.O. Box 1503, Berkeley, California 94701 or Pro. Box 995, Princeton, New Jersey 98540). Since applications for the test must be received approximately eighteen days before each testing date, applicants should secure the booklet and application blank at least a month in advance. Specify by both institution and code that your test seems be sens to:

Institution The-University-of-Texas-at-Dallas Code R-6897-3

NOTE: --All-applicants-are-urged-to-register-and-complete-the-CRE-at-their-earliest opportunity.--Students-seeking-to-qualify-for-admission-in-the-fall-term-of-an academic-year-should-take-the-examination-no-later-than-January-of-the-preceding year-

Admission Test for Graduate Study in Business

The Admission Test for Graduate Study in Business (ATGSB) 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 satisfactory score must be submitted by every applicant to the Graduate Program in Management and Administrative Sciences 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.

Specify by both institution and code that your test score be sent to:

Institution
The University of Texas at Dallas

Code R-6897

English Requirements

Students are required to be able to speak English well and to write it in a good expository style. Proficiency will be evaluated in the course work and in other contacts with faculty members. Students whose native language is not English are required to submit scores from the Test of English as a Foreign Language (TOEFL). Applications from students whose native language is not English will not be acted upon until such time as an acceptable score has been received, or until other proof has been given of proficiency in English. Instruction in written and spoken English is available.

[Medical-Requirements

Regardless-of-classification,-before-a-new-or-re-admitted-student-may-register at-the-University,-he-must-have-satisfied-the-following-health-requirements:

- 1. -- Gompletion of the medical-history form -
- 2---Physical-examination-by-a-licensed-physician-within-90-days-prior-to registration---This-physical-examination-must-be-completed-by-a-private physician-and-cannot-be-obtained-through-the-University.
- 3----A-negative-chest-X-ray-or-a-negative-skin-test-for-tubereulosis,-dated not-more-than-90-days-before-registration.
- 4---An-immunization-against-poliomyelitis,-consisting-of-at-least-3-doses-of
 oral-vaccine,-provided-one-or-more-doses-have-been-reached-since-the
 fourth-birthday---(Polio-vaccine-is-not-required-for-persons-nineteen
 years-of-age-or-older-)

Exclusions-from-compliance-are-allowable-on-an-individual-basis-for-medical contraindications-and-religious-conflicte---Students-falling-into-these-eategories must-submit-affidavite-as-specified-by-law:

- tr---The-student-must-present-an-affidavit-signed-by-a-physician,-duly
 registered-and-licensed-under-the-Medical-Practice-Act,-in-which-it-is
 stated-that,-in-the-physicians-s-opinion,-the-immunisation-required
 would-be-injurious-to-the-health-and-well-being-of-the-student-or-any
 member-of-his-family-or-household;-or
- 2.---The-student-must-present-an-affidavit-signed-by-the-applicant,-or,-if-a
 minor;-by-his-parent-or-guardian;-stating-that-the-immunisation-conflicts
 with-the-tenets-and-practice-of-a-recognized-church-or-religious-denomination-of-which-the-applicant-is-an-adherent-or-member;-provided;
 however;-that-this-exemption-does-not-apply-in-times-of-emergency-or
 epidemic-declared-by-the-Commissioner-of-Health-of-the-State-of-Texas-

Requirements-promulgated-by-the-State-Board-of-Health-pursuant-to-statute are-oubject-to-change-at-any-time-by-that-body---To-be-certain-that-no-changes have-occurred,-a-student-should-contact-the-Director-of-Student-Services---The necessary-medical-forms-are-mailed-to-all-admitted-students-by-the-Office-of Student-Services-]

Conditional Admission

A student desiring to work toward an advanced degree in an area in which his undergraduate training is insufficient may be admitted with the understanding that he undertake course work and other study to make up the deficiencies noted by his Graduate Adviser, and that such make-up work will be in addition to the regular degree requirements.

When a student with less than minimum grade-point average, or with an unsatisfactory score on the Required Entrance Examination, is admitted on the recommendation of a Graduate Adviser, then that Graduate Adviser may assign special conditions regarding the number of semester hours to be taken and specific grade-point average to be maintained. If these conditions are not met, the student may be barred from subsequent registration in the relevant Graduate Program.

Enrollment for Graduate Study

A student who does not wish to enter a Graduate Degree Program, or who has been denied admission to it, may seek admission through the Director of Admissions as a special student, provided he has the approval of the Executive Dean for Graduate Studies. It is the student's responsibility to be certain about prerequisites, but the student is encouraged to talk with Graduate Advisers. Students who qualify for regular admission are encouraged to enroll as degree students and pursue an advanced degree.

[Enrollment-as-a-Non-Degree-Student

A-student-who-does-not-wish-to-enter-a-Graduate-Program,-or-who-has-been denied-admission-to-it;-may-seek-admission-through-the-Director-of-Admissions-as a-non-degree-student;-provided-he-has-the-approval-of-the-instructor-and-the Graduate-Adviser.—Students-who-qualify-for-regular-admission-are-encouraged-to enroli-as-degree-students-and-pursue-an-advanced-degree.—Normally,-an-individual may-not-receive-credit-toward-a-graduate-degree-for-courses-taken-as-a-non-degree student:—Exceptions-to-this-regulation-require-approval-of-the-Program-Head-and concurrence-of-the-Graduate-Dean.]

GENERAL ACADEMIC REGULATIONS

GRADUATE PROGRAMS

Student Responsibility

The student is responsible for fulfilling degree requirements and enrolling for courses that fit into his degree program. He is likewise responsible for awareness of the University regulations with regard to the standard of work required for continuance in the Graduate Program. For a complete list of requirements for a particular degree, the student should combine the general requirements given below and the special requirements listed under the specific Program in which he becomes a candidate.

Course Numbering System

All courses are identified by a 4-digit number preceded by the name (or abbreviation) of the Program. Courses beginning with the number 5 are graduate courses that will be available to selected advanced undergraduates in 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.

[Course-Numbering-System

All-courses-are-identified-by-a-3-digit-number-preceded-by-the-name-(or abbreviation)-of-the-Program.—Courses-numbered-500-599-are-graduate-courses-that will-be-available-to-selected-advanced-undergraduates-in-1975;-these-courses-are generally-of-a-broad-or-introductory-nature.—Courses-numbered-600-899-are;-and will-be;-open-only-to-graduate-students;-these-are-generally-advanced-courses. Courses-numbered-900-999-are-researeh-courses;--All-thesis-courses-are-numbered-908-and-all-dissertation-courses-909.]

Grades and Grade-Point Average

Grades used are: A, B, C, and F; S (satisfactory); U (Unsatisfactory); X (incomplete); NC (non-credit); \underline{W} (withdrawn) [WP-(withdraw-passing); WF-(withdraw-failing);] and AU (audit).

Grade points are computed on the following basis: A (4 points per semester hour), B (3), C (2), F $[e_{\overline{x}}-WF]$ (0). The grades S, U, X, NC, WP and AU are not counted.

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 of these courses. Students taking research related to thesis or dissertation, may, at the option of the instructor, be given a grade of X, S, or U, as appropriately determined for the time period.

[Thesis-and-dissertations-receive-letter-grades-only.-Students-taking-Thesis or-Dissertation-courses,-or-Research-related-to-thesis-or-dissertation,-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-of-these-courses.--The-limitation-of-one-year-on on-the-period-during-which-an-X-grade-ean-be-changed-to-a-letter-grade-does-not apply-to-thesis-and-dissertation.]

Any course except thesis or dissertation may be graded either by letter grading (A, B, C, F) or by pass-fail grading (S-U). Students taking the same course at the same time may be graded by either system, but an irreversible decision in this respect must be made for each student by 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 [present] 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 *twenty per cent* of the hours for any master's degree may be taken on a Pass-Fail (S-U) 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 (S-U) basis is not limited by the twenty per cent maximum designated for the master's degree.

Course Load

The minimum course load for a graduate student to be considered full time during the long session is nine (9) semester hours. The normal course load for a graduate student during the long session is twelve (12) semester hours; the maximum is fifteen (15) semester hours. The minimum course load for a graduate student to be considered full time during the Summer session is six (6) semester hours. The normal course load for a graduate student during the Summer session is eight (8) semester hours; the maximum is ten (10) semester hours [except in the M.A.T. programs, where the maximum is twelve (12) semester hours]. Registration in excess of these maximums must have the recommendation of the Graduate Adviser and approval of the Graduate Dean and will be permitted only under exceptional circumstances. A student who is employed should consult with his Graduate Adviser about combined course and work load.

Continuation in the Graduate Programs

Registration in the Graduate Programs beyond the first semester (or Summer session) is dependent upon two main factors:

- 1. Satisfactory progress in meeting any admission conditions that were imposed; and
- 2. Maintenance of a 3.0 cumulative grade-point average in graduate courses at The University of Texas at Dallas.

If, at the end of a semester, a student's cumulative grade-point average is below 3.0 he will be informed by a letter from the Registrar [Director of Student Records] that he is on academic probation. A student who is placed on academic probation for two consecutive semesters is subject to dismissal.

Registration Days

In the University calendar, registration days for each semester are included. It is urged that students plan their work with care, consulting especially their Graduate Adviser and those of the teaching staff under whom their work will be taken and bearing in mind the requirements for the degree they seek.

Registration for Courses

The only way to become a member of a class is to register for it through the proper registration procedure. The instructor receives the student's name by official notice from the Registrar and in no other way. A student may not receive credit for a course for which he is not registered.

Continuous Registration

Degree candidates are expected to maintain continuous registration until all degree requirements are satisfied. Students who have completed course registration (including the thesis) must maintain continuous registration. By failing to register for one semester hour or more a student breaks his registration and must be re-admitted. A "re-admitted student" is required to satisfy the curriculum requirements existing at the time of the re-admission. 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.

[Continuous-Registration

Degree-candidates-are-expected-to-maintain-continuous-registration-until-all degree-requirements-are-satisfied:—Students-who-have-completed-course-registration (including-the-thesis)-must-maintain-continuous-registration:—By-failing-to register-for-one-semester-hour-or-more-a-student-breaks-his-registration-and-must be-re-admitted:—A-"re-admitted-student"-is-required-to-satisfy-the-curriculum-re-quirements-existing-at-the-time-of-the-re-admission:—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:

Veteran's Affairs

The VA Clerk, in the Office of the Director of Admissions and Registrar, is responsible for Veteran's benefits. All questions regarding Veteran's benefits should be so addressed.

NOTE: Veterans are responsible for notifying the VA Clerk of their desire to enroll for benefits.

Student Visas

The Visa Clerk, 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.

Paying Fees as a Part of Registration

A student is not registered, is not in the University, and is not entitled to University privileges until he has paid all fees and tuition.

Late Registration

Students are urged to register on the appointed days. No student may register for credit later than the last registration day (see University Calendar), except under unusual circumstances and then only with the approval of the Registrar and the Head of the Program concerned.

Adding and Dropping Courses, and Withdrawal From the University

[The-fourth-class-day-is-the-last-day-for-adding-courses,-registering-or-making any-changes-in-class-schedule,-other-than-withdrawal-from-the-University-or-from-a particular-course.]

Any student wishing to change his class schedule, or course enrollment, 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. Consult with and secure approval of the Graduate Adviser for his Program.
- 3. A student may drop a course before mid-semester with a grade of W after counseling with the instructor of the course. After mid-semester, a student becomes responsible for the course and may drop the course with a grade of W, if passing, and F if failing.
- [3.--If-a-student-registers-for-a-course-and-drops-without-the-official approval-of-the Registrar, F-will-be-recorded-as-the-grade. A-course is not-considered-officially-dropped-until-the-student-returns-a-Drop-Card signed-by-the-instructor-and-the-Graduate-Adviser-to-the-Office-of-the Registrar, indicating-a-grade-of-WP-or-WF.]
- 4. A student who finds it necessary to withdraw from the University during a semester must arrange for his official withdrawal through the Graduate Adviser and Registrar. Any other procedure will lead to failure in all courses for which the student is registered.
- 5. If a student withdraws from The University of Texas at Dallas or transfers to another school, he may re-enter the University only on the basis of an application for re-admission accompanied by a transfer of credit from all schools attended after leaving The University of Texas at Dallas. This regulation does not apply to students absent during the Summer Session.

Residence Requirements

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 graduates from The University of Texas at Dallas.

In Absentia Registration

In Absentia registration (i.e., registration for no course work) constitutes an arrangement for the candidate who desires to complete the Degree requirements during the semester of In Absentia registration. This could include a candidate who is removing an incomplete (X) grade; or a candidate who has left U.T.D. and is transferring authorized and approved credit to qualify for the Degree; or a candidate who submitted the thesis or dissertation for the degree too late for the previous semester deadline; or any other similar reason where it can be determined that the degree will be earned during the semester of In Absentia registration. Such a candidate may, for a nominal fee (see page), register during the semester or summer session in which the Degree will be received.

[In-absentia-Registration-(ire-,-registration-for-no-course-work)-constitutes an-arrangement-for-the-candidate-who-has-finished-the-last-requirements,-including submission-of-thesis-or-dissertation,-for-his-degree-too-late-for-the-semester deadline-but-before-the-first-registration-day-of-the-following-semester.--Such-a candidate-may,-for-a-nominal-fee,-register-in-the-next-following-semester-or Summer-session-for-the-sole-purpose-of-receiving-his-degree-in-that-semester-or Summer-session-

Correspondence Courses

Correspondence courses are not accepted for graduate credit.

Transfer of Credit

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 University of Texas System. Credit for graduate courses taken outside The University of Texas System can be transferred only if approved by the Graduate Adviser and the committee on Graduate Studies, and is normally limited to a total of six semester hours; transfer of more than six hours' credit requires approval of the Graduate Dean. [In cases where such transfer is approved, the student must still meet the residence requirement of two full semesters.]

Concurrent Registration in The University of Texas System Component Institutions

A graduate student enrolled at The University of Texas at Dallas may apply for admission to a course in another University of Texas System component institution, subject to making the proper arrangements with the cooperating institutions. Similarly, a graduate student from any University of Texas System component institution other than The University of Texas at Dallas may apply for admission to a course at The University of Texas at Dallas subject to making proper arrangements with the cooperating institutions. Interested individuals should contact the Registrar at each institution for further information.

Time Limits

Master's Degree: Normally, a full-time student will complete the requirements for a Master's Degree in two years. All requirements for a Master's Degree must be completed within one six-year period. Work over six years old is lost and can be reinstated only by special permission of the Graduate Dean, upon recommendation of the Program's Committee on Graduate Studies.

Doctoral Degree: No official time limit has been imposed on acquiring the Doctoral Degree; however, all doctoral work is subject to review by the Graduate Dean.

Graduation Under a Particular Catalog

General and specific requirement for degrees in Graduate Programs may be altered in successive catalogs. The student is bound only by the requirement of a single catalog. This will normally be the catalog in force at the time of his admission, within a six-year limit, unless he elects to be bound by a subsequent catalog. This regulation applies to general academic degree requirements, but not to operating regulations and procedures. These change frequently, and the student is bound by regulations in force in the current semester.

PROCEDURES AND REQUIREMENTS FOR GRADUATE DEGREES

Committee on Graduate Studies

Each Program has a Committee on Graduate Studies which oversees the early academic careers of all graduate students in the Program. It is represented on the Admissions Committee by its chairman.

Graduate Adviser

The chairman of the Committee on Graduate Studies of a particular Program, who is a faculty member, serves as Graduate Adviser for all graduate students until the time of appointment of a Supervising Professor.

Supervising Professor

At some time after matriculation (typically upon completion of Core Courses and/or Preliminary Examination) a Supervising Professor will be appointed for each student, based upon mutual agreement between student and faculty, and approval of the Graduate Dean.

Supervising Committee

After a Supervising Professor has been selected, the Graduate Dean, upon the recommendation of the Program Faculty, will appoint a Supervising Committee normally consisting of three members drawn chiefly from the candidate's major area (for Ph.D. candidates, there shall be four members, and there may be one additional member from outside The University of Texas at Dallas), including the Supervising Professor as chairman, which will oversee the research and thesis (or dissertation) work of the student and will help him plan his Elective Course curriculum.

Master's Degree

The following procedure outlines, in approximate chronological order, the steps to be followed by students seeking a Master's degree:

- 1. Registration (see University Calendar).
- 2. Taking of any examination required by individual Programs at the time of registration.
- 3. Demonstration of competence in the subject material of the Program Core Curriculum by completing those courses with acceptable grades or by passing examinations covering the material of those courses.
- 4. Selection of a Supervising Professor (see above).
- 5. Completion with acceptable grades of graduate-level course work (including Core Courses) totaling a minimum of 30 semester hours.
- 6. Filing, in the Office of the Graduate Dean, during the first fifteen calendar days of the final semester or first six days of the final summer term (a) a Diploma Name Card, (b) an Application for Graduation, and (c) a graduation fee receipt.
- 7. Submission of a thesis to the student's Supervising Committee not later than six weeks before the first day of final examinations. This requirement may be replaced in certain Programs by additional course work.
- 8. Submission to the Graduate Dean's Office, not later than two weeks before the end of the semester or summer session in which the degree is to be awarded, three unbound copies of the thesis, along with certification by the Supervising Committee that the student has completed all required work. Additional copies may be required by supervising faculty. Questions regarding copyright should be cleared with the Graduate Dean and University Attorney. All necessary forms may be obtained in the Office of the Graduate Dean.
- 9. Satisfaction of any special requirements of individual Academic Programs, most of which are outlined in the Program descriptions.

Master's Thesis

The candidate for the Master's degree writes his thesis under the direction of a Supervising Professor. The thesis is subject to approval by the Supervising Committee (see above) and ultimately by the Graduate Dean.

Doctor of Philosophy

The following procedure outlines, in approximate chronological order, the steps to be followed by students seeking the Doctor of Philosophy degree:

- 1. Registration (see University Calendar).
- 2. Taking of any examination required by individual Programs at the time of registration.
- 3. Demonstration of mastery of the subject material of the Program Core Curriculum by completing those courses with superior grades or by passing with high grades examinations covering the material of those courses.
- 4. Demonstration of general facility in English and professional facility in one relevant foreign language.
- 5. Passing of any Preliminary Examination required by the individual Program.
- 6. Selection of a Supervising Professor (see above).
- 7. Satisfactory performance in an oral Qualifying Examination conducted by members of the Graduate Faculty of The University of Texas at Dallas. A written examination may also be required by the Supervising Committee.
- 8. Filing, in the Office of the Graduate Dean, during the first fifteen calendar days of the final semester or first six days of the final summer session (a) a Diploma Name Card, (b) an Application for Graduation, and (c) a graduation fee receipt.
- 9. Submission of a dissertation to the student's Supervising Committee not later than eight (8) weeks before the first day of final examinations.
- 10. Request for the dissertation defense, a public presentation, scheduled formally through the Office of the Graduate Dean at least two weeks prior to this examination. This request must be accompanied by ten copies of the dissertation abstract and one copy of the candidate's vita. Normally the final oral examination is taken during regular class days in the long session; but in cases where unusual hardship would be involved by insistence on this rule, the Dean may approve the candidate's petition, if it is supported by the Supervising Committee, to have the examination scheduled on a regular class day of the summer session, provided all members of the committee can be present.
- 11. Submission of the Report of Dissertation Defense form signed by the Supervising Committee to the Office of the Graduate Dean immediately following completion of the defense. This form certifies that the student has completed the work assigned by the committee; passed all examinations required by the program, including the defense; completed a dissertation which gives evidence of ability to do independent investigation in the major field, and itself constitutes a contribution to knowledge; and submitted for publication in American Dissertation Abstracts an abstract which meets the approval of the committee.

- 12. Submission of the following items to the Office of the Graduate Dean, not later than two weeks before the end of the semester or summer session in which the degree is to be awarded: (a) three unbound copies of the dissertation, signed by the committee; (b) payment of fee for microfilm reproduction to The University of Texas at Dallas; (c) questions regarding copyright should be cleared with the Graduate Dean and the University Attorney; (d) survey of earned doctorate; (e) microfilm agreement. All necessary forms may be obtained at the Office of the Graduate Dean.
- 13. Satisfaction of any special requirements of individual Academic Programs, most of which are outlined in the Program description.

Foreign Language Requirement

- All doctoral programs in the Graduate Programs have a minimum requirement of proficiency in one relevant foreign language. Specific requirements beyond this minimum are stated under each Program.
- 2. The minimum requirements in foreign languages can be satisfied by an examination approved by the Dean.
- 3. The minimum requirement may be waived by the Dean upon special petition of the appropriate graduate studies committee on behalf of the candidate.

Doctoral Dissertation

The dissertation is required of every candidate and must be, as a result of independent investigation in the candidate's major area, an original contribution to scholarship. It must be accepted by the candidate's Supervising Committee, although at the request of this Committee the Dean may appoint a subcommittee to pass on the dissertation.

Not less than six weeks before the first day of final examinations in the semester in which the student expects to receive his degree, the Supervising Professor will receive a complete copy of the dissertation (unbound) from the candidate. The Supervising Professor calls for any last changes he still deems necessary, but arranges it so that the other members of the Supervising Committee have at least four (4) weeks to read the unbound copy. After the whole committee has familiarized itself with the dissertation, the members sign a notice of acceptance by which they state their willingness to examine the candidate on his dissertation.

Request for Dissertation Defense

Request to hold this examination must be formally scheduled through the Dean's office two weeks in advance. This request signifies the acceptance of the doctoral dissertation for the purpose of scheduling the oral defense on the dissertation and on such other parts of the student's program as the committee may determine.

Public Defense of Dissertation

Until the dissertation defense has been successfully passed, the dissertation is not actually regarded as approved. The examination will cover the dissertation and the general field of the dissertation, and such other parts of the student's program as the committee may determine. If the examiners are satisfied that the candidate has (1) completed the work assigned by the committee; (2) passed all examinations required by the department, including the defense; (3) completed a dissertation which gives evidence of ability to do independent investigation in the major field, and itself constitutes a contribution to knowledge; (4) submitted for publication in American Dissertation Abstracts an abstract which meets the approval of the committee, they then sign the approval sheets for the doctoral dissertation and an official recommendation of the candidate to the Dean.

Submission and Publication of Dissertation

The successful candidate is required to pay the cost of microfilm reproduction of his complete dissertation. A signed copy (unbound) of his doctoral dissertation is sent from the Office of the Graduate Dean to University Microfilms, Ann Arbor, Michigan, for reproduction.

With the dissertation the student must also submit to the Dean two copies of an abstract, not to exceed two pages in length (double-spaced), which has been approved in final form by the Supervising Committee. This will be published in American Dissertation Abstracts.

Publication of [by] microfilm does not preclude subsequent publication of the dissertation, in whole or in part, as a monograph or in a journal; in fact, such subsequent publication is expected. Copyright, at the author's expense, may be arranged if desired, by completing a special form to be secured in the Dean's Office. In order to protect patent or other rights, the Dean may be requested to delay publication by microfilm for a period of one year. This request must be supported by a written recommendation of the Supervising Professor.

GRADUATE PROGRAMS

GRADUATE PROGRAM IN CHEMISTRY (M.S., Ph.D.)

(The Ph.D. degree in Chemistry is pending approval by the Coordinating Board which meets on April 18, 1975. If not approved, references to the degree will be removed from the catalog.)

Members of Faculty currently participating:

PROFESSORS: Donald Rapp (Physics)

ASSOCIATE PROFESSORS: Richard A. Caldwell (Head) (Chemistry), Harold Werbin

(Biology)

Lynn A. Melton (Chemistry), Christopher A. Parr (Chemistry), A. Dean Sherry (Chemistry), William R. Thompson (Chemistry) ASSISTANT PROFESSORS:

OBJECTIVES

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 candidate will have demonstrated broad knowledge via his coursework in chemistry, and initiative and research proficiency via the development, presentation, and defense of a thesis.

The Doctor of Philosophy is offered jointly with The University of Texas at Arlington and The University of Texas Health Science Center at Dallas. This program develops creativity, originality, and independence in the highly motivated student. The Chemistry Program has a strong commitment to the academic/industrial interface, since the majority of employment opportunities for Ph.D. chemists are in industry.

PROGRAMS

Within the Chemistry Program opportunities exist for coursework in Physical/ Theoretical, Organic, Inorganic, Bio-Organic, and Analytical Chemistry. The opportunity to take a minor in several of the other UT-Dallas programs allows the student to prepare himself, if he chooses, for ultimate interdisciplinary work.

The following research is in progress in Chemistry at UT-Dallas.

- R. A. Caldwell Mechanisms of organic photochemical reactions. Photocycloadditions and fragmentations. Applications to synthesis. Instrumental techniques.
- L. A. Melton -- Experimental studies of electronic, vibrational and rotational energy transfer as studied by optical pumping with a tunable dye laser.
- C. A. Part -- Theoretical reaction dynamics. Atomic and molecular interaction potentials, extension of transition state rate theories, classical trajectory studies. Computer animation studies.

Donald Rapp -- Applications of quantum mechanical scattering theory to calculations of probabilities and rates of excitation and reaction in molecular collisions. Vibrational excitation of diatomics, charge transfer, multistate close coupling calculations.

A. D. Sherry - Experimental studies in lanthanide ion solution chemistry and the use of lanthanides as spectrochemical probes of protein structure. NMR, ESR, fluorescence spectroscopy, and pulsed NMR techniques (measurement of water proton relaxation rates) are currently used to study metal ion binding sites in metalloproteins and metalloenzymes.

 $W.\ R.\ Thompson$ — Problems in chemical communication—isolation and identification of pheromones and their receptor proteins. Biological membranes—chemical and spectroscopic studies of protein—lipid interactions. Mechanisms of action of psychoactive drugs.

Harold Werbin — Characterization and mechanistic studies of DNA-photolyase, an enzyme which repairs photochemical damage to DNA. Photochemistry of electron transport quinones.

FACILITIES

The University of Texas at Dallas has [or-io-in] the [process-of-acquiring-all] equipment and facilities necessary for routine use by its faculty and students in teaching and research. Larger items include a laser spectroscopy facility, a dark laboratory, a 60 MHz NMR spectrometer, assorted spectrophotometers utilizing fluorescence, phosphorescence and absorption, gas chromatographs[y], and a gas chromatograph/mass spectrometer. [A-minicomputer-io-projected-for-purchase-in-1974] Facilities external to Chemistry, but readily available to its use, include the Library, Computer Center, glass, machine, and electronics shops.

SPECIFIC DEGREE REQUIREMENTS

Undergraduate preparation equivalent to the degree of Bachelor of Science in Chemistry is required. The student must demonstrate his preparation by passing [preliminary] examinations in physical, [and] organic, and inorganic chemistry, and [in-addition-his] either [ehoiee-of-one-of-the-following:-B]biochemistry[,-Inorganic,] or [A]analytical [G]chemistry. These examinations will be given [to-the-student-upon matriculation,-and-there-will-be-opportunity-for-remedial-work-if-indicated-by-his performance:-The-intent-of-these-examinations-is-to-assist-the-student-in-strengthen-ing-his-preparation-for-subsequent-work-] prior to the Fall, Spring, and Summer semesters. Remedial work, if required, will be provided.

Master of Science (Chemistry)

All students must [*] complete the [e] required Core [eonoisting-of] (Chemistry 5411 [511] and Chemistry 5431 [531]), [eomplete] nineteen hours of further graduate coursework, [of-which] (at least seven must be in Chemistry), [*-eomplete-e total-of] twelve semester hours of thesis research, and present a written thesis to the Chemistry Faculty.

The student will be guided in his work by a Supervising Committee. [,-which-shall have-the-added-responsibility-of-setting-for-him-a-comprehensive-examination-at-the end-of-his-course-work-] The student will also make an oral presentation and defense of his thesis to this Committee.

Doctor of Philosophy (Chemistry)

The specific course of study will be determined by the needs of the individual and will be guided by a supervising committee. Generally, the program will require: coursework in major and minor areas of specialization; satisfactory performance on examination for advancement to candidacy for the doctorate; and acceptance of the student's dissertation by the student's supervising committee. The dissertation must make a significant contribution to knowledge in the candidate's specialty area.

The program includes the option of an Industrial Internship as part of the student's training; the objective of such an internship is to give the student superior preparation for industrial employment. Inquiries regarding either the details of these internships or other details of the program are invited and should be directed to the Chemistry Graduate Advisor.

Doctor of Philosophy (Chemical Physics)

The Chemical Physics Program is a course of study leading to the Ph.D. in Physics, with a selection of courses chosen mainly from Physics and Chemistry Program offerings, and a dissertation under a faculty member in either the Chemistry or Physics Programs. A wide range of flexible options are available to physical chemists in this program. The specific degree requirements include, in addition to the general institutional requirements, completion of a Physics core (Phys. 5400, 5401, 5313 and 5421) [500,-501,-513-and-521], a set of elective courses to be arranged by the student and his advisers (typically to include courses such as Chem. 5312, 5314, 5332, 6322 [512,-514,-532,-622], and Phys. 5402, 6400, 6351, 6352, 6353 and 6354 [502,-600,-651,-652,-653-and-654] and all other general requirements for a Ph.D. in Physics.

Admission to the Chemical Physics Program can be obtained either directly upon entrance to UT-Dallas, or after acquiring a M.S. in Chemistry.

For general degree requirements, see "Procedures and Requirements for Graduate Degrees," page .

Chemistry Courses

Course Description

- 5300[500] Organic Chemistry (3 semester hours) Werbin Chemical bonding, stereochemistry, physical properties, reactions, and mechanism. Characterization by spectroscopic techniques. Primarily for Biology graduate students. (3-0)
- 5309[509] Special Topics/TAGER (3 semester hours) (3-0) [500]
- 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. Prerequisites: Chemistry 5411 and 5314 [511-and-514] or equivalent. (3-0)
- 5313[5±3] Statistical Mechanics (Same 5313[53±]) Rapp (3 semester hours)

 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: Chemistry 5411[5±1]. (3-0)
- Thermostatics and Thermodynamics (3 semester hours)

 Classical thermostatics with discussion of statistical mechanical interpretation. Chemical and base equilibria. Ideal and non-ideal fluids. Kinetic theory, transport properties, and an introduction to chemical dynamics. Prerequisite: undergraduate physical chemistry. (3-0)
- Physical Organic Chemistry (3 semester hours) Caldwell Reaction mechanisms. Techniques for determining reaction mechanisms. Reactive intermediates. Applications to synthesis. Prerequisite: Chemistry 5431[531]. (3-0)

- Synthetic Organic Chemistry (3 semester hours)

 A survey of modern synthetic methods in organic chemistry. Prerequisite: Chemistry 5431[531]. (3-0)
- Advanced Inorganic Chemistry (3 semester hours)

 Atomic structure; Ionic bonding and crystal structures; Valence Bond
 Theory, Molecular Orbital Theory, hybridization, and delocalization;
 introduction to structure and bonding of transition metal complexes,
 cyrstal field theory, ligand field theory and spectra. (3-0)
- Advanced Inorganic Chemistry (3 semester hours)

 Periodicity; electrode potentials; chemistry in aqueous and nonaqueous solutions; organometallic ehmistry; lanthanide chemistry;
 bio-inorganic chemistry; additional topics at discretion of instructor. (3-0)
- Instrumental Analysis (3 semester hours)

 A survey of electronic and instrumental techniques used in modern chemistry. Lecture only; laboratory skills may be gained by registering in an appropriate Research Course. (3-0)
- 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. Pre-reqsite: Chemistry 5351 or consent of instructor. (3-0)
- 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 such as paper, plastic and concrete. The regularities of the periodic table will be emphasized. May not be counted as credit toward the M.S. degree in Chemistry. (3-0)
- Organic Chemistry (3 semester hours)
 Survey of organic chemistry including types of chemical bonding, functional groups, synthesis and reactions. Aliphatic, aromatic, and heterocyclic compounds are discussed. Applications, such as pharmaceuticals and dyestuffs, are presented. May not be counted as credit toward the M.S. degree in Chemistry. (3-0)
- Physical Chemistry (3 semester hours)
 Thermodynamics, solutions and phase equilibria, chemical equilibrium, kinetic theory, chemical kinetics, quantum mechanics, molecular structure and bonding. May not be counted as credit toward the M.S. degree in Chemistry. (3-0)
- 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. May not be counted as credit toward the M.S. degree in Chemistry. (3-0)
- 5411[544] Introduction to Chemical Physics (4 semester hours) Rapp Core Course. 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. (4-0)

- Advanced Organic Chemistry (4 semester hours)

 Core course. Modern concepts of bonding and structure in covalent compounds. Statis and dynamic stereochemistry and methods for study.

 A survey of the relationships between structure and reactivity. (4-0)
- 6190[690] Seminar (1 semester hour) [Staff]
 Presentations of current work by faculty and outside speakers. May be repeated. (1-0)
- 6299[699] Research and Literature Seminar (2 semester hours) [Staff]
 Student presentation and critical evaluation of independent work and of the recent literature. May be repeated. (2-0)
- Atomic and Molecular Spectroscopy (Same as Physics 6352[652])
 (3 semester hours)
 Atomic structure; spin-orbit interaction, auto-ionization, selection rules, and effect of external fields; diatomic and polyatomic molecules; symmetry and applications of group theory; molecular vibrations and rotations; electronic band spectra; selection rules and intensities. Prerequisite: Chemistry 5411[511]. (3-0)
- Quantum Chemistry (3 semester hours)

 Detailed treatment of wave mechanics applied to particle-in-a-box, harmonic oscillator, and H-atom potentials. Perturbation and variation theory. Approximation methods for atomic and molecular structure. Time-dependent phenomena and transition probabilities. Prerequisite: Chemistry 5411[511]. (3-0)
- Molecular Spectroscopy (3 semester hours)

 Electronic structure of atoms and molecules including spin-orbit interactions, selection rules, and effects of external fields; symmetry and applications of group theory; basic theory of magnetic resonance.

 Prerequisite: Chemistry 6322[622] or consent of instructor. (3-0)
- Special Topics in Physical Chemistry (3 semester hours)
 Subject matter will vary and the course may be repeated for credit.

 Examples of topics include [are:-M] molecular beam experiments, scattering theory, computer simulation, and molecular quantum mechanics.

 Prerequisites: 5411, 5313, 6322 [511,-513,-622,] or consent of instructor. (3-0)
- 6332[632] Natural Products (3 semester hours)
 Chemistry and synthesis of naturally occurring and biologically active molecules. Prerequisite: Chemistry 5333[533]. (3-0)
- Special Topics in Organic Chemistry (3 semester hours)
 Subject matter will vary and the course may be repeated for credit.

 Examples of topics include [a*e:--0] organic photochemistry, organometallic chemistry, homogeneous and heterogeneous catalysis, and advanced NMR techniques. Prerequisite: Chemistry 5431[531]. (3-0)

6349[649]	Special Topics in Inorganic Chemistry (3 semester hours) Subject matter will vary and the course may be repeated for credit. Examples of topics include [*-P]physical [M]methods of [#]inorganic [6]chemistry, [A]applications of [6]group [#]theory, and [#]bioinorganic [6]chemistry. (3-0)
6359[6 59]	Special Topics in Analytical Chemistry (3 semester hours) Subject matter will vary and the course may be repeated for credit. (3-0)
8211-8911 [9±±]	Research in Physical Chemistry Parr, Melton, Rapp (2 to $9[42]$ semester hours) (0-variable)
8221-8921 [921]	Research in Theoretical Chemistry Rapp, Parr (2 to $9[\frac{1}{2}]$ semester hours) (0-variable)
8231-8931 [93±]	Research in Organic Chemistry (2 to $9[\frac{12}{2}]$ semester hours) A student desiring laboratory instruction in techniques of preparative chemistry should register in this course. (0-variable)
8241-8941 [941]	Research in Inorganic Chemistry Sherry (2 to $9[42]$ semester hours) (0-variable)
8251-8951 [951]	Research in Analytical Chemistry [Staff] (2 to 9[12] semester hours) A student desiring laboratory instruction in the use of modern analytical instruments should register in this course. (0-variable)
8261-8961 [96±]	Research in Biochemistry Thompson, Werbin, Sherry (2 to $9[\frac{12}{2}]$ semester hours) (0-variable)
8398[908]	Thesis (3 semester hours) (May be repeated for credit) (0-9)

GRADUATE PROGRAM IN COMMUNICATION DISORDERS (M.S., Ph.D.)

Members of Faculty currently participating:

PROFESSORS: Aram Glorig (Head) (Communication Disorders), George Moushegian (Communication Disorders)

ADJUNCT PROFESSOR: David Daly (Communication Disorders)

ASSOCIATE PROFESSORS: George M. Gerken (Communication Disorders), Hanna K. Ulatowska (Communication Disorders)

ADJUNCT ASSOCIATE PROFESSOR: Donnell F. Johns (Communication Disorders)

ASSISTANT PROFESSORS: Allan K. Bird (Communication Disorders), John J. Godfrey
(Communication Disorders), Edwin K. Hammer
(Communication Disorders), Judith Burroughs Keith
(Communication Disorders), Ross J. Roeser (Communication Disorders), Ross J. Roeser (Communication Disorders), Robert D. Stillman (Communication Disorders),

LECTURERS: John Christy Campbell (Communication Disorders), Sara Macaluso Haynes, (Communication Disorders), Caroline J. Mitchell (Communication Disorders), Will Ann Nunn (Communication Disorders), Sharon M. Richardson (Communication Disorders)

OBJECTIVES

The program in Communication Disorders is multidisciplinary with faculty specializations in Audiology, Linguistics, Neurology, Neurophysiology, Neuropsychology, Otology, Psychology, Speech Pathology, and Speech Science. The instructional experience is designed to cover relevant portions of these established disciplines and also is intended to prepare the student to integrate across disciplines.

M.S. PROGRAM

The Masters program in Communication Disorders provides clinical study and training centered in the fields of Speech Pathology or Audiology. The student is provided with a foundation of basic core courses upon which the advanced clinical program is built. Practical experience is provided in a variety of clinical, educational, and medical settings. In addition, the qualified student is provided with the option of an introduction to research.

Ph.D. PROGRAM

The doctoral program prepares students to integrate the interdisciplinary bases of communicative behavior by providing instruction in the scientific and clinical aspects of Communication Disorders. The student will specialize within the broad areas of: 1) Hearing Science and Audiology or 2) Speech Science, Speech Pathology, and Language. The core courses cover the fundamental aspects of communication disorders with emphasis on the Neurosciences and the Behavioral Sciences. All students regardless of their area of specialization are encouraged to acquire managerial and administrative techniques. The training program is designed to permit graduate students to pursue individual research and clinical interests within wide areas of choice, developing skills which will better prepare them for a career as a clinician, a teacher, an investigator, or an administrator.

FACILITIES

The facilities available for this program are primarily those of the Callier Center for Communication Disorders, but also include those of the main campus of The University of Texas at Dallas and those adjacent to the Callier Center at The University of Texas Health Science Center (including The University of Texas Southwestern Medical School). These facilities provide the educational, clinical, research, and medical environment essential for an interdisciplinary program in Communication Disorders.

SPECIFIC DEGREE REQUIREMENTS

A background in speech pathology, audiology, linguistics, education, 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 Advisor if necessary.

The M.S. Program requires a minimum of 48 semester hours of credit. These hours must include the core courses: 6304, 6305, 6306, 6307, 6317, 6330, and 7326. Students emphasizing Audiology must take: 6310, 7316, 7318, and 7332. Students emphasizing Speech Pathology must take: 6319, 6327, 7328, 7329, 7351, and 7352. The student completing the Master's Program in Communication Disorders will meet the academic requirements for the Certificate of Clinical Competence offered by the American Speech and Hearing Association (ASHA) in either speech pathology or audiology.

The requirements of the Ph.D. Program include completion of the following core courses: 6305, 6317, 7172, 7345, 7346, 7347, 7353, 7354 and 7371. Following the core courses an individualized degree program will be jointly developed by the student and the faculty. For general degree requirements, see "Procedures and Requirements for Graduate Degrees," page .

COURSES IN COMMUNICATION DISORDERS

Core Courses

Course	Description
5309	Special Topics/TAGER (3 semester hours) (3-0)
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 multidisciplinary evaluation and treat-
	ment. (May be repeated for credit.) (variable)
6304	Advanced Clinical Audiology (3 semester hours)
	Study of auditory pathology, symptomatology and measurement. Clinical

Study of auditory pathology, symptomatology and measurement. Clinical application and interpretation of speech audiometry, bone conduction tests, and masking. Prerequisite: Introduction to Audiology or the equivalent. (3-0)

Hearing and Speech Science (3 semester hours)

Basic acoustics and acoustic measurements, the cochlea, psychoacoustics, acoustic and physiological phonetics, analysis and synthesis of speech, speech perception. (2-3)

6306	Neuroanatomy and Neurogenic Speech Disorders (3 semester hours)
	Brain mechanisms related to speech, language and audition. Differential diagnosis and remediation of the dysarthrias and apraxia of
	speech. Prerequisite: Anatomy and Physiology of the Hearing and Speech Mechanisms or the equivalent. (3-0)
6307	Language and Cognition (3 semester hours)
	Developmental aspects of language and cognition. (3-0)
6317	Language and linguistics (3 semester hours) Basic processes underlying language including phonology, morphology,
	syntax and semantics. (3-0)
7145-7345	Seminar in Communication Disorders (1-3 semester hours)
	An integrative interaction with instructors from doctoral core courses. Designed to emphasize the multidisciplinary aspects of the field, and to provide the student with a perspective not ordinarily obtained through individual courses. Prerequisite: Consent of in-
	structor. May be repeated for credit. (variable)
7172	Introduction to Computer Science (1 semester hour) Elementary principles and programming. (1-0)
7326	Habilitation of Hearing Impaired Children (3 semester hours)
	Principles and methodology in the development of speech and language for the hearing impaired child, with particular emphasis on the preschool and elementary age child. Prerequisite: COD 6304 (3-0)
7346	The Neural Basis of Communicology (3 semester hours)
	An introduction to communicology within the framework of neuroanatomy and neurophysiology. Neural mechanisms of sensory processing and higher brain function. Emphasis on the auditory modality. Laboratory exercises and demonstrations. (2-3)
7347	Research Methodology in Communication Disorders (3 semester hours)
	Strategies in the acquisition and analysis of data in the field of Communication Disorders. (2-3)
7353	Behavioral Science (3 semester hours) An introduction to the roles of cognition, learning and affect in human communication and its disorders. (3-0)
7354	Disorders of Hearing, Speech, and Language (3 semester hours) Etiology and symptomatology of disorders of hearing, speech, and language. (3-0)
7371	Statistics for Communication Disorders (3 semester hours) The basic parametric and nonparametric statistics needed for the description and analysis of data in the field of Communication Disorders. (3-0)
Hearing Sci	ence and Audiology
Саилле	Description

<u>Course</u>	Description
6310	Differential Audiological Procedures (3 semester hours) Lecture and clinical experience dealing with audiological procedures
	used to establish differential diagnoses of auditory disorders. Prerequisite: COD 6304 (3-0)
	in the second se

7316	Adult Aural Rehabilitation and Hearing Aids (3 semester hours) Acoustic performance of hearing aids, and the clinical procedures used in the selection of hearing aids. Auditory training and speech conservation for the rehabilitation of patients with hearing impairment. The social and psychological considerations and counseling in the rehabilitation of the hearing impaired adult. Prerequisite: COD 6304 (3-0)
7318	Audiological Consideration of Special Populations (3 semester hours) Etiological, medical, legal, and genetic considerations relevant to exceptional populations including: infants, deaf-blind and retarded children, and the aged. Prerequisite: COD 6310 (3-0)
7332	Experimental Audiology (3 semester hours) The response characteristics of the auditory system to simple and complex stimuli, including speech, and the experimental methods by which such characteristics are obtained. Special attention to electrophysiological techniques and objective audiometric procedures. Emphasis on the application of psychophysical theory to the analysis of results obtained from human and animal experimentation. Prerequisite: COD 6310 (2-3)
7350	Seminar in Audiology (3 semester hours) Emphasis on review and critique of pertinent literature relating to theoretical approaches to rehabilitative techniques. Prerequisite: Consent of instructor. (May be repeated for credit) (3-0)
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. Prerequisites: COD 6305 or consent of instructor (1-0)
7365	Industrial Audiology (3 semester hours) Effects of noise on hearing. Techniques in sound measurement as applied to the industrial setting. Review of legislation governing noise. Audiometric considerations in industry. Prerequisite: COD 6310 (3-0)
8335	Advanced Neuroanatomy and Neurophysiology of Sensory Systems (3 semester hours) Intensive study of brain mechanisms and pathways of the auditory and visual systems. (3-0)
8336	Neuropsychology (3 semester hours) Higher brain function, perception, and sensory processes: theoretical foundations of audition and vision. (3-0)
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. (2-3)
Speech Science	e, Speech Pathology, and Language
Course	Description
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: COD 6305 (3-0)

6327	Disorders of Stuttering and Voice (3 semester hours)
	The pathology, physiology and acoustic symptomatologies in disorders
	affecting phonation, resonance and rhythm. Emphasis on procedures
	and methods for the evaluation and treatment of these disorders.
	Lectures will be supplemented with patient presentations and demon-
	strations. (3-0)
7328	Aphasia and Related Language Disorders (3 semester hours)
1540	The study of the etiology, symptomatology, assessment and therapeutic
	techniques for aphasia and other related neurogenic language dis-
	orders. Prerequisite: COD 6306 (3-0)
7220	Mathada for Language Discurdors (2 comparer house)
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: COD 6307 (3-0)
700/	
7334	Seminar in Speech Pathology (3 semester hours) Advanced study of selected topics in speech pathology with an empha-
	sis on differential diagnostic procedures; review and critique of
	pertinent literature, with special reference to the analysis of
	theories and techniques as they relate to rehabilitative programs.
	Prerequisite: Consent of instructor. (May be repeated for credit)
	(3-0)
7349	Advanced Diagnosís of Language Disorders (3 semester hours)
7 349	Procedure and practice in the evaluation of language disorders in
	children and adults; supervised administration of diagnostic
	language tests. Prerequisites: COD 6317, 7328 (3-0)
7351	Differential Diagnostic Techniques in Speech and Language Pathology
	(3 semester hours)
	Procedures for the differential diagnosis of hearing impairment,
	mental retardation, emotional disturbance and brain injury. Princi-
	ples of diagnosis: rationale validity, and reliability of diagnostic
	procedures. Lectures will be supplemented by the demonstrations and
	clinical observations. Prerequisite: COD 6307 (2-3)
7352	Organic Disorders in Speech Pathology (3 semester hours)
	The disorders of phonation, resonance and articulation associated
	with neurophysiological problems including cleft palate and cerebral
	palsy. Prerequisite: COD 6306 (3-0)
7355	Behavior Modification in Communication Disorders (3 semester hours)
	Theories and principles of program design for teaching various
	language skills. Discussions of practical applications. Pre-
	requisite: 6307 (3-0)
7357	Linguistic Analyses (3 semester hours)
	A survey of the techniques and methods of modern linguistics includ-
	ing analyses of phonological, syntactic, and semantic systems of
	natural language. Prerequisite: COD 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.
	Proreguisites: COD 6317 7328 (3-0)

7360	Psycholinguistics and the Reading Process (3 semester hours) Survey of empirical and theoretical investigations of the psycholinguistic process of reading. Application to disturbance of reading process in children and aphasics. Prerequisites: COD 6307,
7260	6317 (3-0)
7368	Linguistics and the Sign Language (3 semester hours) Linguistic description and evaluation of the evolving sign systems of the deaf. Discussion of the acquisition of sign systems. Review of research literature in the area. Prerequisite: COD 6317 (3-0)
8363	Developmental Linguistics (3 semester hours) Discussion of major theoretical approaches to language acquisition. Implications for remediation. Prerequisite: COD 6317 (3-0)
8364	Seminar in Perceptual Phonetics (3 semester hours) Advanced study of selected topics in acoustic phonetics and speech perception; review and critique of pertinent literature, with special reference to the potential applications of acoustic measurement techniques and theory to diagnosis and rehabilitation. (3-0)
Behavioral and	nd Medical Aspects of Communication Disorders
Course	Description
6225	Medical Aspects of Communicative Disorders (2 semester hours) Diseases related to communicative disorders. Medical evaluation and treatment in otolaryngology, neurology, neurosurgery, pediatrics, radiology, physical medicine and rehabilitation. Participation in clinical conferences and special clinics. (2-0)
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. (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. (3-0)
7356	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. (3-0)
8340	Psychological Approach to Physical Disability (3 semester hours) Effects of sensory impairment on cognitive and affective development. Sociological aspects of physical disability. (3-0)
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: COD 7353 (3-0)
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 com- munication disorders. Prerequisite: COD 7353 (3-0)

Seminar in Brain and Behavior (3 semester hours)

Advanced study of selected topics in brain and behavior. Prerequisite: Consent of instructor. (May be repeated for credit) (3-0)

Support Courses

<u>Cours e</u>	Description
6115	Clinical Practicum in Communication Disorders (1 semester hour) Supervised participation in clinical practice. Intake procedures, case histories, records and reports, and the therapeutic processes and techniques applicable to both children and adults. (May be re- peated for credit) (variable)
7170-7370	Practicum in Communication Behavior (1-3 semester hours) Rotation through various settings in a communication disorders agency. (May be repeated for credit) Prerequisite: Consent of instructor. (varying from 0-3 to 0-9)
7198-7398	Directed Individual Study in Communication Disorders (1-3 semester hours) Individualized program of reading, research or implementation of clinical strategies. (May be repeated for credit) Prerequisite: Consent of instructor. (varying from 0-3 to 0-9)
8180-8980	Research in Communicology (1-9 semester hours) (May be repeated for credit) (varying from 0-3 to 0-27)
8198-8698	Theses (1-6 semester hours) (May be repeated for credit) (varying from 0-3 to 0-18)
8199-8999	Dissertation (1-9 semester hours) (May be repeated for credit) (varying from 0-3 to 0-27)

[CRADUATE-PROGRAM-IN GOMMUNICATION-DISORDERS-(M-S-;-Ph-D-)

Members-of-Faculty-currently-participating+

PROFESSORS:--Pavid-D:-Daly-{Communication-Disorders};-Aram-Glorig-{Head}-{Com-munication-Disorders}munication-Disorders}-

ASSOCIATE-PROFESSORS:--George-H.-Gerken-+Communication-Disorders},-Hanna-K.Ulatowska-+English-and-Linguistics}

ASSISTANT-PROFESSORS:--Judith-Ray-Burroughs-(Communication-Disorders),
Edwin-K.-Hammer-(Communication-Disorders),
Ross-J.-Roeser-(Communication-Disorders),
Allen-L.-Rupert-(Communication-Disorders),
Robert-D.-Stillman-(Communication-Disorders)

LECTURER:--Donnell-F.-Johns-(Communication-Disorders)

OBJECTIVES

This-curriculum-prepares-students-to-integrato-the-interdisciplinary-bases-of communicative-behavior-and-to-express-this-knowledge-in-a-practical-manner-through research-and-study-and-through-innovative-and-offective-delivery-of-olinical-ser-vices--The-training-program-is-designed-to-permit-graduate-students-to-pursue individual-research-and-olinical-interests-within-wide-areas-of-choice,-developing skills-which-will-better-prepare-them-for-a-eareer-as-a-olinician,-a-teacher,-an investigator,-or-an-administrator.

M-S--PROGRAM

Three-estegories-of-instruction-fulfill-the-specific-sims-of-the-proposed-program.--(l)-eere-eeurses,-(2)-basis-science-courses,-and-(3)-clinical-training

The structure of the M.S.-Program provides flexibility so that a student may pursue areas of interest, with an emphasis in Audiology or Speech Pathology. In addition to course work, the student will obtain clinical and laboratory exposure as well as have the opportunity to participate in olinical practicum.

The -academic-program-and-clinical-services-reflected-in-the-curriculum-include evaluations-of-disorders-using-a-wide-variety-of-evaluative-procedures-and-therapeutic-techniques---The-Master-of-Science-Degree-in-Communication-Disorders-will provide-the-necessary-course-work-and-practicum-for-olinical-certification-

Ph.D. PROGRAM

The Doctoral Program in Communication Disorders is designed to produce graduates who are experts in the diagnosis and treatment of human communicative behavior and its problems. Thus the common areas of function and concern to all traditional fields of study in communication behavior (specifically: etiology and pathology, diagnosis and evaluation, habilitation and rehabilitation, and prevention and conservation) are a part of the curriculum. To this list of common areas of function may also be added: Normal growth and development in communication skills, administration and supervision of programs, staff development, and innovation in delivery of services.

The-persons-trained-in-the-Ph.D.-program-will-be:--(l)-researchers-who-ear direct-investigation-of-the-basic-aspect-of-that-segment-of-the-pepulation,-with communication-disorders,-with-a-broad-knowledge-of-its-elinical-characteristics; and-(2)-administrators-of-elinical-and/or-educational-programs-who-have-a-general background-in-the-scientific-and-systematic-investigation-of-communication disorders.

In-this-program,-elasoroom-learning-must-be-demonstrated-and-validated-in-a elinical,-educational-or-laboratory-situation-to-meet-performance-eriteria-specified-by-the-faculty.

PACILITIES

The-unique-facilities-available-for-this-program-provide-access-to;-and-train-ing-in;-a-variety-of-laboratories;-both-at-Gallier-Genter-for-Communication-Dis-orders-and-The-University-of-Texas-Health-Science-Genter;--This-combination provides-an-opportunity-for-a-deeper-understanding-of-the-pathologies;

What-is-uniquely-different-in-this-program-is-the-inherent-strength-of-the Callier-Genter-for-Genmunication-Disorders,-both-in-basic-and-olinical-areas, Learning-generated-by-the-free-interaction-between-the-personnel-of-the-various disciplines,-the-extensive-laboratory-facilities-and-the-wealth-of-olinical material-all-serve-well-to-develop-a-depth-in-this-educational-program-not-generally-encountered-in-other-academic-settings.

SPECIFIC-DECREE-REQUIREMENTS

A-background-in-opeck-pathology,-audiology,-linguistics,-oducation-or-psychology-would-be-expected-for-students-extended-the-study-of-communication-disoxders--In-addition,-the-student-would-be-expected-to-meet-the-basic-requirements
for-entrance-into-graduate-study-at-The-University-of-Texas-at-Dallas-

A-special-degree-requirement-will-be-the-rotation-ef-each-student-through various-werk-areas-of-compatency-in-the function-of-each-aspect-of-research-and-service-to-patients.

The-M-S--Program-requires-a-minimum-of-36-semester-hours-of-credit---The student-completing-the-Master's-Program-in-Communication-Disorders-will-have-met the-academie-requirements-for-Certification-of-Clinical-Competence-in-either-speech pathology-or-audiology-offered-by-the-American-Speech-and-Hearing-Association-

Applicants-for-the-Dectorate-are-usually-expected-to-held-a-Masteris-Degree in-Communication-Disorders-or-some-related-field,---While-such-prior-formal-train-ing-is-not-required,-it-is-strongly-recommended.

For-goreral-degree-requirements,-see-"Precedures-and-Requirements-for Graduate-Degrees,"-page-32.

Mas--Program-in-Communication-Disorders

Gore-Gourses-(Required-of-all-MyS,-Students)

Course

Deseription

erebreation-to-destable Studies-in-demmestable Disorders

(44466-4-10464-4-104

This-course-will-provide-an-overview-of-the-history-and-contemporary philosophics-in-speech-pathology-and-audiology.--Special-reference is-given-to-the-cooperative-intersetion-between-speech-pathology-and audiology-and-their-relationships-to-other-health-related-disciplines-Introduction-to-research-methodologies-and-seientific-writing--(1-0)

- 520------Gamunication-Sciences-(3-scaester-houre)

 Instrumentation-and-measurements.--A-survey-of-the-nature-of-scund;

 accustics-and-the-general-mathematical-concepts-escential-to-work-in

 speech-pathology-and-audiology.--Measurement-of-fundamental-frequency

 and-intensity-of-speech---Demonstration-of-instrumentation-and-lab
 oratory-experiments-will-augment-the-lestures.-(3-2)

orderer-Leeturers-will-oever-medical-evaluation-of-these-problems and-consider-the-various-medical-and-surgical-treatment-approaches (otoloryngology,-neurology,-neurosurgery,-pediatries,-radiology, physical-medicino-and-rehabilitation)-and-relate-them-to-the-specific sommunicative-disorder--Participation-in-clinical-conferences-and at-special-olinics-will-be-coordinated-with-didactic-presentation-(2-0)

Required-Courses-for-Emphasis-in-Audiology

A---Basie-Seienee-Gourse

Control

Description

502-----Anatomy-and-Physiology-of-the-Auditory-System-(2-semester-hours)
A-comparative-anatomical-study-of-both-the-peripheral-and-central
auditory-systems--A-study-of-the-normal-physiology-of-the-auditory
systems-which-will-include-middle-ear-and-centlear-biophysics,
eechlear-biochemistry-and-clootrophysiology-of-the-cochlea-and
eentral-auditory-systems-(2-0)

B---Clinical-Training-Courses

Contro

Description

504-----Advanced-Slinical-Audiology-(3-semester-houre)

Whe-study-of-auditory-pathology-symptomatology-and-measurementSlinical-application-and-interpretation-of-speech-audiometry,-bone
conduction-tests,-masking,-and-special-tests-for-sensorineural
lesion-differentiation,-(3-0)

506------Adult-Aural-Rehabilitation-and-Hearing-Aids-(3-semester-hours)
A-study-of-the-acoustic-performance-of-hearing-aids,-olinical-procedures-used-in-the-selection-of-hearing-aids,--Auditory-training-and
speceh-conservation-in-the-rehabilitation-of-patients-with-hearing
impairment,--The-secial-and-psychological-considerations-and-counseling-in-the-rehabilitation-of-the-hearing-impaired-adult,-(3-0)

511-----Seminar-in-Glinical-Audiology-(3-semester-hours) Etiological, modical, logal, and genetic, and psycho-accustical eensideration-with-exceptional-populations:--infants;-the-retarded; the-aged,-the-multiple-consideration-in-audiological-practice--(3-0) Required-Courses-for-Emphagis-in-Speech-Pathology A---Basie-Seienee-Courses Course Description 503------Aratomy-and-Physiology-of-Voice-and-Spocch-Production (2-comester-bours) A-didaetie-and-laboratory-study-of-the-anatomy-and-physiology-of-the phonatory,-resenance,-and-articulary-systems,-(1-5) 539------Wokkopkyciologiosl-Basos-of-Language-(3-comostor-hokrs) A-study-of-the-neurophysiological-foundations-of-language-and Linguisties---Emphasis-on-the-theoretical,-developmental,-and-comparative-aspects-of-lingwistic-behavior-as-applied-to-neurophysic-Logical-and-psychological-deficits-evidenced-in-language-disorders-(3-0) B---Clinical-Training-Courses Description Cauxsa 505----Advanced-Glimie-Methodo-in-Speceh-Pathology-(3-semester-hours) The-study-of-the-speech-pathologics,-symptomatology,-and-measurement,-ineluding-instrumentation-and-elinical-measurement-procedures-The-therepeutie-precess-in-speech-pathology;-materials,-techniques applicable-to-speech-therapy--- Case-presentations-and-demonstrations-will-supplement-leetures---(2-5) 507------Disorders-of-Veise-and-Articulation-(3-semester-hours) The-study-of-the-pathology,-physiology-and-accustic-symptomatologies in-disorders-affecting-phonation,-resonance-and-articulation,--Emphasic-on-precedures-and-methods-for-the-evaluation-and-treatment-of phonatory-resense-and-articulatory-disorders---Lestures-will-be supplemented-with-patient-presentations-and-demenstrations--(3-0) 521-----Differential-Diagnostie-Peckniques-in-Speeck-Pathology (3-semester-beurs) Bandasis-on-procedures-for-the-differential-diagnosis-of-hearing impairment,-mental-retardation,-emetional-disturbance-and-brain injury---Principhos-of-diagnosis-rationalo-validity--and-reliability-of-diagnostie-procedures---Leetures-will-be-supplemented-by the-demonstrations-and-elinical-observations---(2-5) 533-----Organie-Diserdere-in-Speech-Pathology-(3-semester-hours) Neurophysiological-background-and-otiologics-of-speech-and-language

Elective-Courses-(Master's-Degree)

These-eersill-be-effered-subject-to-sufficient-student-demard.

disordors-associated-with-neurogenie-specch-and-language-disorders-

elest-palate,-and-other-orefacial-pathologies,-(3-0)

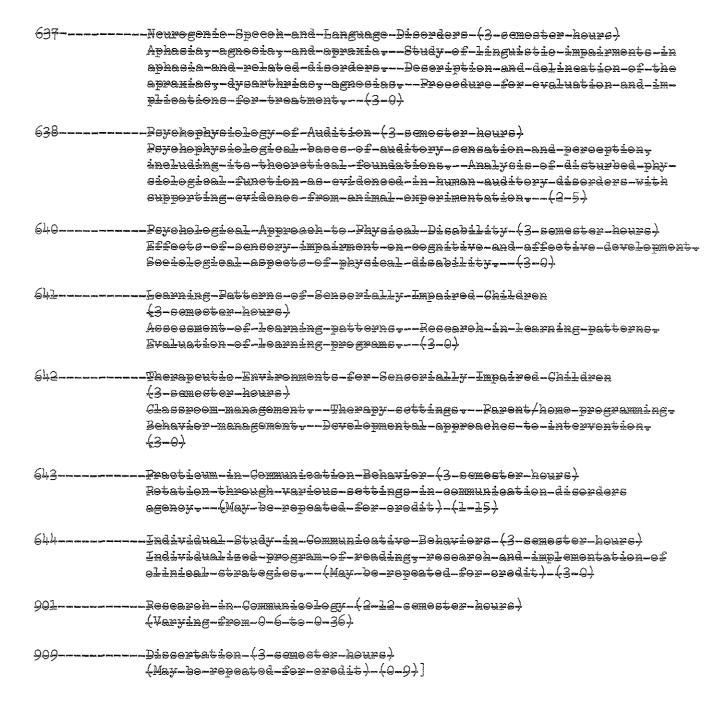
Course Deserration 509-----Special-Topics/TAGER-(3-semester-hours)-(3-6) 522------Stuttering-(3-semester-howrs) A-review-of-the-theories-of-stattering-and-the-stady-of-the-approsehes-to-the-treatment-ef-disorders-producing-stuttering-symptomatology -- The -principles -of -therapeutie -techniques -and management-programs-will-be-supplemented-by-patient-presentation and-demonstrations,-{2-0} 53l----Aeoustical-and-Physiclogical Phonetics-(3-semester-hours) The-assustic-features-of-voice-and-speceh-production.--The-use-of vocal-synthesis-methods-to-evaluate-the-relevance-of-the-accustic properties-of-vocal-production-to-perception,--Application-of acordetic-phonetics-to-the-analysis-of-disorders-of-voice-and-speech production.--Emphasis-on-the-physiological-bases-of-voice-and speech-production; -including-its-theoretical-foundations--(3-3) 532----Experimental-Audiology-(3-semester-hours) Desertation-of-the-response-sharacteristics-of-the-auditory-system to-simple-and-complex-stimuli;-including-speech-and-the-exporimental methods-by-which-such-charactoristics-are-obtained,--Special-attontion-to-electro-physiological-techniques-and-objective-audiometric procedures --- Emphasis-on-the-application-of-psychophysical-theory-to the-analysis-of-results-obtained-from-human-and-animal-experimen-*a*ion--(3-2) -Seminar-in-Speceh-Pathology-(3-cemester-hours) Advanced-study-of-solocted-topies-in-speech-pathology-with-an-emphaeis-on-differertial-diagnostie-procedures;-review-and-oritique-of pertinent-literature,-with-special-reference-to-the-analysis-of theories-and-techniques-as-they-relate-to-rehabilitative-programs-(3-0) -Linguistie-Analyses-(2-semester-hours) A-survey-of-the-techniques-and-methods-of-medern-linguistics,-including-specific-analysis-of-phonetic,-phonelogical-morphomic,-and-syntaotie-aspects-of-matural-language-systems--(3-0) 598-----Directed-Individual-Studies-in-Communicative-Disorders (1-2-comester-bours) Independent-pursuit-of-edvanced-problems-in-speech-pathology-and/or audiology-of-special-concern-to-qualified-graduate-students---May-be repeated-to-a-maximum-of-six-comester-hours---Requires-the-consent of-the-major-professor-and-the-instructor-involved.--(May-be-repeated fer-eredit -- (1-5-te-1-10) Pa. D. - Program-in-Communication-Disordors Coxe-Convece Deseription COURSE

Whe-input-stage-of-the-communicative-process---Basic-accustics-and optics.--Normal-and-pathological-functioning-of-the-auditory-and wisual-systems. -- Principles-of-psychophysics. -- Sensory-prostheses-

-- Communicate gy-I-(3-semester-hours)

42-01





GRADUATE INSTRUCTION IN EDUCATION

A sequence of graduate professional education courses has been developed at The University of Texas at Dallas which will complement the academic specialization of those students seeking the Master of Arts in Teaching Degree. The University does not offer a graduate degree in education, but rather offers those education-related activities which promote professional development and may lead to advanced teacher certification.

Some of these professional education courses such as the Seminar in Education and Psychology of Learning, are equally appropriate to any of the disciplines in which the student does his graduate work. They are designed to enhance understanding of the learning process and thus bring new insight to the role of the teacher. Certain other graduate professional education courses such as the Interdisciplinary Teaching of the Humanities, are more tightly focused upon specific academic areas.

Students who are interested in advanced certification in a teaching field, in professional career development, or in special endorsement programs are advised to consult the Teacher Certification Officer at The University of Texas at Dallas.

A description of the certification track on the M.A.T. degree and of the other options available for professional educators are discussed in an earlier portion of the bulletin. See Page $\,$

Education Courses

Course

Description

5300	The Interdisciplinary Teaching of the Humanities in the Secondary
	School (3 semester hours)
	Approaches to the interdisciplinary teaching of the Humanities at the
	secondary level. Each student will complete a project designing a
	unit from the present curriculum which could be taught from an inter-
	disciplinary perspective. Designed primarily for M.A.T. students in
	the Humanities.
	The state of the s
5304	Seminar: Education and Psychology of Learning (3 semester hours)
	Topics vary. Suggested topics include: a systematic approach to
	instruction, human variability and classroom learning, good setting
	and measurable achievement, learning theory and the role of the
	teacher.
5305	Seminar: Teaching of Science (3 semester hours)
	Selection and analysis of concepts appropriate to various topics in
	the sciences taught in secondary schools and community colleges.
5004	
5306	Seminar: Teaching of Mathematics (3 semester hours)
	Selection and analysis of concepts appropriate to the teaching of
	mathematics in the secondary schools and community colleges.
5334-5634	
2334-2034	Principles of Teaching: Supervised Experience in Early Childhood
	Education (3-6 semester hours)
	Supervised practicum in early childhood settings: nursery school, day
	care center, and kindergarten.

Course	Description
6300	Multicultural Education (3 semester hours) An examination of historical and current socio-cultural developments and their impact upon education. The transmission of values, cultural assumptions, and the patterning of education in cross-cultural perspective with special attention to multi-ethnic situation in American society.
6305	History and Philosophy of Education (3 semester hours) An inquiry into the function of philosophic principles in educational theories and institutions. Centers on the purposes of knowledge and education, the relationships among the sciences and their organization into curricula and the ways in which knowledge is acquired and transmitted.
6310	Instructional Media (3 semester hours) A graduate course in the defining of course objectives, the selection, use and evaluation of media appropriate to the objectives. Application of these strategies to the teaching field of the student's interest will be provided on an individual project basis.
8101-8301	Special Topics in Education (1-3 semester hours) May be repeated for credit.

GRADUATE PROGRAM IN ENVIRONMENTAL SCIENCES (M.S., Ph.D.)

Members of Faculty currently participating:

- PROFESSORS: Ervin Fenyves (Engineering and Applied Sciences), G. Fred Lee (Director, Institute for Environmental Sciences) (Engineering and Applied Sciences), Patrick L. Odell (Acting Program Head) (Mathematical Sciences), Donald Rapp (Physics)
- [PROFESSORS:--Etvin-I.-Fenyves-tEngineering-and-Applied-Sciences),

 Francis-S.--Iohnson-tPhysics),-G.--Ered-Lee-tEngineering-and-Applied

 Sciences),-Gyrus-L.--Lundell-tBiology),-Patrick-L.--Odell-(Acting-Head)

 [Mathematical-Sciences]
- ASSOCIATE PROFESSORS: James B. Combs (Geosciences), William I. Manton (Geosciences)
- ADJUNCT ASSISTANT PROFESSOR: G. Vaughn (Engineering and Applied Sciences)
- ASSISTANT PROFESSOR: Klaus Truemper (Management Sciences), Richard A. Bradley

 [Environmental Sciences), William G. Gale, Ir. (Environmental Sciences)
- LECTURERS: J. S. Chapman (Pulmonary Diseases, The University of Texas Health Science Center at Dallas), James L. Crowson (Political Science), R. Thurman [Political Science]
- [LECTURERS:--James-L:-Crowson-{Political-Science},-Kenneth-B:-McCool-{Mathematical Sciences},-L:-Donald-Thurman-{Engineering-and-Applied-Sciences}]

OBJECTIVES

The basic objective of the Graduate Program in Environmental Sciences is to provide training in the analyses and solutions of problems in the field of natural resources and energy and the field of environmental quality control. These fields encompass a broad range of practical problems in research, development, planning, utilization, and management, and cross boundaries of engineering, law, and applied natural and social sciences. The multidisciplinary program for Environmental Sciences is designed to train individuals who not only are skilled and knowledgeable in the scientific/technical aspects of problems in natural resources, energy, and environmental quality control, but also will be sensitive to the needs of the larger community for information and guidance.

PROGRAMS

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 to developing solutions for problems in the environmental sciences.

There are two tracks for specialization in the Environmental Sciences Program:

1) Environmental Quality Control and Natural Resources Management and 2) Energy and Mineral Resources. Applicants to the program should indicate which track they intend to enter.

Environmental Quality Control and Natural Resources Management

There are three areas of specialization in the field of Environmental Quality Control: Air Quality Control; Water Supply, Water and Wastewater Treatment and Water Quality Control; and Management, Social and Economic aspects of Environmental Quality Control. Within each of these areas are subareas of specialization — among these are aquatic biology; aquatic toxicology; aquatic chemistry; environmental engineering; air pollution control; engineering and chemistry; ecosystems modeling; nuclear energy and environmental radioactivity; applied ecology; environmental law; environmental health; urban and regional planning; and coastal zone management. The water supply and pollution control program is devoted to instruction and research on fresh surface and ground waters, estuarine and marine waters.

Opportunities exist for both on-campus and off-campus research, with particular emphasis on analysis of and solution development for practical problems in water and air quality control. One of the unique aspects of the Environmental Sciences Program research is the opportunity for students to participate as members of a multidisciplinary team representing the natural sciences, social sciences, engineering and law working on the development of solutions to environmental problems.

Energy and Mineral Resources

The field of Energy and Mineral Resources offers three areas of Specialization:
Energy Resources; Mineral Resources; and Management, Social, and Economic Aspects of
Energy and Mineral Resources. First-year students will normally complete core
courses which provide a review of the fundamentals of these fields and will also
take some seminar and elective courses.

After the first year, the student may proceed to advanced course work in any of the three general areas (or in a combination of them) best fitting his own particular goals and immediate situation. The course work includes lecture, laboratory and field courses. Research work may be undertaken in any of the three areas on-campus or off-campus with particular emphasis on the analysis and solution of practical problems. Research activities will be carried out in close co-ordination with the interdisciplinary Energy Center at The University of Texas at Dallas.

FINANCIAL ASSISTANCE

Research and teaching assistantships are available for qualified students. Further information on financial support can be obtained from the Director of the Institute of Environmental Sciences.

FACILITIES

Equipment and facilities are available for graduate research in the natural scientific, social scientific, engineering and legal aspects of environmental quality control and resource management at The University of Texas at Dallas. In addition, arrangements can be made for students to work at The University of Texas marine facilities at Galveston and Port Aransas, Texas.

SPECIFIC DEGREE REQUIREMENTS

Those students choosing to enter the Graduate Program in Environmental Sciences should have a Bachelor's Degree in the natural or mathematical sciences or engineering. A social science background is also acceptable for specialization in an area of Environmental Quality Control. Students entering the Energy and Mineral Resources specialization areas with a background in mathematical sciences or operations research should have a strong minor in one of the natural sciences.

Before graduating with a master's or Ph.D. Degree in Environmental Sciences, the student 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.

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 a student can satisfy the requirements for the Master of Science Degree. In addition to the core courses, a student must complete

- (1) six hours of electives selected from one of the topics areas, and
- (2) a master's thesis (minimum of six semester credit hours)

or

- (1) six hours of electives selected from one of the topic areas, and
- (2) internship at a local industry or government laboratory

or

(1) eighteen 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 courses may have this requirement waived at the discretion of the Executive Dean of the Graduate School.

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; plus any two 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 natural sciences 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 that are 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, and original contribution to scholarship. A Ph.D. degree 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 .

[OBJECTIVES

The basic objective of the Graduate Program in Environmental Sciences is to train a new professional to analyze and provide solutions for a broad range of practical environmental problems. This multidisciplinary program is designed to produce graduates who are not only skilled and knowledgeable in the scientific technical aspects of the environmental problems but who also will be sensitive to the need for understanding by the community at large.

[PROGRAMS

There-are-six-areas-of-specialization-in-the-Environmental-Sciences-Program:
Air-Pollution; -Water-and-Scil-Pollution; -Energy-Resources-and-Radioactive-Pollution;
Ecology; -Land-Use-and-Landscape-Architecture; -and-the-Management, -Social-and-Economic
Aspects-of-Environmental-Sciences, --First-year-students-will-normally-complete-Core
Gourses-that-give-a-review-of-the-fundamentals-of-these-fields, -and-take-some-seminars-and-elective-courses, --Some-students-may-find-it-necessary-to-take-a-survey
course-in-applied-mathematics-as-a-first-semester-elective-

After-the-first-year-the-student-may-proceed-to-advanced-course-work-in-any-of the-six-general-areas,-or-in-a-combination-of-them,-best-fitting-his-own-particular goals-and-immediate-situation,--The-course-work-includes-lectures,-laboratory-and field-courses,--Research-work-may-be-undertaken-in-any-of-the-six-areas-on-or-off campus-with-particular-emphasis-on-the-analysis-and-solution-of-practical-problems-

FACILITIES

Equipment-and-facilities-are-available-in-various-special-fields-of-physics, chemistry,-biology-and-geosciences,-and-ean-be-applied-to-environmental-studies.

SPECIFIC-DECREE-REQUIREMENTS

Those-students-choosing-to-enter-the-program-should-have-a-Bacheleris-Degree in-a-basic-science;—including-mathematical-science;—or-in-engineering.—Those-in mathematical-sciences-or-operations-research-should-have-a-strong-minor-in-one-of the-natural-sciences.

Each-entering-student-is-expected-to-complete-successfully-the-eighteen-hour block-of-core-courses,-501,-502,-510,-511,-520,-cnd-530.

There-are-three-ways-a-student-ean-satisfy-the-requirements-for-the-Master-of-Seience
Begree---in-addition-to-the-core-courses,-a-student-must-complete

- $\langle 1 \rangle$ --six-hours-of-electives-selected-from-one-of-the-topies-areas,-and
- (2)--a-master-s-thesis-(minimum-of-six-semester-eredit-hours)
- (1)--six-hours-of-electives-selected-from-one-of-the-topics-areas,-and
- (2)--internship-at-a-local-industry-or-government-laboratory
- or (1)--eighteen-hours-of-electives-

Those-students-wishing-to-pursue-the-Doctor-of-Philosophy-Degree-must-have-a Master-of-Science-Degree-in-Environmental-Sciences-from-UTD-or-its-equivalent--The Ph-D--Program-requires-a-major-concentration-in-three-of-the-oix-areas-of-study-and a-minor-concentration-in-two-areas--A-dissertation-is-required-and-must-be,-as-a result-of-independent-investigation-in-the-student-s-major-area,-an-original-contribution-to-scholarship---Research-leading-to-the-granting-of-the-degree-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------

Environmental Sciences Courses

Course

Description

5301[501]

5302 [502]

Natural Resources I: Air (3 semester hours) Atmospheric physics, physical meteorology, and environmental micrometeorology; sources, fate, significance of air pollutants, air quality control, devices and methods in monitoring air pollutants. [and-monitoring-of-air-poliutants.] (3-0)

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. [sources,-fate,-and-monitoring-of-pollutants.] (3-0)

5303

Natural Resources III: Earth (3 semester hours)
The gross concepts and principles of geology; earthquake prediction; ground water; fluvial systems; soils, universal resources; secular climatic change. Includes mandatory field trip. (3-0)

5309[509]

Special Topics/TAGER (3 semester hours) (3-0)

Earth-processes -- geological-evolution, -soil-dynamics, -geography-of the-earth;-emergence-and-stabilization-of-biological-diversity,-population-dynamics,-ecological-equilibria,-energy-networks-in-the-blosphere.--(3-0)]

5311[511]

Applied Ecology I [##] (3 semester hours) Man's impact on the biosphere: exploration, exploitation, conservation and development of natural resources, ecological principals, stabilization of biological diversity, population dynamics, ecological equilibrium, energy networks in the biosphere. [:--Aspects-of comparative-physiology;-pathology-and-toxicology-of-different-pollutants--Effects-on-the-biosphere;-public-health-problems-] (3-0)

5319

Natural Resources and Society (3 semester hours) A review is made of many of the basic natural resources that feed our technological society. Emphasis is placed on where ores occur, how much resource there is, the methods of mining and processing, the energy requirements, and the waste products generated. The short, medium and long term prognosis for support of our population is discussed. (3-0)

5320[520]

Energy Consumption: Resources and Impact (3 semester hours) Energy needs and resources; current technological problems. Nonconventional energy resources (nuclear fission, fusion, solar energy). Environmental impact. (3-0)

<u>5330[53</u>9] Economic, Social and Legal Aspects of Environmental Quality Control (3 semester hours) Introduction to social aspects of environmental systems analysis; economics of public works and water resource planning; economic, legal, and social problems in pollution control, land use, and resource management. (3-0)Resource Economics (3 semester hours) 5335 Economic theory of Resource Management, cost benefit analysis, economic aspects of air and water control. (3-0) <u>5340</u> Environmental Modeling (3 semester hours) Stochastic and deterministic models of environmental systems, system analysis, environmental models of physical, chemical, biological pollutants. (3-0)[Meteorology-and-Air-Pollution] [623------Handling-and-Disposal-fo-Radioactive-Materials--(2-semoster-hours) Handling, -shielding, -storage-and-transportation-of-radioactive materials;-sources-and-characteristics-of-radioactive-wastes---(2-0)] 6301[601] 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. (3-0) 6302[602] 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. (3-0) Biological Effects of Air Pollution (3 semester hours) 6303[603] Biological processes involved with the absorption, fate and pathology of air pollutants; [*] e[E] ffects of air pollution on the biosphere [*]with emphasis on terrestial plants. (3-0) Air Pollution and Public Health (3 semester hours) 6304[605] Acute and chronic public health aspects of air pollution; problems of detection, correlation, and evaluation of epidemiological data. (3-0) 6305[694] Air Pollution Measurements and Control (3 semester hours) Sources and characteristics of air pollution, techniques of measurements, air pollution control systems. (3-0) 6309[609] Special Topics in Air Pollution and Air Quality Control (3 semester hours) (May be repeated for credit) (3-0)

[Hydrology-and-Water-Politicion]

Applied Fluid Mechanics (3 semester hours)
Principals of fluid flow as they relate to water supply, water and wastewater treatment and water pollution control. (3-0)

[Dynamie] Hydrology (3 semester hours)
Transport processes; dynamical modeling; analysis of hydrologic sys-6311[6++] tems; measurement techniques. (3-0)6312[612] Water Resource Systems (3 semester hours) Analysis, design and operation of surface and subsurface reservoirs, pipeline systems, channels and river basins. Water quality control; economic and management aspects with particular emphasis on the Texas Water Plan. (3-0) 6313 Aquatic Chemistry (3 semester hours) Application of chemical principals to understanding environmental chemistry of pollutants in natural water systems. ----Physics-and-Chemistry-of-Water-and-Soil-Pollutants--(3-semester-hours) 613---Source; -chemistry; -and-transport-of-water-pollutants. -- Analysis-of water-and-soil;-instrumentation.--(3-0)] Aquatic Biology (3 semester hours) 6315 Effects of physical, chemical and biological pollutants on aquatic ecosystems. (3-0) Water [and-Soil] Pollution and Public Health (3 semester hours) 6316[616] Acute and chronic public health aspects of water [and-soil] pollution; problems of detection, correlation, and evaluation of epidemiological data. (3-0) Water Supply and Water Treatment (3 semester hours) 6317 Engineering design principles for municipal and industrial water supply and treatment. (3-0)6318 Water Analysis (3 semester hours) Chemical and biological methods for determining the pollutional characteristics of water. (2-3) Special Topics in Water Quality Control (3 semester hours) 6320[619] (May be repeated for credit) (3-0) [Energy-Resources-and-Radioactive-Pollution] [Ecology-{Fo-be-offered-after-September,-1975}] 6330[633] Mathematical Ecology (3 semester hours) A general survey of the mathematical and statistical aspects of classical ecology. Population genetics and dynamics; ecology and animal communities; food chains and webs. (3-0)

Exploitation and conservation of renewable natural resources, explora-

tion of untouched resources, development of resources. (3-0)

Ethnogeography (3 semester hours)

6331[632]

6333	Food Resources of the World (3 semester hours)
	Ecology of the human population; population and resources. The
	challenge to produce more food; management of resources, new forms of
	intensive management on the land and in the water. Cycles of elements;
	quantitative estimates. Ecosystems for human benefit; prospects and
	problems of modern agriculture. Ecological aspects of land manage-
	ment; earth's major ecosystems, future land resources, integrated land
	use planning. Management of aquatic resources; the coastal zone and
	estuaries; aquaculture. The effects of pollution. (3-0)
6334[634]	Agriculture and Environmental Quality [Seienee] (3 semester hours)
	A general survey of the environmental aspects of agriculture and for-
	estry, land use for food production, pesticides, environmental toxi-
	cology, food control and public health. (3-0)
6335[636]	Marine Biology [and-Food-Resources-of-the-Oceans] (3 semester hours)
	Ecology of micro- and macro-organisms in the seas and estuaries;
	cycling of energy and matter through the marine ecosystem; food re-
	sources of the oceans and their utilization. (3-0)
6336	Marine Chemistry and Pollution (3 semester hours)
0330	Chemical characteristics of the oceans and estuaries, factors influ-
	encing composition and pollution of marine waters. (3-0)
	encing composition and politicion of marine waters.
6338	Special Topics in Oceanography (3 semester hours)
	(May be repeated for credit) (3-0)
6339[639]	Special Topics in Environmental Biology [Ecology] (3 semester hours)
	(May be repeated for credit) (3-0)
6340[6 2 0]	Energy Problems in our Technological Civilization (3 semester hours)
	The energy supply: fossil fuels and nuclear energy, [coal, -production
	eyeles, world reserves, new energy sources. Environmental aspects of
	[various] fuel, recovery, extraction and utilization. [fuels:]
	(3-0)
6341	Fossil Energy (3 semester hours)
0341	Fossil energy resources, methods of recovery and environmental
	problems of recovery transformation and utilization. (3-0)
	of options of footing of the footing
6342	Nuclear Energy I: The Principles of Nuclear Physics
	(3 semester hours)
	Introduction into atomic physics; atoms electrons, and radiations;
	atomic spectra, X-rays and atomic structure. The constitution of the
	nucleus; isotopes, natural radioactivity, artificial nuclear disinte-
	gration and artificial radioactivity; alpha-, beta-, and gamma-decay;
	nuclear reactions, nuclear forces and nuclear structure. Neutron
	physics and nuclear fission. (3-0)
6343	Nuclear Energy II: Physics and Measurement of Nuclear Radiations
	(3 semester hours)
	Interaction of nuclear radiation with matter; detection and measure-
	ment of nuclear radiations. Operation and construction of counters;
	dosimetry and shielding; radiation hazards; maximum permissible levels
	of radiations, environmental monitoring and safety measures. Particle- track detectors and accelerators. (3-0)
	crack defectors and acceptators. (2-0)

6344	Nuclear Energy III: Nuclear Energy Generation (3 semester hours)
	Nuclear fission and fusion. Nuclear fission reactors and nuclear
	power stations; light water reactors, and high temperature gas cooled
	reactors; breeder reactors. Safety problems, radioactive hazards and
	radioactive waste disposal. Nuclear fusion and controlled thermo-
	nuclear reactors. Energy conversion and technological problems. (3-0)
	indical reactors. Energy conversion and technological problems. (5-0)
6345	Nuclear Energy IV: Handling and Disposal of Radioactive Materials
	(3 semester hours)
	General aspects and methods of the technology of radioactive materi-
	als; handling, shielding, storage and transportation of radioactive
	materials; sources and characteristics of radioactive wastes; dis-
	posal and management of radioactive wastes produced by the nuclear
	energy industry. (2-1)
	energy industry. (2-1)
6346[622]	Biological Effects of Nuclear Radiations (3 semester hours)
	Immediate and late somatic effects, cellular damage, genetic effects;
	internal and external permissible exposure levels; diagnostic proce-
	dures; ecological pertubations. (3-0)
	11110, 111110, 1111
6347	Solar Energy (3 semester hours)
	Solar energy recovery and problems. (3-0)
6348	Geothermal Energy (3 semester hours)
	Potential for geothermal energy recovery and problems of geothermal
	energy. (3-0)
6210	m1 1 1 The case (Consequent of Consequent of Consequency of Consequent of Consequency of Conseq
6349	Thermodynamics and Energy Conversion (3 semester hours)
	The fundamental laws of thermodynamics. The states of matter. Ther-
	modynamic properties. Fluid flow, heat transfer and compression and
	expansion of fluids. Refrigeration cycles. Efficiencies of heat
	engines. Methods of conversion of energy from one form to another.
	(3-0)
6350[629]	Special Topics in Energy Resources (3 semester hours)
0220[653]	(May be repeated for credit) (3-0)
	(May be repeated for credity (5-0)
6351	Mineral Resources I - Ferrous and Nonferrous Metals
	(3 semester hours)
	Mining and refining technology; gross world production and consump-
	tion; U.S. production and consumption; distribution of known re-
	serves; pollution and environmental health problems within the
	minerals industry. (3-0)
6352	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. (3-0)
6353	Substitution Technology and Resource Recycling (3 semester hours)
	Conservation of natural resources including timber, minerals, fossil
	fuels and energy; materials reclamation with respect to economic
	usefulness, engineering, and environmental cleanliness; benefits from
	industrial and municipal waste material reclamation. (3-0)

6354	Public Policy in Energy and Natural Resources (3 semester hours)
	The effect of political attitudes and legal constraints on developing
	and sustaining supplies of energy and natural resources. (3-0)
6359	Special Topics in Mineral Resources (3 semester hours)
	(May be repeated for credit) (3-0)
	l-Landscape-Architecture
(To-be-offere	-d-after-September,-1975}
6414	Advanced Aquatic Chemistry (4 semester hours)
	Applications of advanced chemical principles for water quality con-
	trol with emphasis on environmental chemistry of pollutants in natural
	water systems and water and wastewater treatment processes. (3-3)
[644	Biological-Effects-of-Water-and-Soil-Pollution(3-semester-hours)
[O.1.	Biological-processes-involved-in-the-absorption,-fate,-and-pathology
	of-water-pollutants;-effecto-of-water-and-pollution-on-the-bio-
	sphere(3-0)]
6419	Water Pollution Control (4 semester hours)
0727	Engineering methods and design of control systems for physical, chem-
	ical and biological pollutants from wastewaters. (3-3)
6432[631]	Environmental Biology (4 semester hours)
	Biochemical energetics, genetics, and evolution; physiology and interactions with the environment. (3-3)
	TOTAL CITY OF CANTAL CAME (5 3)
6437	Oceanographic and Limnological Techniques (4 semester hours)
	Oceanographic and limnological field sampling and study methods, a one
	week field trip to the Texas gulf coast is conducted. (3-3)
641	Landscape-Design-and-Gonstruction(3-semester-hours)
	Theories-and-methods-in-landscape-analysis,-physiographic-and-cul-
	tural-aspects-of-landscape-planning;-environmental-aspects(3-0)
642	Regional-and-Urban-Landocape-Deoign(3-semester-hours)
092	Landscape-decign-for-the-community,-renewal-and-development,-social
	and-psychological-factors,-special-problems-of-metropolitan-areas,
	environmental-aspects(3-0)
642	Secial,-Public-Health-and-Safety-Appects-of-Landscape-Architecture
049	+3-semester-hours
	Social,-health-and-safety-aspects-of-regional-and-wrban-planning-and
	development; -housing-and-industrial-area, -highways-and-communication;
	eir-quelity-and-water-supplies;-sewage-system-and-solid-waste-dispo-
	eal;-policy-making,-management-and-administrative-problems(3-0)
644	-Special-Topico-in-Landscape-Architecture(3-samester-hours)
- , ,	(May-be-repeated-for-eredit)(3-0)]

[Environmental-Management,-Social-and-Economics-Problems]

- 7320 Demography (3 semester hours)

 Human population trends, factors influencing human population emigration, migration. (3-0)
- Management Systems I (3 semester hours)

 A study of the basic technology and techniques that are utilized in the development of management information systems, including: data base management systems, information structures, information organization and retrieval, cybernetics, and systems theory. Students will program in high-level languages. Prerequisite: MAS 5351 or permission from instructor. (3-0)
- 7325[725*] Operations Research Techniques for Environmental Quality
 (3 semester hours)
 Applications of operations research techniques to problems of environmental quality. Critical review of current literature. Prerequisite: MAS 6313[613]. (3-0)
- 7355[755*] Simulation of Management Systems for Environmental Evaluation
 (3 semester hours)
 Applications fo simulation languages and methodologies to problems of environment. Analysis of data generated by simulation models and validation of models and results. (3-0)
- 7359 Special Topics in Management, Social, and Economic Problems of
 Natural Resources (3 semester hours)
 (May be repeated for credit) (3-0)
- 7367*[767*] Land Use and Resource Management (3 semester hours)

 Seminar or selected topics in optimal land use models and the environmental and economic trade-offs necessary for effective management.

 (3-0)
- 7368*[768*] 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 advantage or limitatrions of each are investigated from a methodological and practical viewpoint. (3-0)
- 7369*[769*] Urban, Regional and Social Problems in Environmental Design
 (3 semester hours)
 Theory of economic discrimination, racial composition of employment and unemployment, discrimination in housing and their environmental interface. Topics also include rural poverty, transportation and tax proposals. (3-0)
- 7384*[784*] Problems in Environmental Health, Sanitation and Community Planning (3 semester hours)

 Seminar on the relationship of environmental health to sanitation and community planning. Qualitative and quantitative models will be evaluated. (3-0)

*See Graduate Program in Management and Administrative Sciences (MAS)

[Other-Courses]

7385	Special Topics in Environmental Sciences (3 semester hours) (May be repeated for credit) (3-0)
7386	Special Topics in Environmental Law (3 semester hours) (May be repeated for credit) (3-0)
7387	Special Topics in Environmental Management (3 semester hours) (May be repeated for credit) (3-0)
7388	Special Topics in Resource Economics (3 semester hours) (May be repeated for credit) (3-0)
8188	Environmental Sciences Seminar (1 semester hour) Discussions presented by students and staff on environmental quality control topics. (May be repeated for credit) (0-1)
8189	Environmental Sciences Research Seminar (1 semester hour) Discussion of current environmental sciences research presented by students and staff. (May be repeated for credit) (0-1)
<u>8310[810</u>]	Environmental Science Laboratory (3 semester hours) Students participate in the analysis and solution of problems, either individually, or as a member of an on-or-off campus interdisciplinary team, in the laboratory or in the field. The student may change [his] problems at the end of a semester's work; however, since experience on a given problem will provide the basis for the M.S. thesis, a change in problem may necessitate a longer time to complete the M.S. Degree. (0-9)
8390-8990 [9 1 0]	Research in Environmental Science (3-9 semester hours) (May be repeated for credit) [Open-to-students-who-are-candidates-for the-Ph.DDegree.] (0-9)
8398[908]	Thesis (3 semester hours) (May be repeated for credit) (0-9)
8399[909]	Dissertation (3 semester hours) (May be repeated for credit) (0-9)
8911	Environmental Science Internship (9 semester hours) Available for students who choose internship with industry or agencies in the area of environmental control. Student must present proand-post seminars covering internship activities. (May be repeated for credit) (0-9)

GRADUATE PROGRAM IN GENERAL STUDIES* (M.G.S.)

Members of Faculty currently participating:

Robert Armstrong (Anthropology), Erwin J. Fenyves (Engineering and Applied Sciences), Patrick L. Odell (Acting Head)
[Mathematical Sciences] PROFESSORS:

ASSOCIATE PROFESSORS: M. J. Regina Kyle (Humanities)

OBJECTIVES

The Graduate Program in General Studies, leading to the degree of Master of General Studies, is a multidisciplinary curriculum including at least two courses each from humanities, social sciences, behavioral sciences, and natural sciences. 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 -- 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 General 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, postgraduate experience can offer the opportunity for meaningful, interesting activity, and the chance to update general knowledge.

The Graduate Program in General Studies leads to the degree of Master of General Studies 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 interdisciplinary seminars, the graduate student designs with the advisor 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 distribution courses, which are taken from the offerings of other graduate programs at The University of Texas at Dallas, the Master of General 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 General Studies 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 general studies program can apply toward credit for the Master's degree in the specific area.)

*The M.G.S. degree cannot be awarded before 1976-77 academic session; however, course work leading to the degree may be taken prior to this date.

FACILITIES

Facilities at The University of Texas at Dallas which support other graduate programs are available to students in the Program in General Studies. Those facilities are briefly described in sections of this Bulletin associated with specific degree programs.

SPECIFIC DEGREE REQUIREMENTS

Students entering the General Studies Program should have the Bachelor's Degree or its equivalent. They should be mature and capable of independent study and work.

General requirements for admission to graduate programs at The University of Texas at Dallas are stated in this Bulletin on page ().

For the degree of Master of General 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 (6) 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 can 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 General Studies Advisory Committee. The project must be approved by the student's advisor and program committee.

GENERAL 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 GEOSCIENCES (M.S., Ph.D.)

Members of Faculty currently participating:

[Anton-1-Hales-1Geosciences], Martin Halpern (Geosciences), Charles E. Helsley (Head) (Geosciences), Mark Landisman (Geosciences), Emile A. PROFESSORS:

Pessagno, Ir. (Geosciences)

VISITING PROFESSOR: Anton L. Hales (Geosciences)

ASSOCIATE PROFESSORS: James L. Carter (Geosciences), James B. Combs (Geosciences),

[Martin-Halpern-(Geoseiences)], William I. Manton

(Geosciences), Richard M. Mitterer (Geosciences), [Emile-A. Pessagno, - In. - (Geosciences), Dean C. Presnall (Geosciences),

James B. Urban (Geosciences)

ASSISTANT PROFESSORS: David K. Parrish (Geosciences), Ronald W. Ward (Geosciences)

Joint Appointments from The University of Texas Marine Science Institute (MSI) (Galveston location) and from Southern Methodist University (SMU).

PROFESSORS: H. James Dorman (Geosciences, MSI), [William-Maurice-Ewing-Geosciences, MSI), Gary V. Latham (Geosciences, MSI), Joel S. Watkins (Geosciences,

MSI), J. Lamar Worzel (Geosciences, MSI)

[Andrew-D.-Suttle,-Ir.-(Geosciences,-MSI)], David Blackwell (Geosciences, SMU), C. Vance Haynes (Geosciences, SMU) ADJUNCT PROFESSORS:

Eugene Herrin (Geosciences, SMU), Michael Holdaway (Geosciences, SMU), Robert L. Laury (Geosciences, SMU), Bob H. Slaughter (Geosciences, SMU), Andrew D. Suttle, Jr. (Geosciences, MSI), Donald Thorstensen (Geosciences, SMU), Thomas E. Williams (Geosciences, SMU)

Undergraduate or Master's work in either chemistry, biology, geology, mathematics, physics, or engineering is acceptable. Deficiencies in undergraduate geology will be offset by strength in other sciences and mathematics. The program is designed specifically to permit students to remedy deficiencies in geology without undue prolongation of course work. Course programs will be designed to meet the specific needs and interests of each student.

SPECIFIC REQUIREMENTS FOR M.S. AND Ph.D DEGREES:

- Each student must fulfill the following Program requirements: Α.
 - Demonstration of ability to use a computer and a knowledge of FORTRAN or an equivalent language.
 - Fulfill the minimal mathematics requirements (one course in either mathematics or statistics beyond one year of calculus).
 - Demonstrate scientific facility in a foreign language acceptable to the faculty.
 - Complete a field course. This requirement may be waived by the faculty on the recommendation of the supervising professor. (Note: students are responsible for all personal expenses related to field trîps.)

- 5. A Ph.D. student will complete a minimum of four (4) and an M.S. student a minimum of two (2) courses, with acceptable grades, in at least two (2) fields other than the major field. A Ph.D. candidate already holding an M.S. in Geosciences may satisfy, with approval of faculty, two of the four courses via previous graduate work. Fields (groupings of subheadings in the catalogue) are defined as follows:

 (a) General Geophysics, (b) Seismology, (c) Mineralogy-Petrology-Geochemistry, (d) Structural Geology-Tectonics, (e) Sedimentology and (f) Paleontology-Stratigraphy.
- 6. All degree aspirants (M.S. and Ph.D.) must complete at least 5 additional courses with acceptable grades, exclusive of seminars and research.
- [1:---Complete-with-satisfactory-grades-the-Gore-Gourses-(Core-I-and-Gore-EL):
- 2.--Fulfill-the-minimal-mathematics-requirement-(one-course-beyond-one year-of-calculus-in-either-mathematics-or-statistics).
- 3.--Prove-his-seientifie-faeility-in-either-French,-German,-Russian,-Spanish,-or-any-other-foreign-language-acceptable-to-the-faculty-
- 4.--Complete-a-field-course.--This-requirement-may-be-waived-by-the faculty-on-the-recommendation-of-the-Supervising-Professor---(Note: students-are-responsible-for-all-personal-expenses-related-to field-trips-)
- 5---Prove-his-ability-to-use-a-computer-
- 6---Masterlo-of-Seienee-aspirants-must-take-at-least-5-advanced-courses (exclusive-of-Gore-L-and-Core-LL)-with-acceptable-grades-
- 7.--Ph.D.-aspirants-should-normally-take-at-least-7-advanced-courses (enclusive-of-Gore-L-and-Gore-IL)---Two-of-these-courses-may-be research-eourses-]
- B. All students must submit an acceptable thesis or dissertation.

C[B]. General

Requirements for granting degrees for the M.S. and Ph.D. are stated under "Procedures and Requirements for Graduate Degrees," page 32.

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 must be approved by the student's Supervisory Committee before the thesis defense and the submission of the thesis to the University.

Facilities for Graduate Work

The research facilities available to students are excellent. They include mass spectrometers, a low 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°C and 50 kb and one-atmosphere studies up to 1600°C at controlled oxygen fugacities, a paleomagnetic laboratory, an organic geochemistry laboratory including facilities for carbon and nitrogen analysis and amino acid analysis, a sedimentology laboratory including flume and an automated settling tube, an array of recording three-component 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 microfilm 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, including laboratories for radiocarbon dating and for thermal conductivity, diffusivity and productivity measurements, are available at other universities in the area.

Marine studies at Galveston are conducted aboard the Research Vessel IDA GREEN, equipped with a 24 channel digital seismic system, and in a new dockside campus building. Research facilities include a microfilm library of WWSSN records, over 3000 tapes containing all data from four lunar seismic stations, earth-science library collections and two digital computers. Terrestrial geophysics facilities also include a salt mine seismic observatory at Hockley, Texas, and a seismic network in Costa Rica. The Galveston campus has a medical-life sciences library and an IBM 370/155 computer. Students at Galveston will normally take [the-core-and other] fundamental courses at Dallas in their first two to four semesters, and will participate in seminar and research courses at Galveston.

The facilities for marine related research at Galveston are also available by arrangement to students doing the majority of their research work at Dallas should the need for these facilities arise.

Geosciences Courses

General

Course

Description

5400 [500] Introduction to Geology

Mitterer, Parrish, Presnall

(4 semester hours)

A review of earth processes as a whole: Time and geology; geomorphology; igneous and sedimentary processes and products; metamorphism; structure, [form-and-deformation-of-geologic-bodies]; evolution of continents and oceans. Includes three 2 day field trips to study a variety of geologic features and rock types. This course is open only to those students whose major undergraduate study was in subjects other than geology. Laboratory course. (2-6) [Shemical-fractiona-tion-within-the-earth, etc.-This-course is-open-only-to-students whose major undergraduate study was in subjects other than goology. (3-0)]

Modern-concepts-of-the-structure-and-chemistry-of-the-earth-s-interior, and the methods-by-which this information is obtained; earth shaping-processes; -the-origin-and-chemistry-of-crustal-materials-and their-relation-to-the-crust-mantle-system;-regional-and-global tectonics -- (3-0)

Regional-and-global-stratigraphy-with-emphasis-on-the-testonie-framework-and-chemical-evolution-of-sediments,-evidence-for-early-life-and the-ecologie-significance-of-its-subsequent-evolution;-modern-concepts of-bio-and-lithostratigraphic-correlation.-(3-0)]

5302

Petroleum Geology

Mitterer, Urban, Outside Lecturers

(3 semester hours)

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: Introductory Sedimentology, Structural Geology. (2-3)

5303	Geologic Computing (3 semester hours) Parris	sh
	Application of computer techniques in solving geological problems. Includes instruction in programming 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)	-
[503	Use-of-the-Computer-(3-semester-hours)	łì
<u>5104</u> [504]	Spring Field Trip (1 semester hour) A ten to fourteen day trip to selected regions in the United States and/or northern Mexico in order to study the field relationships of geologic features within those regions. Field trip. (May be repeated for credit). (S-U grading) (0-3)	'f
5405 [505]	Field Geology Helsley, Parrish, [Manton, Halpern (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, 8-10 days of detailed field mapping and preparation of a report prepared in professional form. Field trips. Prerequisite: Physical Geology. (2-6)	
5306-5606	Field Geology-Summer Camp (3-6 semester hours) 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)	
[586	Field-Geology-Summer-Gamp-(6-12-semester-hours)Staf (1-20)-(Note:Students-are-responsible-for-all-personal-expenses-re lated-to-field-trips:)]	
[507	Introduction-to-Field-Geology	
5308 [508]	Special Topics in Geology-Geophysics (3 semester hours) Staf (3-0) (Offered at Dallas and Galveston)	f
5309 [509]	Special Topics/TAGER (3 semester hours) (3-0) Staf	f
[510	Elements-of-Earth's-History-(3-semester-hours)	n-;
511	Geology-Laboratory-II-(l-semester-hour)Staf Sedimentary-rocks,-paleontology,-structural-and-stratigraphic problems(3-0)]	€

5312 [51 2]	Geology and Man (3 semester hours) Economic significance of earth resources and implications for the quality of life, environmental implications of use and depletion, land usage, and consequences of interference with geologic processes.
5314	Geothermal Energy (3 semester hours) Combs Potential for geothermal energy recovery and problems of geothermal energy. (3-0)
7314	Seminar in Geothermal Energy Resources (3 semester hours) Combs Geological, hydrological, geochemical and geophysical methods used in 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. (3-0)
8114-8914	Research in Geothermal Energy Resources (1-9 semester hours) Combs (May be repeated for credit.)
Stratigraphy	
Course	Description
5420	Elements of Earth's History (4 semester hours) Overview of historical geology and its relationship to sedimentation, structural geology, stratigraphy and plate tectonics. Laboratory includes sedimentary rocks, paleontology, structural and stratigraphic problems. Laboratory course. Prerequisite: GEO 5400 or consent of instructor. (3-3)
5321	Principles of Stratigraphy (3 semester hours) Evolution of modern biostratigraphic nomenclature from D'Orbigny to Hedberg. Field trips and lectures focusing on local structure. Prerequisite: An upper division undergraduate course in paleontology. (3-0)
5322	Area Geology (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 Uplift, Ouachita, Arbuckle and Wichita Mountains. Limited geologic mapping exercises will be included. Field trips. Prerequisite: GEOS 5400 or equivalent. (1-6)
6321	Regional Stratigraphy (3 semester hours) Systematic studies of the stratigraphy of selected regions such as Texas and the adjoining states emphasizing the applications of the principles of stratigraphy for the interpretation of depositional systems. The course will generally include one or two field trips to examine selected stratigraphic sections within the region under consideration. Field trip. (3-0)
7321	Seminar in Stratigraphy (3 semester hours) Urban, Pessagno
9120-9920	(3-0) Research in Stratigraphy (1-9 semester hours) (Offered at Dallas and Galveston) (May be repeated for credit.)

Paleontology

Course	Description
5430 [530]	Invertebrate Paleontology (4 semester hours) [Studies-of-the] Morphology, evolution, classification and paleoecology of invertebrates important in the geological record. Laboratory course. Prerequisite: Historical Geology. (2-6) [fessil-record. (2-6)]
[531	Principles-&-Methods-of-Paleontology
5432 [532]	Micropaleontology I (4 semester hours) Introduction to the study of invertebrate microfossils with emphasis on the Foraminiferida, Ostracoda, and Radiolaria. [535-te-be-taken concurrently:-(4-0)] Laboratory course. Prerequisite: Historical Geology. (2-6)
5433 [533]	Palynology I ([2] 4 semester hours) An introduction to palynology, [M]morphology, systematic[s] and stratigraphic distribution of Mesozoic and Cenozoic palynomorphs, including spores, pollen, dinoflagellates, and hystrichospheres. [CEO 536-to-be-taken-concurrently: (2-0)] Laboratory course. Prerequisites: Historical Geology, General Botany recommended. (2-6)
5334 [53 4]	Paleoecology (3 semester hours) Relations between sediment type, organism distribution, diagenesis, and the historical continuity of community organization. $[(3-9)]$ Field trips required. $(2-3)$
[535-	-Micropalcontology-IA-(2-semester-hours)Pessagno
	Laboratory-studies-of-microfossils-important-in-the-fossil-record, (0-6)
536	Laboratory-studies-of-microfossils-important-in-the-fossil-record,
536 6432	Laboratory-studies-of-microfossils-important-in-the-fossil-record, (0-6) -Palynology-IA-(2-semester-hours)
	Laboratory studies of microfossils important in the fossil record. (0-6) Palynology IA (2-semester hours)
6432	Laboratory-studies-of-microfessils-important-in-the-fessil-record, (0-6) -Palynelogy-IA-(2-semester-hours)

[635	Palynology-IIA-(2-semester-hours)	
	acritarchs, -chitinosoa, -and-microscopic-algae, (0-6)]	, porren,
7334 [638]	Seminar in Paleontology (3 semester hours) Per (3-0)	essagno
7335 [639]	Seminar in Palynology (3 semester hours) (3-0)	Urban
8130-8930 [930]	Research in Paleontology $(1-9[42]$ semester hours) Pessagno, (Offered at Dallas and Galveston) (May be repeated for credit).	
[Sedimentolog	y Stratigraphy	
Course	Description	
543	-Principles-of-Stratigraphy-(3-semester-hours)	eaphie Livision
534 <u>1</u> [543]	Introductory Sedimentology (3 semester hours) Basic principles of physical and chemical sedimentation. Fluid sediment interactions; introduction to hydrodynamics, water che weathering and formation of carbonate and siliceous sediments.	emistry;
5342 [54 2]	Sedimentary Environments (3 semester hours) The interpretation of ancient sedimentary environments of depose based on the study of primary sedimentary structures, grain size analysis, fossils, trace fossils, unit geometry, quartz grain structures, trace element, geochemistry, etc. Deals with clastic terrigenous as well as carbonate sediments. (3-0)	e surface
<u>5444</u> [544]	Sedimentary Petrography I (4[2] semester hours) Description, classification and genesis of clastic terrigenous mentary rocks in thin-section and hand sample. Emphasis is on stones, but coverage of siltstones, shales and chemical deposit (chert and evaporites) is also included. [GEO 545-to-be-taken-currently. (2-0)] Laboratory course. (2-6)	sand- :s
[545	Sedimentary-Petrography-IA- (2-semester-hours) Laboratory-studies-of-clastic-sediments: (0-6)]	
5345 [546]	Sedimentary Petrography II (3 semester hours) Study of the origin, textures, distribution patterns and altera of recent and ancient carbonate sediments. The chemistry of for tion and diagenesis of carbonates will be emphasized. (3-0)	
5446 [547]	Sedimentary Petrography III (4[2] semester hours) Description, classification and genesis of carbonate grains as in thin-section and hand samples. Includes the microscopic idecation of calcareous fossils. [GEO 548-to-be-taken-concurrent] (2-0)] Laboratory course. (2-6)	entifi-
[548	-Sedimentary-Petrography-IIIA-(2-semester-hours) Laboratory-studies-of-carbonate-sediments(0-6)]	

5347	Marine Geology (3 semester hours) Staff
	The water masses and circulation of oceans will be related to oceanic chemistry as well as processes and patterns of sediment deposition.
	The emphasis will be on oceanic sediments but outer shelf and slope
	deposition will also be discussed. Geophysical and deep-sea drilling
	results will be used to outline the rates of deposition and thick-
	nesses of sediments in various basins. (3-0)
[641	Regional-Stratigraphy-(3-semester-hours)Pessagno,-Urban
	Systematic-studies-of-the-stratigraphy-of-selected-regions-sweh-as
	Texas-and-the-adjoining-states-emphasising-the-applications-of-the
	principles-of-stratigraphy-for-the-interpretation-of-depositional
	ayatemaThe-course-will-generally-include-one-or-two-field-trips-to examine-selected-stratigraphic-sections-within-the-region-under-con-
	aideration:(3-0)]
[644	Sedimentary-Petrography-i-(4-semester-hours)
1011	Description, -elassification-and-genesis-of-elastic-terrigenous-sedi-
	mentary-rocks-in-thin-section-and-hand-sample:Emphasis-is-on-sand-
	Stones,-but-coverage-of-siltstones,-shales-and-chemical-deposits
	(cherts-and-evaporites)-also-is-included.
648	-Seminar-in-Stratigraphy-(3-semester-hours)
	(3-0)]
7341	Seminar in Sedimentation (3 semester hours) Staff
[649]	(3-0)
7342	Seminar on Marine Geology (3 semester hours) Staff
	(Galveston only) Discussion and reviews of literature on selected topics. (3-0)
	topics. (3-0)
[949	
	(1-12-semester-hours)-(Offered-at-Dallas-and-Calveston)]
8140-8940	Research in [Stratigraphy] - Sedimentology Staff
[945	$(1-9[\frac{1}{2}]$ semester hours) (Offered at Dallas and Galveston)
01/1 00/1	
8141-8941	Research in Marine Geology (1-9 semester hours) Staff
	(Offered at Dallas and Galveston) May be repeated for credit.
Geochemistry	
Course	Description
	'
5451 [551]	Biogeochemistry (4[3] semester hours) Mitterer
[334]	Composition and distribution of organic matter in sedimentary environ-
	ment; influence on sedimentary processes; carbonate geochemistry; organic-inorganic interactions; diagenesis; origin of life and petro-
	leum. Laboratory course. Prerequisites: one year of Chemistry,
	Introductory Sedimentology or equivalent. (3-3) [GEO-557-to-be-taken
	concurrently:(3-0)]
[552	- Environmental - Seochemistry
-	(3-semester-hours)
	Geochemistry-of-the-sedimentary-environment-including-atmosphere,
	hydroshpere and biosphere and the effects of man on the environment.
	GEO-556-to-be-taken-concurrently(3-0)]

5453 [553]	Sedimentary Geochemistry (4[3] semester hours) Organic and inorganic aspects of the sedimentary environment including sediments, water and organisms. Laboratory course. Prerequisites: one year Chemistry, Introductory Sedimentology or equivalent. (3-3) [{3-0}]
5454 [55 4]	Instrumental Techniques in Geochemistry - Petrology (4 semester hours) Introduction to [M]modern instrumental techniques including atomic absorption spectrophotometry, mass spectrometry, electron microprobe spectrophotometry, mass spectrophotometry, scanning electron microscopy, and X-ray diffraction and sample preparation. Laboratory course. (2-6) [{2-6}]
[556	-Environmental-Geochemistry-LaboratoryMitterer,-Garter,-Manton (1-semester-hour) Laboratory-procedures-related-to-environmental-processes,(0-3)]
[557	-Laboratory-Techniques-in-Biogeochemistry-and
[\$50	-Geochemistry-(3-semester-hours)
6353 [65 3]	Isotope Geochemistry (3 semester hours) Application of isotopic abundance measurements [of-stable-and-radio-genic-isotopes-to-problems-concerning-the] to the origin of the elements, the solar system and rock systems. (3-0)
6454 [65 4]	Geochronology $(4[3]$ semester hours) Halpern Uranium-lead, rubidium-strontium, and potassium-argon radiometric age dating as applied to the solution of geologic problems. $[(3-0)]$ Laboratory course. $(3-3)$
6355 [65 5]	Geochemical Prospecting & Ore Deposits (3 semester hours) Carter Geochemical methods in mineral exploration including analytical techniques and studies of weathering, soil formation, primary and secondary dispersion patterns and anomalies; evaluation of ore bodies in terms of economics and genesis. (3-0)
[656	- Geochronology-Laboratory-(2-semester-hours)
7357 [657]	Seminar in Isotope and Trace Element Geochemistry (3 semester hours) Discussion of the application of radiogenic isotopes and trace element fractionation patterns to the problem of the origin of igneous rocks. (3-0)
7358 [65 8]	Seminar in Geochemistry (3 semester hours) (Offered at Dallas and Galveston) (3-0)

7359 [659]	Seminar in Geochronology (3 semester hours) Halpern (Offered at Dallas and Galveston) (3-0)
8150-8950 [950]	Research in Geochemistry $(1-9[12])$ semester hours) Staff (Offered at Dallas and Galveston) (May be repeated for credit).
Petrology - M	lineralogy
Course	Description
5461	Introduction to Mineralogy-Petrology I Carter, Manton, Presnall (4 semester hours) Hand specimen mineralogy and fundamentals of crystallography and optical mineralogy. Laboratory course. Prerequisite: Permission of instructor. (3-3)
5462	Introduction to Mineralogy-Petrology II Carter, Manton, Presnall (4 semester hours) Classification, nomenclature and textures of igneous, sedimentary, and metamorphic rocks including both hand specimen and optical study. Laboratory course. Prerequisite: permission of instructor. (3-3)
5463 [560]	Advanced Mineralogy (4[2] semester hours) Carter Elements of optical mineralogy, X-ray and chemical properties of rock forming minerals. Laboratory course. Prerequisite: GEOS 5461. (3-3) [GEO-562-to-be-taken-concurrently(2-0)]
[56]	-Introduction-to-Igneous-and
[562	-Advanced-Mineralogy-Laboratory-(2-semester-kours)
[564	-Igneous-and-Metamorphie
6360	Phase Equilibria (3 semester hours) Principles of phase equilibria and their application to problems of igneous and metamorphic petrology. (3-0)
[-6 6 0 0 000 100 100 100 100 100 100 100 100	Phase-Equilibria-and-Thermodynamics-I-(3-semester-hours)Prosnall Principles-of-phase-equilibria-and-thermodynamics-as-applied-to-petro-logic-problems,-pressure-temperature-composition-phase-diagrams, pressure-temperature-projections-of-multicomponent-systems-using Schreinemakers'-rules,-methods-of-deducing-paths-of-erystallisation and-fusion,-calculation-of-phase-diagrams-from-thermodynamic-data-(3-0)]
6361	Igneous Petrology (3 semester hours) Historical evolution of great conflicts in the development of petrologic thought from about 1900 to the present. Emphasis on current theories for the origin of igneous rocks as they are related to a plate tectonic framework. (3-0).

Origin-of-igneous-rocks-in-light-of-recent-theoretical,-experimental and-field-studies,-petrology-of-the-erust-and-upper-mantle,-basalt, granite-and-andesite-genesis,--(3-0)] -Phase-Equilibria-and-Thermodynamics-II-(3-semester-houre)----Presnall Continuation-of-GEO-660.--(3-0)] 6463 Electron Microprobe Techniques (4 semester hours) Carter [663] [Introduction-to] [p]Principles and procedures in scanning electron spectrophotometry including energy dispersive analysis. [(2-6)]Laboratory course. (2-6) 7369 Seminar in Petrology (3 semester hours) Staff [669] (3-0)8160-8960 Research in Petrology (1-9[42] semester hours) Staff [960] (May be repeated for credit). Structural Geology -- Tectonics Course Description 5370 Structural Geology (3 semester hours) Parrish Introduction to behavior of materials, stress and strain, failure criteria, fault analysis, rheologic properties of geologic materials, fold analysis; survey of major structural provinces in North America and Europe. Laboratory includes descriptive structural geology map interpretation, stereophoto analysis, use of stereographic projections. Laboratory course. Field trips. Prerequisites: Physical Geology, Trigonometry. (2-3) An-intermediate-level-course-for-the-student-who-has-had-little-or-no exposure-to-the-subject,--The-fundamentals-of-descriptive-structural geology-will-be-covered,-followed-by-more-advanced-concepts-leading to-the-Coulomb-Mohr-eriterion-for-rock-failure-and-the-analysis-of rock-deformetion-by-means-of-finite-homogenous-strain-theory-Prerequisites:--Analytical-geometry-and-calculus---(2-3)] 5371 Advanced Structural Geology I (3 semester hours) Introduction to tensor description of stress and strain, fundamentals of elasticity theory and failure criteria as they relate to fracture and fault analysis. Study of the effects of such environmental parameters as temperature, pressure and time on the rheology of geologic materials. Analysis of folds and development of rock fabric. Laboratory course. Prerequisites: Analytic Geometry, Calculus (2-3) 5372 Regional Geology of North America Halpern, [Parrish, Urban] [572] (3 semester hours) Historical development of the North American Continent. [-(3-0)]Prerequisite: Permission of instructor. (3-0) 5373 Regional Geology Helsley, Manton, Halpern, Pessagno [573] (excluding North America) (3 semester hours) Examination of the stratigraphy and tectonics of selected areas in central Europe, the Caribbean, Africa, South America and Antarctica and their relation to a global tectonic framework. $\lceil (3-9) \rceil$ Prerequisite: permission of instructor. (3-0)

23/3	lectonics (3 semester nours) Parrish
	Description and analysis of mountain systems and geosynclines using
	concepts included in behavior of materials, fabric analysis, finite
	homogeneous strain theory, descriptive structural geology, proper-
	ties of the earth's crust and upper mantle, and plate tectonics.
	(3-0)
[571	Tectonics-(3-semester-hours)
[974	
	Major-structural-features-of-the-earth,-their-origin-and-history-as
	related-to-continental-drift,-sea-floor-spreading,-and-the-properties
	of-the-interior(3-0)
6077	
6371	Advanced Structural Geology II (3 semester hours) Parrish
	Introduction to behavior of materials, plastic and recovery deforma-
	tion mechanisms in rocks, experimental rock deformation, theoretical
	analysis and analysis of rock deformation including application of
	finite element and finite difference techniques to deformation in the
	earth's crust and mantle. Prerequisite: Advanced Structural
	Geology I. (3-0)
6375	Global Tectonics (3 semester hours) Helsley, Parrish
	Major structural features of the earth, their origin and history as
	related to continental drift, sea floor spreading, and the properties
	of the interior. Prerequisite: GEOS 5370. (3-0)
[574	Petroleum-CcologyMitterer
	(3-semester-hours)
	A-practical-course-in-petroleum-explorationPorosity-and-permea-
	bility-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,-(3-0)]
[575	Area Coolegy (2 compater house)
[Area-Geology-(3-semester-hours)
	An-examination-of-the-geology-of-Texas-and-adjacent-statesTwo-or
	three-two-day-field-trips-to-adjacent-regions-such-as-the-Gulf
	Coastal-Plain,-Llano-Uplife,-Ouachita,-Arbuckle-and-Wichita
	$\frac{\text{Mountains}_{\text{res}}(3-0)}{1}$
5 4 7 6	
[670	Advanced-Structural-Geology-(3-semester-hours)
	Weepanjee-of-weterjaje-devejopment-of-took-fabrjes,-devejopment-of
	basins-and-mountain-systems-with-particular-emphasis-on-those-of-the
	North-American-Continent(3-0)]
[671	Marine-Geology-(3-semester-hours)
	The-water-masses-and-circulation-of-occans-will-be-related-to-occanic
	chemistry-es-well-as-processes-and-patterns-of-sediment-deposition.
	The-emphasis-will-be-on-secanic-sediments-but-outer-shelf-and-slope
	deposition-will-also-be-discussedGeophysical-and-deep-sea-drilling
	recults-will-be-used-to-outline-the-rates-of-deposition-and-thick-
	nesses-of-sediments-in-various-basins,(3-0)]
T678	Seminar-on-Marine-Coology
, 0 , 0	(Galveston-only)
	Discussion-and-reviews-of-literature-on-selected-topics(3-0)]
	ntoerootouland-leateno-ot-tiletagagagagagagagagagaga4444
7379	Sominar in Postonica (3 somester hours)
7379 [679]	Seminar in Tectonics (3 semester hours) Parrish, Helsley
「ロアプ」	Discussions of selected topics involved in the formation of major
	features of the earth, such as sea-floor spreading, plate tectonics,
	development of island arcs, and deformation of mountain systems. (3-0)

Research in Structural Geology-Tectonics Helsley (1-9[12] semester hours) (Offered at Dallas and Galveston) (May be repeated for credit). [971-----Research-in-Marine-Geology-(1-12-semester-hours)------Staff (Offered-at-Dallas-and-Galveston).] General Geophysics Course Description 5380 Applied Geophysics I (3 semester hours) [580]Techniques and interpretation of [seismie,] gravitational, magnetic, and electric prospecting methods as applied to exploration of the crust. (3-0) 5381 Paleomagnetism (3 semester hours) [581] Magnetic properties of rocks; their measurements and analysis; past behavior of the earth's magnetic field and its relation to continental drift and global tectonics. (3-0) -Potential-Methods-in-Geophysies-{3-semester-hours}------Combs Potential-theory, -emphasizing-application-to-geophysical-problems, such-as-gravity,-magnetics-and-heat-flow.--(3-0) 5482 Instrumental Techniques in Geophysics (4 semester hours) A discussion of the instruments commonly used in investigating the [583] interior of the earth. Laboratory course. [-(2-6)]--Digital-Methods-Used-in-Geophysics------Visiting-Lecturers (3-semester-hours) Fourier-series-and-transform-analysis-of-time-series---(3-0)] 6381 Geophysical Implications of Plate Tectonics Landisman [681] (3 semester hours) Survey of some of the important geophysical consequences of plate tectonics. Case studies of several geographical regions, and of a variety of geophysical subjects will be used as illustrative material. (3-0) 6382 Geomagnetism [Terrestrial-Magnetismm-&-Geoelectricity] Staff (3 semester hours) [682] Studies of the main magnetic field of the earth; secular variation; external magnetic field; electromagnetic induction and conductivity in the earth. (3-0)Physical Properties of Rocks and Minerals (3 semester hours) 6383 Review of crystal structure and bonding in crystals with emphasis on silicates and oxides; interrelationship of the physical properties of rock-forming minerals including elastic, thermal, electrical, and optical properties; equations of state; physical properties as a function of pressure and temperature; derivation of behavior of aggregates from single crystal behavior with application to rocks under geologic conditions. (3-0)

8170-8970

6384	Terrestrial Heat Flow (3 semester hours) Combs
	Theory of heat conduction in solids with geological applications, methods, instrumentation, and measurement of surface heat flow on land and in the ocean; correlation of geothermal observations with other geophysical, geochemical and geological data to solve regional problems, thermal state, temperatures, and thermal history of the earth. (3-0)
7384 [68 4]	Seminar $\underline{i}[\bullet]n$ Numerical Methods in Geophysics Staff (3 semester hours) (Galveston Only) Formal consideration of computational topics related to current research problems. (3-0)
7385 [685]	Seminar $\underline{i}[\Theta]$ n Gravity and Geodesy (3 semester hours) Staff (Galveston only) Study and discussion of selected topics. (3-0)
7386 [686]	Seminar $\underline{i}[\vartheta]n$ Marine Geophysics (3 semester hours) Staff (Galveston only) Study and discussion of selected topics. (3-0)
7387 [68 7]	Seminar in Rock Magnetism (3 semester hours) Helsley (3-0)
7388 [688]	Seminar in Electromagnetic Sounding (3 semester hours) Landisman
7389 [689]	Seminar in Paleomagnetism (3 semester hours) Current topics in paleomagnetism and their relation to geology and geophysics[alapplications.] (3-0)
8180-8980 [980]	Research in Geophysics $(1-9[\frac{1}{2}]$ semester hours) Staff (Offered at Dallas and Galveston) (May be repeated for credit).
8181-8981 [981]	Research in Marine Geophysics $(1-9[\frac{1}{2}]$ semester hours) Staff (Offered at Dallas and Galveston)
8182-8982 [982]	Research in Paleomagnetism $(1-9[\frac{1}{2}]$ semester hours) Staff (May be repeated for credit).
Seismology	
Course	Description
5390	Seismology (3 semester hours) An introductory course in seismology. Analysis of stress and strain; the wave equation; plane wave reflection and refraction; spherical waves and head waves; surface waves; ray theory; travel time observations, seismicity. (3-0)
[590	-Seismology-(3-semester-hours)
5391	Digital Geophysical Signal Processing (3 semester hours) Ward Temporal and spatial transform analysis of geophysical signals in- cluding use of spectra, bandpass filtering, velocity filtering, and deconvolution filtering.

6390 [692]	Physics of the Interior of the Earth Landisman, [Gombo] (3 semester hours) Seismic studies of the crust, mantle, and core; physical and mechanical properties of the interior; thermal history of the earth and the mechanics of tectonics and orogenic processes. (3-0)
6391	Applied Geophysics II (3 semester hours) Discussion of seismic reflection exploration methods including sources, recording instrumentation, velocity analysis, static and dynamic corrections, and horizontal and vertical wave tests. The use of numerical modeling and borehole logs in the interpretation of processed seismic reflection sections will be studied. Seismic refraction techniques will also be covered. Prerequisite: 5391. (3-0)
[-693	Physics-of-the-Interior-of-the-Earth-IILandisman,-Combs (3-semester-hours) Gontinuation-of-692,-(3-0)]
6392	Seismic Waves in Porous Media (3 semester hours) Laboratory measurements and theoretical models of the effect of fluids on seismic wave propagation in porous rocks will be studied. These studies will be applied toward the interpretation of reflection amplitude anomalies observed in reflection seismology in terms of differences in saturating fluid and rock matrix parameters. Prerequisite: Permission of instructor. (3-0)
7390 [69 4]	Seminar on Lunar Seismology and Structure <u>(3 semester hours)</u> Staff (Galveston only) Review of current literature and results of lunar geophysics. (3-0)
7391 [6 99]	Seminar in Seismology (3 semester hours) (Offered at Dallas and Galveston) (3-0) Discussion and review of literature on selected topics in seismology. (3-0)
8386 [69 5]	Theoretical Seismology I (3 semester hours) Background of elastic wave theory. Mathematical and physical basis, fundamental concepts. Must be taken concurrently with 8388 [697]. Permission of instructor required. (3-0)
8387 [696]	Theoretical Seismology II (3 semester hours) Continuation of theoretical basis for elastic wave propagation, dispersion, generation, and attenuation. Must be taken concurrently with 8389 [698]. Prerequisites: 8386 [695] and 8388 [697]. (3-0)
8388 [697]	Seismological Literature I (3 semester hours) Landisman Study of selected references illustrating important ideas related to the propagation, dispersion, generation and attenuation of elastic disturbances. Must be taken concurrently with $8386 \ [695]$. Permission of instructor required. (3-0)
8389 [698]	Seismological Literature II (3 semester hours) Landisman Continuation of study of selected references illustrating important concepts of elastic waves. Must be taken concurrently with 8387 [696]. Prerequisites: [GE0] 8386 [695] and 8388 [697]. (3-0)
8190-8990 [99 0]	Research in Seismology $(1-9[42]$ semester hours) Staff (Offered at Dallas and Galveston) (May be repeated for credit).

8398 [908]	Thesis (3 semester hours) (Offered at Dallas and Galveston) (May be repeated for credit). (0-9)
<u>8399</u> [909]	Dissertation (3 semester hours) (Offered at Dallas and Galveston) (May be repeated for credit). (0-9)

GRADUATE PROGRAM IN HUMAN DEVELOPMENT (M.S., M.A.T.)

(The Program in Human Development is pending approval by the Coordinating Board which meets on April 18, 1975. If not approved, the program will be removed from the catalog.)

Members of Faculty currently participating:

PROFESSORS: S. Farnham-Diggory (Head) (Psychology),
Aram Glorig (Communication Disorders)

ASSISTANT PROFESSOR: Edwin K. Hammer (Communication Disorders)

OBJECTIVES

The Graduate Program in Human Development offers the Master of Science and Master of Arts in Teaching degrees. The program currently emphasizes child development and early childhood education; however, it is planned to expand into other topics in human development as the demand arises and the University matures.

The program emphasizes the ecological approach to research and practice in human development. This emphasis has important implications for the way in which developmental processes are studied. It assumes that several considerations are inherent in the design and implementation of research and services: 1) relevant connections can be made between scientific work in human development and the natural settings in which developmental phenomena occur; 2) interdisciplinary collaborations are sought wherever possible; and 3) the interrelationships of all aspects of development — the whole child — are of concern. Qualities which the Program strives to develop in students are 1) a strong base in developmental theory and methodology, 2) observational skills, and 3) mastery of the tools and techniques of evaluation. To facilitate development of these qualities, the program utilizes coursework, work with children, class research projects, site visits to child-oriented centers, and interdisciplinary contacts with other programs at UTD and in the Dallas metroplex.

Graduates of the Program in Human Development will be qualified to assume positions in research, education, government, and child-oriented services. 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, attendance and is not limited to degree candidates.

PROGRAM

Two degrees are offered for graduate work in Human Development, the Master of Science and the Master of Arts in Teaching. The Master of Science degree is appropriate for students who want to work in research, college teaching, or other areas of developmental study which do not require nursery-kindergarten teacher training. The M.S. degree program should be selected by students who plan to continue their training beyond the Master's degree level. The Master of Arts in Teaching degree should be selected by graduate students who plan to teach at the pre-school and kindergarten levels or work in related early childhood education services; the M.A.T. degree program is appropriate for experienced teachers who seek professional development.

FACILITIES

Facilities at The University of Texas at Dallas which support other graduate programs are available to students in the Graduate Program in Human Development. In addition, the Dallas Metroplex contains many public and private schools and services which represent diverse sociocultural characteristics and developmental philosophies.

SPECIFIC DEGREE REQUIREMENTS

Applicants should present a broad background in the behavioral sciences and/or education. In addition, they should have some proficiency in statistics for the social sciences. If a student's preparation is not adequate, he/she may be required to take additional courses which will not be counted toward the degree.

General degree requirements may be found in "Procedures and Requirements for Graduate Degrees" on page .

Master of Science

The following course distribution requirements must be completed for the degree of Master of Science:

- 1. Core Courses (15 semester hours).
- 2. Four courses from the Advanced Sequence in Human Development. These courses must be from two of the three Advanced Sequence areas.

 (12 semester hours)
- 3. One course in a related area from a Program outside Human Development
 (3 Semester hours).
- 4. 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. Core courses (15 semester hours).
- 2. Courses from the Advanced Sequence in Human Development totalling 15
 semester hours. These courses must be chosen in two of the three
 Advanced Sequence areas and must include Human Development 5334-5634
 (depending on hours desired).
- 3. One course in a related area from a program outside Human Development (3 semester hours).
- 4. A demonstration project which reports the development and application of an original teaching technique appropriate to the age group with which the student performed supervised teaching (3 semester hours).

HUMAN DEVELOPMENT COURSES

Core Courses (Required)

Course Description Survey of Theory and Research in Child Development I (3 semester hours) An analytical overview of theory and research; major theories and organizing principles of the field will be studied with research they have generated. Survey of Theory and Research in Child Development II (3 semester hours) Continuation of 5300. (Prerequisite: HUD 5300)

5302	Introduction to Research Methods in Child Development (3 semester hours) An introduction to the methods and procedures for research, including
	experience with computers and appropriate audio-visual materials.
5303	Experimental Design in Child Development (3 semester hours) An applied course in which students will work as a group to design, carry out, and report empirical research (Prerequisite: HUD 5302).
5304	Observation of Children (3 semester hours) Observational study of children of various ages and in various settings.
Advanced Cour	se Sequence
	Area 1: Cognitive Development
Course	Description
5310	Human Learning (3 semester hours) Discussion and analysis of historical and contemporary approaches to the learning processes and conditioning. Particular attention is paid to the relationship between learning and developmental processes.
5311	The Developmental Theory of Jean Piaget (3 semester hours) Intensive study of Piagetian theory, its applications to education, and current research.
5312	Motivation (3 semester hours) Study of various systems for explaining motivation with special attention to analysis of the relationship of emotion and motivation.
5313	Language Development (3 semester hours) Survey of theories and empirical research in the area of language development.
5314	The Development of Creative Thinking (3 semester hours) Study of theories of creativity; development of skills in evaluating means and materials used to foster creativity.
5315	Infant Behavior and Development (3 semester hours) Study of the infant to age two; attention to the interrelationships of the perceptual-cognitive and the social-emotional domains. Area 2: Affective Development
Course	Description
5320	Experimental Study of Social Development (3 semester hours) Study and analysis of theory and research in social interaction; use of sociological and social psychological formulations to generate hypothesis to be tested with children.
5321	The Child in Family and Society (3 semester hours) Cross-cultural studies in child development; analysis of the modern American family, its interactions, and how it functions in society.
5322	The Disadvantaged Child (3 semester hours) Study of development of children from disadvantaged backgrounds, utilizing empirical studies and cases from literature.

5323	Personality Development (3 semester hours)
	Intensive study of major theories of personality development in childhood; commonalities and divergencies of theories will be explored.
5324	The Development of Sex Differences (3 semester hours) Theory and research on the development of sex-role identity, sex-typed behavior and attitudes.
5325	Adolescence (3 semester hours) Development from late childhood to early adulthood; some of the special topics to be considered are peer groups, identify formation, anti-social behavior, and cross-cultural studies of adolescence.
	Area 3: Early Childhood Education
Course	Description
5330	Kindergarten: Organization, Principles, and Practices (3 semester hours) The kindergarten movement from historical and contemporary perspectives; acquaints students with methods and materials appropriate for use in kindergarten.
5331	Learning in Early Childhood (3 semester hours) Research on learning in the pre-school child; attention to the roles of language and symbolic representation in early learning.
5332	Seminar in Day Care (3 semester hours) Setting up, maintaining, and evaluating day care facilities for infants and young children.
5333	Variations in Early Childhood Education (3 semester hours) Visits to a number of different kindergartens and nursery schools which reflect various educational philosophies, in addition to readings and films. Discussion meetings will cover analysis and evaluations of various approaches.
5334-5634	Principles of Teaching: Supervised Experience in Early Childhood Education (3-6 semester hours) Supervised and directed teaching in a nursery school, day care center or kindergarten.
Research Cour	ses_
Course	Description
8101-8301	Special Problems in Child Development (1-3 semester hours) Supervised individual study of special topics. The study plan must be approved in advance by the Program Head and the sponsoring faculty member. (May be repeated for credit)
8307	Demonstration Project (3 semester hours) (May be repeated for credit)
8398-8698	Thesis (3-6 semester hours) (May be repeated for credit)

GRADUATE PROGRAM IN HUMANITIES* (M.A., M.A.T., Ph.D.)

Members of Faculty currently participating:

PROFESSORS: Robert P. Armstrong (Anthropology), Lilian R. Furst (Comparative Literature), Bryce Jordan (History of Music)

ASSOCIATE PROFESSOR: Regina M. J. Kyle (Acting Head) (Comparative Literature)

ASSISTANT PROFESSORS: Beverly Crane (Comparative Literature), Ronald Cox

(Philosophy), Nancy Cluck (Literature and Music), David Faris
(Comparative Literature), Wendy Faris (Comparative Literature),
Rockwell Gray (Philosophy), Abel Iannone (Philosophy),
Paul Monaco (History)

MASTER OF ARTS - DOCTOR OF PHILOSOPHY

OBJECTIVES

The Humanities Program leading to the degrees of Master of Arts and Doctor of Philosophy is designed to integrate the traditional disciplines of language and literature, history, philosophy, the visual arts, and music as they relate to the development of Man's ideas about himself — ideas which are expressed in the monuments of his creation. The program trains flexible and imaginative people who can shape the materials of the humanities in a variety of ways and communicate them to a broad spectrum of the community. Graduates will find a wide range of opportunities, from teaching at various levels in the educational system to directing inservice programs for business and industry and developing multidisciplinary humanistic programs.

PROGRAM

Three areas of specialization are offered in the Graduate Program in the Humanities: Aesthetic Studies, Comparative Literature, and History of Ideas. Each area represents an interdisciplinary approach to a body of knowledge in the Humanities. Aesthetic Studies is concerned with the description, analysis, and explanation of artistic phenomena. Comparative Literature is concerned with the conceptualization and study of literature according to aesthetic, cultural, and psychological categories which transcend traditional period and national divisions. History of Ideas examines the genesis of intellectual positions within a complex socio-historical matrix and the role of ideas in human affairs.

A student in the program will attain both a good general understanding of the theoretical and methodological problems involved in interdisciplinary humanistic studies and special competence in dealing systematically with the texts and materials of one field of study in the humanities.

FACILITIES

Facilities at The University of Texas at Dallas which support the humanistic disciplines are available to students in the Graduate Program.

SPECIFIC DEGREE REQUIREMENTS

Students are admitted to the Master of Arts degree program at the culmination of which they may apply for admission to the Doctor of Philosophy degree program.

Only under special circumstances are students admitted directly to the Ph.D. degree program.

*The M.A. and M.A.T. degrees cannot be awarded before 1976-77 academic session; the Ph.D. degree cannot be awarded before 1978-79 academic session; however, course work leading to those degrees may be taken prior to those dates.

- 1. General Requirements. Applicants must fulfill the general requirements for admission to The University of Texas at Dallas which are contained on p. of this Bulletin.
- 2. Language Requirements. For admission to the M.A. degree program, the student in Aesthetic Studies or History of Ideas must demonstrate a strong reading knowledge of one foreign language related to the field of specialization. For admission to the M.A. degree program in Comparative Literature, the student must have a working knowledge of two language and literature areas, one of which may be English.

For admission to the Ph.D. program in Aesthetic Studies or History of Ideas, the student must demonstrate a strong reading knowledge of two foreign languages. For admission to the Ph.D. program in Comparative Literature, the student must have a good working knowledge of two foreign language and literature areas and must have at least a beginning working knowledge of a third. (Work on the third language and literature area may be completed concurrently with the Ph.D. program.)

A student whose language proficiency is inadequate will be required to take additional coursework which will not be counted toward the degree.

- 3. Grade Average. A student must maintain a B average in core courses and in courses in his primary area of specialization.
- 4. M.A. Course Requirements. The student will be eligible for the Master of Arts degree upon satisfactory completion of the following requirements:
 - a. Core courses (15 semester hours)

 Humanities 5300, 5304, 5305

 Two of the following: Humanities 5301, 5302, 5303
 - Courses in major and secondary areas of specialization.
 (18 semester hours)
 - c. Master's Essay (3 semester hours)
 The Master's Essay is a publishable, article-length essay treating a problem in the student's area of specialization from an interdisciplinary perspective.

The M.A. student, in the process of working toward the M.A. degree, has accumulated a portfolio which he may present to the Ph.D. committee to request permission to proceed to the Ph.D. if he/she would like to continue in the program. The portfolio includes records and analyses of past educational and life experiences, progress in course work and teaching during the M.A. program, and evaluation of the Master's Essay. A student may proceed to the Ph.D. candidacy only upon completion and committee approval of the portfolio.

The student admitted to the Ph.D. program must complete the following requirements toward the degree:

- 5. Ph.D. Requirements.
 - a. Courses in area of specialization (18-21 semester hours).
 - b. Internship: Humanities 8302-8602 (3-6 semester horus).
 - c. Qualifying Examination.

d. Ph.D. Casebook (6 semester hours)

Depending on the doctoral candidate's career interests, he/she will design a course or prepare an exhibit which demonstrates his/her mastery of subject material, analysis of important research dealing with the subject, and competence in curriculum or project design and evaluation. The course or exhibit is not a theoretical design; it must actually be given or take place. The final Casebook contains an essay by the degree candidate analyzing and evaluating the total process.

MASTER OF ARTS IN TEACHING (M.A.T.)

OBJECTIVES

The program leading to the degree of Master of Arts in Teaching the Humanities is designed to develop teachers who combine competence in various humanistic disciplines with the ability to stimulate learning in the classroom. The program provides broad and rigorous training in these disciplines and particular training in the teaching of the humanities. It meets an important need expressed by secondary teachers.

The program is designed primarily for teachers employed during the academic year, but who are relatively free during the summer months. Nevertheless, full-time students are encouraged to enroll in the program. The M.A.T. program is designed for students and professionals with significant ability in a discipline as well as a serious commitment to teaching. It constitutes an effective opportunity for the professional development of experienced teachers in that it is possible to complete requirements for the Professional Certificate concurrently with earning the M.A.T. degree.

The student in this program will choose to specialize in one of three areas: Aesthetic Studies, Comparative Literature, or History of Ideas. Some work must also be taken in one of two remaining areas.

FACILITIES

Facilities at The University of Texas at Dallas which support the humanistic disciplines are available to students in the M.A.T. program.

SPECIFIC DEGREE REQUIREMENTS

- 1. A student may be admitted to this program if he/she meets the general requirements of The University of Texas at Dallas as outlined on page of this Bulletin.
- 2. Prior to admission, a student who chooses to specialize in Aesthetic

 Studies or History of Ideas must demonstrate a strong reading knowledge of one foreign language related to the field of specialization. A student who chooses to specialize in Comparative Literature must have a working knowledge of two language and literature areas, one of which may be English. A student whose language proficiency is inadequate will be required to take additional coursework which will not be counted toward the degree.
- 3. A student must maintain a B average in the core courses and in courses in his/her primary area of specialization.

- 4. The following course requirements must be completed:
 - a. M.A.T. Core Courses (12-15 semester hours):

 Humanities Education 5300

 Humanities 5300

 Two courses from Humanities 5301, 5302, 5303

 Humanities 5304 for students planning to write a Master's Essay.
 - b. Courses in major area of concentration (12 semester hours).
 - c. Courses in second area of concentration (3 semester hours).
 - d. Courses in Professional Education (3-6 semester hours)

 Students completing requirements for the Professional Certificate should complete 6 semester hours which must include HUED 6300.
 - e. Master's Essay or Casebook (3 semester hours).
- 5. At the culmination of the student's program, he develops either a Master's Essay or Master's Casebook.

If the student chooses to write a Master's Essay, he must take Humanities 5304 and produce an article-length, publishable essay written from an interdisciplinary perspective.

If the student chooses to develop a Master's Casebook, he designs a teaching unit to be applied to the classroom setting in which he works. The Casebook includes a statement of the problem, and evaluation of relevant research on the subject matter, a statement of goals for the unit, a total design of the unit, and a report of the outcome of teaching the unit, including evaluation.

HUMANITIES COURSES

Core Courses

Course Description

- HUMA 5300 Interdisciplinary Approaches to the Humanities (3 semester hours)

 Lectures and discussions on interdisciplinary approaches to the humanistic disciplines and the nature of interdisciplinary studies.

 Each student will complete a project on an interdisciplinary topic.

 Open only to graduate students in the Humanities.
- HUMA 5301 Pro-Seminar in Aesthetic Studies (3 semester hours)

 Fundamental problems in historical and critical approaches to the arts and a survey of methods of criticism and connoisseurship. Includes a consideration of the nature and functions of the work of art and its relation to society. Open only to graduate students in the Humanities.
- HUMA 5302 Pro-Seminar in Comparative Literature (3 semester hours)

 Fundamental problems of a theory of literature, of literary history, and of literary criticism. Includes a consideration of the uses that criticism make of such disciplines as history of ideas, aesthetics, and the social dimensions of literature.

- HUMA 5303 Pro-Seminar in The History of Ideas (3 semester hours)

 Fundamental problems and approaches to the history of ideas and of the underlying theoretical problems.
- HUMA 5304 Interdisciplinary Research in the Humanities (3 semester hours)

 A seminar on methodologies of interdisciplinary research in the humanities. Focus will be on the design of problems and how various disciplines can contribute to elucidating them. May be repeated for credit.
- A seminar-laboratory course on the teaching of the humanities. Each student will be assigned to one of the interdisciplinary courses and will have the opportunity over the semester to participate with increased responsibility in the course. Regular discussions and evaluations of the experience. This course or its equivalent is a prerequisite for appointment as a teaching assistant.

Aesthetic Studies

- <u>Course</u> <u>Description</u>
- HUAS 6301 The Cultural Nature of the Work of Art (3 semester hours)

 The study of the arts in the context of the cultures which give them birth. The functions of the arts in different societies. Includes examples from art, music, and theater.
- HUAS 6310 The Literature of Art (3 semester hours)

 A selection of writings by artists, critics, art historians and theoreticians analyzed through lectures and class discussions.
- HUAS 6315 The Art of the Renaissance (3 semester hours)

 Advanced studies in the art of the fifteenth and sixteenth centuries in Europe.
- HUAS 6320 French Art of the Later Nineteenth Century (3 semester hours)

 Studies in Realism, Impressionism, and Post-Impressionism and related artistic developments.
- HUAS 6321 Contemporary Art History (3 semester hours)

 Studies in the problems arising in the twentieth century in painting, sculpture, and art criticism.
- HUAS 6325 The Art of the United States (3 semester hours)

 Painting, sculpture and architecture from the American Revolution to modern times.
- HUAS 6330 History of Music Theory (3 semester hours)
 Readings in music theory from antiquity through the Renaissance.

HUAS 6331	Music and Drama (3 semester hours)
	The problems arising from the combination of the musical and dramatic
	arts. Examples from the range of musical-dramatic literature in the West from the Middle Ages to the present day.
HUAS 6340	The Music of the Renaissance (3 semester hours)
	Studies in the history of music during the fifteenth and sixteenth
	centuries.
HUAS 6346	Studies in Romantic Music (3 semester hours)
	Selected topics in music from Beethoven, Weber and Schubert to
	Strauss, Mahler, and Sibelius. Some consideration will be given to
	Impressionism and to the relations between music and the other arts.
HUAS 6360	Studies in Stage History (3 semester hours)
	Examinations of the play on the stage and in its historical setting.
	Introduction to the relevant documents for theater research, such as
	prints, play-bills, prompt books, manuscripts and rare books.
HUAS 7301	Problems in Cultural Historiography (3 semester hours)
***************************************	The conceptual foundations of historical study in the arts; the re-
	lation between history and criticism; the history and function of
	style-period concepts; evolutionary and developmental theories;
	modes of explanation in cultural history.
HUAS 7329	Museum Techniques (3 semester hours)
	A course designed to familiarize the students with museum techniques
	and administration. Will include training in exhibit design, library
	work and research, and administration. May be repeated once, for credit.
	CI CUIL 6
HUAS 7349	Ethnomusicology (3 semester hours)
	Studies in the music of nonliterate people; in folk music and in the
	music of non-Western high cultures.
HUAS 7398	Workshop in Arts Criticism (3 semester hours)
	Theory and practice of arts criticism. Includes studies in music,
	theater, and the visual arts. May be repeated once for credit.
HUAS 7399	Workshop in Arts Management (3 semester hours)
11000 / 399	Problems in management related to the arts. May be repeated once
	for credit.
1711AC 9200	
HUAS 8390	Special Topics in Aesthetic Studies (3 semester hours)

Comparative Literature

1. Area and Period Studies

Course Description

- HUCL 6351 European-American Literary Relations (3 semester hours)

 Studies in the mutual evaluation and influence of European and American authors and movements upon each other and their societies.
- HUCL 6365 The Literature and Thought of Renaissance Europe (3 semester hours)

 A consideration of the basic ideas, assumptions, and aspirations of the European Renaissance reflected in major literary texts, as well as in music and art.
- HUCL 6375 Studies in Romanticism (3 semester hours)

 Comparative readings in literary theory, fiction, drama, and lyric poetry by the Romantic writers in Germany, France, and England.

2. Genre Studies

Course Description

- HUCL 6305 The Development of the Tragic Vision (3 semester hours)

 Studies in the development of tragic drama from the Greeks to the twentieth-century. Includes a consideration of theories of tragedy.
- HUCL 6306 The Development of the Comic Vision (3 semester hours)

 Studies in the development of comedy from Aristophanes and Menander to the present. Includes a consideration of theories of comedy.
- HUCL 6307 Studies in Modern American and European Drama (3 semester hours)

 Continental, British and American dramatists from the 1920's to the present; including Brecht, Lorca, Giraudoux, Sartre, Beckett, Eliot, O'Neill, Albee and others.
- HUCL 6311 The Development of the European Novel (3 semester hours)

 Topic for 1975-1976: The 19th century European novel, with selections from English, French, German and Russian novelists of the period.
- HUCL 6320 Studies in Poetic Form (3 semester hours)

 Studies in the nature of poetry and the poetic vision with a detailed study of verse forms in English and other languages.
 - 3. Theory and Language (3 semester hours)

Course Description

MUCL 5310 Workshop in the Problems of Translation (3 semester hours)

An examination of the problems of transferring concepts and symbolic structures from one language to another. Emphasis on linguistic translation although some consideration of translation of forms may also be done. May be repeated for credit.

HUCL 7300	Critical Approaches to Language (3 semester hours) An examination of classical works in the characterization and investigation of language. Topics studies will include the origin of language, the idea of a common language, language and the unconscious, primitive language, and myths of language.
HUCL 7310	French Language in Literature (3 semester hours) Analysis of texts from the standpoint of language and style, with oral and written presentations aimed at developing literary expression.
HUCL 7315	Spanish Language in Literature (3 semester hours) Analysis of texts from the standpoint of language and style, with oral and written presentations aimed at developing literary expression.
HUCL 7320	Linguistics of the Classical Languages (3 semester hours) Studies in Greek and Latin linguistics.
HUCL 7330	German Language in Literature (3 semester hours) Analysis of texts from the standpoint of language and style, with oral and written presentations aimed at developing literary expression.
HUCL 7350	The History and Development of the English Language (3 semester hours) Advanced Studies in the history and development of English as a language.
HUCL 7399	Workshop in Language Teaching (3 semester hours)
HUCL 8390	Special Topics in Comparative Literature (3 semester hours)
History of Id	leas
Course	Description
HUHI 6301	Ideas of Man and the World in Western Thought (3 semester hours) Examines some historically influential conceptions of the nature of man: of his moral, political, and intellectual life, and of the world in which he lives.
HUHI 6303	Philosophy of the Social Sciences (3 semester hours) The philosophical foundations of the social sciences, focusing on questions concerning the structures of social reality and the methodological and epistemological status of the social sciences.
<u>HUHI 6304</u>	Philosophy of the Natural Sciences (3 semester hours) Historical study of the reciprocal relationships between natural science and philosophy in the west from ancient Greece to modern times.
HUHI 6305	History and Philosophy of Education (3 semester hours) An inquiry into the function of philosophic principles in educational theories and institutions. Centers on the purposes of knowledge and education, the relationships among the sciences and their organization into curricula and the ways in which knowledge is acquired and transmitted.

Contemporary Philosophies of Language (3 semester hours)
Current topics in the philosophy of language. HUHI 6306 **HUHI 6330** Philosophy and Society (3 semester hours) Analyses of the philosophical bases of social institutions and behavior. The function and application of such concepts as natural law and natural rights, justice and equality, liberty and tolerance, the common good and social utility. **HUHI** 6331 Technology and Society (3 semester hours) Technology as a social activity. The ideologies which underly the structure of a technological community, and the relationship of technology and its products to the larger society. Ethical questions raised by technological developments. American Intellectual History (3 semester hours)
Main intellectual currents in American history as expressed in poli-HUHI 7340 tical and economic thought, theology, science, philosophy, and literature, with some reference to the economic background and interaction between ideas and social structure. Renaissance Europe (3 semester hours)
Advanced studies in the intellectual, political, and economic trans-HUHI 7350 formation of late-medieval Europe from the crisis of Italian civic spirit to the flowering of the Renaissance monarchies. HUHI 7355 The Intellectual History of Contemporary Europe 1890-1970 (3 semester hours) A study of dominant thinkers and currents of thought, emphasizing the disintegration of the rationalist tradition in European culture (1890-1930) and the response to irrationalism in contemporary European culture (1930-1970). HUHI 7370 Phenomenology (3 semester hours) An investigation of the methods, concepts, and history of phenomenology with particular emphasis upon its philosophical basis. ings from Husserl, Heidegger, Merleau-Ponty and Ricoeur. HUHI 7371 European Philosophical Criticism (3 semester hours) An analysis and interpretation of recent trends in contemporary European thought, including structuralism, neo-Freudianism, new criticism, as well as later phenomenology. Will also consider the philosophical implications of literature, aesthetics, anthropology, and linguistics. HUHI 8390 Special Topics in the History of Ideas (3 semester hours)

RESEARCH AND INTERNSHIP

(Courses	may	Ъe	repeated	for	credit)

Course	Description
HUMA 8302- 8602	Internship in Humanities (3-6 semester hours) Open only to Ph.D. candidates in Humanities.
HUMA 8303	Special Problems in Humanities (3 semester hours) Individual or small group course of reading and/or research.
HUMA 8304	Master's Essay (3 semester hours)
HUMA 8398	Master of Arts in Teaching Casebook (3 semester hours).
НИМА 8399	Ph.D. Casebook (3 semester hours)

GRADUATE PROGRAM IN INTERNATIONAL MANAGEMENT STUDIES (M.A., Ph.D.)

Members of Faculty currently participating:

Raymond P. Lutz (Acting Head) (Management Science), [Lee-H:-Smith PROFESSORS:

+Management-Seienee+;] Howard F. Van Zandt (Management Science)

ASSISTANT PROFESSORS: Laurence A. Madeo (Management Science), Larry J. Merville

(Management Science), Asger Nielsen (Management Science), [David-M.-Raddock-{Political-Science},] Klaus Treumper

(Management Science)

LECTURER: James E. Moore (Psychology) [Jack-Seward-{Foreign-tanguages}]

OBJECTIVES

The purpose of this program is to provide knowledge of and training in international management which includes trade across national boundries, management practices within foreign nations and management on a global basis.

[The-purpose-of-this-program-is-to-provide-knowledge-of-and-training-in-international-trade-and-industry-as-it-applies-to-the-Pacific-Basin, -assimilating-the unique-aspects-of-the-region's-culture-and-traditions-as-they-apply-to-sperating systems-of-trade,-industry-and-modes-of-bureaueratie-operation.]

PROGRAM

The Program in International Management Studies provides students with the opportunity to learn in depth the fundamentals of (a) functional areas of management, (b) international management, and (c) cultural, socio-political and geographical constraints affecting international business decisions. [;-with-emphasis-on-the Pacific-Basin-] It also provides educational opportunities for the student with non-business undergraduate training to prepare for a career in the management of international trade and industry.

SPECIFIC DEGREE REQUIREMENTS

For general degree requirements, see "Procedures and Requirements for Graduate Degrees," page $\,$.

A. M.A. in International Management Studies

Each Master of Arts student must complete a program of 36 semester hours as well as earning a satisfactory grade on the written and oral examination taken during the last semester of registration. Alternately, the student may elect to submit a Master's thesis which counts as three credit hours towards the total course requirements.

[Each-Master-of-Arts-student-must-complete-a-program-of-36-semester-hours-including-(1)-the-basic-core-courses-in-Management-Systems,-(2)-the-courses-in-the International-Management-Gore; -(3)-one-of-the-sets-of-courses-for-the-various-goographic-sub-regions-of-Japan,-China-and-others-in-the-Pacific-Basin,--The-two-cores provide-the-students-with-a-comprehensive-knowledge-of-management-principles-both from-a-general-and-an-international-perspective.--Over-80%-of-the-material-covered in-the-International-Gore-relates-to-the-functional-business-topies-of-management, marketing-and-commercial-law-in-the-international-environment---In-keeping-with-the existing-philosophy-of-The-University-of-Texas-at-Dallas,-these-eourses-treat-management-problems-from-the-system-perspective,-cutting-across-functional-lines---A student-may-elect-a-33-eredit-hour-program-and-upon-completion-of-the-course-requirements,-submit-a-Masteris-Thesis-1

PREREQUISITES

Prerequisite knowledge equivalent to one year of economics, introduction to accounting (MAS 5331), principles of Statistics (MAS 5311) and a computer programming language (MAS 5152 or MAS 5153) is a requirement for the program.

PROGRAM OF STUDIES

Each candidate must complete a program of studies of at least 36 semester hours which includes IMS 5300 (The World Economy) as an introductory course and IMS 6360 (International Business Management) as a capstone as well as one course from each of the following areas:

Behavioral Management Economics Finance Marketing

 $\underline{\mbox{A list of recommended courses in these functional areas may be obtained from the Graduate Advisers.}$

[BASIG-GORE-IN-MANAGEMENT-SYSTEMS-(see-Graduate-Program-in-Management-and-Adminis-trative-Sciences-for-specific-course-descriptions)-(15-semester-hours)

612--Quantitative-Management-Science-II
632--Accounting-II
641--Financial-Management
652--Management-Systems-II
661--Behavioral-Management-Science-I
INTERNATIONAL-MANAGEMENT-GORE-(12-semester-hours)
590--Technical-Licensing-and-Management-I
596--Gomparative-Management-Methods-and-Gross-Gultural-Behavior-I

SLEGTIVES----AREA-STUDIES

598--Exporting-and-Importing-I

694--Modernization-of-Developing-Areas

9-semester-hours-from-various-geographic-sub-regions-of-Ghina,-Japan-or-others from-the-Pacific-Basin.]

B. Ph.D. in International Management Studies

Prerequisites are those of the M.A. program or its equivalent. Program course requirements consist of a program of studies (at least 60 semester hours) developed jointly by the candidate and the graduate committee which will prepare the student to undertake dissertation research. General dissertation requirements are listed on pages of the catalog.

[Prerequisites-are-those-of-the-M.A.-program-or-its-equivalent.--Each-student must-(1)-complete-the-Functional-International-Management-Development-Core,-(2) complete-the-Advanced-Gore-Gourses,-(3)-complete-9-semester-hours-of-Area-Studies Gourses-for-the-various-sub-regions-in-the-Pacific-Basin,-(4)-complete-a-minimum-of 9-semester-hours-of-Electives,-(5)-demonstrate-proficiency-in-a-foreign-language spoken-in-the-Pacific-Basin,-and-(6)-conduct-research-culminating-in-a-doctoral-dissertation.]

[FUNCTIONAL -INTERNATIONAL -MANAGEMENT BEVELOPMENT -CORE - (9 - semester - hours)

591 -- Technical - Licensing - and - Management - LI-

599 - Exporting and Importing-IL

696 or 697 - China or Japan

ABVANCED-CORE-(21-semester-hours)

642--Investment-Management-(see-Graduate-Program-in-M.A.S.-for-description)

693 -- Comparative-Psychologies-and-Political-Cultures

796 -- Introduction-to-International-Finance-and-Monetary-Systems

798--The-Role-of-the-Multinational-Gorporation-in-World-Trade

799 -- International -Banking

896--The-Far-East-in-the-Modern-World-I

897--The-Far-East-in-the-Modern-World-II

Having-completed-the-Functional-Management-Development-Core-Courses-and-the Advanced-Core-Gourses,-the-student-must-pass-written-and-oral-qualifying-examina-tions-to-be-admitted-to-doctoral-eandidaey.

9-semester-hours-required-from-various-geographie-sub-regions-of-China,-Japan, or-others-from-the-Pacifie-Basia.

ELECTIVES

9-semester-hours-of-electives-to-be-selected-by-the-student-with-his-advisor to-help-prepare-him-to-undertake-dissertation-research-

General-dissertation-requirements-are-listed-on-pages-34-35-]

International Management Courses

Course

Vescription

5300

The World Economy (3 semester hours)

The parameters in the world economy which cause international business to differ from purely domestic operations. The environment in which international business is conducted, including both economic relations among nations and environmental factors that affect business operations within different nations. International trade theory, the balance of payments, tariffs and other restrictions on the free movement of goods and services, economic integration, and international economic organizations. Within different nations: economic, political, social, and cultural conditions important to international corporations.

5301

Legal Environment of World Business (3 semester hours)

Legal implications of operating business enterprises in a multinational environment. Topics included are: legal status of persons and property within a foreign country; international business transactions with or by governments or instrumentalities; the reach of legal systems,

overlapping of conflicting interests, and problems of nationalization, expropriation and annulment of contracts or concessions in foreign

countries. (3-0)

International Marketing Management (3 semester hours)

Studies of the problems of international marketing management, including international economic factors, foreign cultures, nationalism, economic development, etc. Integration and coordination of marketing 5310 for a number of individual foreign operations. Harketing problems arising from differing degrees of foreign involvement (exports, licensing, foreign subsidiaries). Marketing research, product policy, pricing, promotion, distribution, and organization. (3-0) 5320[796] [Introduction-to] International Finance and Monetary Systems (3 semester hours) Foreign exchange, monetary reserves, gold reserves, floats, upvaluations, devaluations, problem of surplus dollars, problem of unconvertibility, Eurodollars, quotations in international currencies. (3-0)6301[790] International Law (3 semester hours) The evolution of international justice; off-shore mineral rights; international patent and copyright protection; law of the sea, treaties to avoid double taxation; international commercial arbitration. [; problems-of-hijseking;-nareoties-smuggling;-terrorism;-Interpol; extradition-agreements. [3-0] International Marketing Systems (3 semester hours) 6310 International trade theory. Institutions, intermediaries and carriers through which trade is conducted. (3-0) World Transportation Management (3 semester hours)
Function and operation of international carriers, the legal environment 6315 in which international carriers operate and the legal implications of such operation, and the management problems involved in operating and using such facilities. Study of public policy in world transportation, the problems facing world carriers and shippers, and an evaluation of the role of transportation upon the development of nations. (3-0) 6320 International Corporate Finance (3 semester hours) Financial policies and practices of companies involved in multinational operations. The course considers management of working capital and permanent assets, return on investment and capital budgeting for the global firm. 6330 International Accounting and Taxation (3 semester hours) Study of national differences in accounting thought and practice; international standards of accounting, auditing and financial reporting; issues, problems and organizations associated with international accounting and taxation. Commercial Geography of The Pacific Basin $[\theta eeania]$ (3 semester hours)* 6350[690] Political, economic, ecological, and social elements in the geography of the region; resources; exploitation of the sea bed; off-shore oil exploitation; pollution; racial and cultural regions. (3-0) [691-----Commercial-Geography-of-East-Asia--(3-semester-hours)* Political, -economic, -ecological-and-social-elements-in-geography-of region;-boundary-disputes;-resources;-exploitation-of-off-shore-petroleum-reservoirs; occan-floor-mining; pollution; racial-and-cultural regions;--(3-0)

**Hot-offered-1974-75*]

--Comparative-Psychologies-and-Political-Gultures--(3-semester-hours) Anglo-Saxon, -Pacific-Islander, -Japanese, -Chinese, -Russian, -Southeast Asian,-etc.-characteristic-behavior.--Xenophobia.--Work-ethic.--(3-0)] International Business Management (3 semester hours)
Identification, analysis, and resolution of managerial issues of policy 6360 and action within the context of an international corporation, with emphasis on problems of adaptation to different sociological, cultural, legal, political and economic environmental characteristics. 6361[590] Technical Licensing and Management $[{\clute{x}}]$ (3 semester hours) Licensing of technology; management of branch offices, joint ventures and subsidiaries; recruitment and training for service overseas and in back up positions in the home office; international transfer of management skills; communications. Continuation-of-590.--(3-0)592-----East-Asia-and-Oceania-I--(3-semester-hours)* Flow-of-trade-and-investments-between-the-U-S--and-the-countries-in the-area;-ecoperative-efforts-in-developing-ecuntries;-ecoperative efforts-in-communist-nations,-tourism,-air-and-sea-transportation, (3-8) 593-----Bast-Asia-and-Oceania-HI--{3-ocmester-houre}* Continuation-of-592,---(3-0) 595-----Ghina-Trade--{3-semester-hours}* Ganton-trade-fair,-barter-arrangements,-techniques-of-dealing-with-the Ghinese,-foreign-products-needed-by-China,-products-China-offers-for emport,-Chinese-foreign-policy-as-it-influences-her-external-trade-(3-8)] 6365[596] Comparative Management Methods and Cross Cultural Behavior I (3 semester hours) International employment practices, training, decision-making techniques, commercial law, competitiveness, loyalties, work ethic, productivity, research and development, preferred industries, plans for 1970's and 1980's, politico-government-business cooperation, adaptation of management methods to foreign situation. (3-0)(3-semester-hours) Continuation-of-596:--(3-0) Industry, -agriculture, -fisheries, -mining, -forestry, -elimate, -races, population-problems,-commerce,-government,-polities,-foreign-economic relations -- (3-0)] Comparative Management Methods and Cross-Cultural Behavior II 6366 (3 semester hours) Continuation of 6365 (3-0) Japan (3 semester hours) 6370[697]. Industry, agriculture, fisheries, mining, forestry, population problems, commerce, government, politics, foreign economic relations. (3-0)

- United States and Japan Commercial Relations since the 1790's (3 semester hours)[*]

 Pre-Perry contacts; Perry 1853-1854; first U.S. merchants in 1850's; Meiji and Taisho eras; events leading to World War II; Allied Occupation; trade imbalances; forecasts for the future. (3-0)
- Modernization of Developing Nations (3 semester hours)

 Problems of independence, national and social integration in developing areas; [;-with-special-attention-to-Asia-and-Near-East;] appeals and application of alternate models of political and economic modernization: survival in a world controlled by "super-powers." (3-0)
- 7305[793] World Politics (3 semester hours)
 International actors; international and domestic environments of foreign policy; global and regional patterns; general characteristics of foreign policy; the overwhelming influeence of business upon international political behavior; readings and discussion of recent and older works of theoretical significance, both empirical and normative. (3-0)
- 7310[598] Exporting and Importing [\(\frac{1}{2}\)] (3 semester hours)

 Tariffs, quotas, non-tariff barriers, OECD, GATT, European Common

 Market, rebates, free trade zones, drawbacks, insurance, export support problems, most favored nation treaties, exporting and marketing abroad.

 (3-0)
- [599-----Exporting-and-Importing-II--(3-semester-hours)
 Gontinuation-of-598.--(3-0)]
- 7320[799] International Banking (3 semester hours)
 The World Bank, various export-import banks, [The-Asian] Development
 Banks; public and private international banks; representative offices.
 (3-0)
- 7350[896] The Far East in the Modern World I (3 semester hours)[*]

 [The-first-course-in-a-two-course-sequence] This course involves[ing]

 the Colonial era, XIX century struggles, World War I, World War II,

 Korean War, Vietnam War, Cambodian War, changes in behavior of industrialized power vis-a-vis developing nations, the international businessman as a peacemaker. (3-0)
- [897-----The-Far-East-in-the-Modern-World-II--(3-semester-hours)*
 Gontinuation-of-896---(3-0)
- 797-----Problems-in-International-Management-Using-Case-Study-Mathods
 (3-semester-hours)*

 Specific-experiences-of-American,-European,-and-other-companies-in
 management-overseas---(3-0)]

<u>7360</u> [798]	The Role of the Multinational Corporation in World Trade (3 semester hours)[*] Comparison and analysis of multinational operations and environment. [American-European-and-Japanese-multinational-corporations-compared.] Problems over movement of capital abroad. Take-over vs. establishing new subsidiaries. Political relationships. Effect of world commerce. (3-0)	
8100	Colloquium Series in International Management Studies (S-U Grading) (1 semester hour) (May be repeated for credit) (1-0)	
<u>8320</u> [992]	Readings in International Business (3 semester hours) Directed reading in areas of specific interest. (May be repeated for credit) (0-9)	
<u>8340</u> [993]	Seminar in International Business (3 semester hours) Discussion of selected concepts and theories in international business. (May be repeated for credit) (3-0)	
<u>8360</u> [990]	Special Topics in International Business (3 semester hours) (May be repeated for credit) (3-0)	
[991	Problems-of-Ghinese-Foreign-Policy(3-semester-hours) A-normative-theory-of-fluctuations-in-the-PRC-s-foreign-policy;-appeal to-the-"third-world"-as-an-economic-social-model-and-as-spokesman;-as- pects-of-the-Sino-Soviet-Dispute-in-historical-perspective;-factors-in in-the-rapprochement-with-the-U-S-;-role-in-the-United-NationsPro- requisite:Permission-of-the-instructor(May-be-repeated-for-credit) (3-0)]	
<u>8390</u> [890]	Commercial Japanese Language I (3 semester hours) Oral and written Japanese, business vocabulary. (3-0)	
8391[891]	Commercial Japanese Language II (3 semester hours) Continuation of $8390[890]$. (3-0)	
<u>8392</u> [892]	Commercial Japanese Language III (3 semester hours) Continuation of $8391[891]$. (3-0)	
<u>8393</u> [893]	Commercial Japanese Language IV (3 semester hours) Continuation of $8392[892]$. (3-0)	
8397	Research Series in International Management Studies (3 semester hours) (May be repeated for credit) (3-0)	
8398 [908]	Thesis (3 semester hours) (May be repeated for credit) (3-0)	
8399 [909]	Dissertation (3 semester hours) (May be repeated for credit) (3-0)	
[*Not-offered-1974-75]		

GRADUATE PROGRAM IN MANAGEMENT AND ADMINISTRATIVE SCIENCES (M.S., Ph.D.)

Members of Faculty currently participating:

PROFESSORS: Alexander L. Clark (Management Science), Raymond P. Lutz (Head)
(Management Science), Howard F. Van Zandt (Management Science)

ASSISTANT PROFESSORS: Laurence A. Madeo (Management Science), Larry J. Merville
[Management Science), Asger M. Nielsen (Management Science),
Klaus Truemper (Management Science)

LECTURERS: James E. Moore (Psychology), Andrew B. Seidel (Management Science)

[PROFESSORS:--Raymond-P.-Lutz-+Head}-+Management-Seienee},-Lee-H.-Smith +Management-Seienee},-Howard-Van-Zandt-+Management-Seienee}

ASSISTANT-PROFESSORS:--Laurence-A-Madeo-{Management-Science},-Larry-I.-Merville +Management-Science},-David-M.-Raddock-{Political-Science}, Klaus-Truemper-{Management-Science}

LEGTURERS:--James-E--Moore-{Psychology},-Eugene-Payne-{Management-Seienee},
Andrew-B--Seidel-{Management-Seienee}]

OBJECTIVES

The purpose of the program is the development of general as well as specific skills for management problem solving in business and public institutions.

PROGRAM

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. [Required] Courses in

- -- operations research
- -- accounting
- -- finance
- -- management systems
- -- behavioral management science
- -- business and public administration

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.

DEGREE REQUIREMENTS

For general degree requirements, see "Procedures and Requirements for $\operatorname{Gradu-ate}$ Degrees," page .

A. M.S. in Management and Administrative Sciences

The M.S. Degree in Management and Administrative Sciences is obtained by completing the program courses outlined below with the total credit hours required, and earning a satisfactory grade on the written and oral examination taken during the last semester of registration. Alternately, the student may elect to submit a Master's thesis which counts as three credit hours towards the total course requirements. Two program options are available—one for students with non-business backgrounds and one for individuals with undergraduate degrees in business and public administration.

1. Non-Business Background Option

This option is suited for individuals without formal training in management and administration. It provides the requisite quantitative and qualitative skills to solve problems in complex organizations. Requirements include prerequisites, the basic core, and a concentration area.

Prerequisites

Prerequisite knowledge in calculus, matrix algebra, computer programming, statistics, and basic accounting is a requirement for the program. Deficiencies in any of these areas may be remedied by taking MAS 5311, MAS 5312, MAS 5351, MAS 5152, MAS 5153, MAS 5154, MAS 5313, MAS 5331.

Basic Core (18 semester hours)

Each candidate must satisfactorily complete the eighteen 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
6334	Accounting II
6341	Financial Management
6351	Management Systems I
5361	Behavioral Management Science I
6305	Readings in Management I

Concentration Area (18 semester hours)

Each candidate must also select and complete the requirements specified in a concentration area. Currently, the five areas listed below are available.

- a. Management
- b. Management Science
- c. Public Administration
- d. Management Systems
- e. Special Area Concentration

Specific course requirements for these areas can be obtained from the office of the Graduate Adviser. Each concentration requires a minimum of 9 designated credit hours and 9 hours of approved electives. Upon approval of both the Graduate Program Head and the Graduate Adviser, a candidate may select the Special Area Concentration to suit particular career needs. Examples of special areas are library management, educational systems, public institution management, insurance management, and health care systems.

2. Business Background Option

This option is open to individuals who have received bachelor's degrees in business or public administration and wish to refine their problem solving skills in a master's degree program. The option includes prerequisites, a basic core, and a concentration area.

Prerequisites

A bachelor's degree in business or public administration is required, which includes knowledge in calculus, finite math, computer programming, statistics, basic and cost accounting, principles of operations research, business finance, information systems, organizational behavior, and business law. Deficiencies in any of these areas may be remedied by taking MAS 5311, MAS 5312, MAS 5351, MAS 5152, MAS 5153, MAS 5154, MAS 5313, MAS 6312, MAS 5331, MAS 6334, MAS 6341, MAS 6351 and MAS 5361.

Basic Core (6 hours)

The core consists of two courses: an integrative business and administration seminar and a policy administration course.

Course Description

6305 Readings in Management I

6306 Administrative Policy Seminar

Concentration Area (24 hours)

Each candidate must select and complete the requirements specified in a concentration. Currently, five areas are available:

- a. Management
- b. Management Science
- c. Public Administration
- d. Management Systems
- e. Special Area Concentration

Specific course requirements for these areas can be obtained from the office of the Graduate Adviser. Each concentration 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-d). Upon the approval of both the Graduate Program Head and the Graduate Adviser, a candidate may select the Special Area Concentration to suit particular career needs. Examples of special areas include library management, education systems, public institution management, insurance management, and health care systems.

[The-M-S.-Degree-in-Management-and-Administrative-Seienees-is-obtained-by-completing-the-program-courses-outlined-below-with-a-total-of-36-eredit-hours-required,-and-earning-a-oatisfactory-grade-on-the-written-and-oral-examination-taken
during-the-last-semester-of-registration--Alternately,-the-student-may-elect-a-33
eredit-hour-program-and-upon-completion-of-the-course-requirements,-submit-a
Master's-Theois-

BASIC-CORE

612Quantitative-Management-Seier 632	
MANACEMENT-SCIENCE-CORE	
613	
LLECTIVES	

9-semester-hours

The -student -entering-the-M-S.-program-must-have-prerequisite-knowledge-equivalent-to-the-material-covered-in-courses-511,-512,-551,-611,-631,-and-651.

B. Ph.D. in Management Science

The program consists of a major and two minor areas, to be determined by the candidate and his doctoral committee. Prerequisites are those of the non-business background M.S. Program. Program course requirements include Core Courses (15 semester hours), Advanced Core courses (15 semester hours), and Electives (48 - 54 semester hours). Core Courses are the same as those in the Basic Core for the non-business background M.S. Program listed above, excluding MAS 6371 (Readings in Management I). Advanced Core Courses vary for the different major areas; a list of course requirements may be obtained from the MAS Graduate Adviser.

[Prerequisites-are-those-of-the-M.S.-program.--Program-course-requirements consist-of-Gore-Courses-(30-semester-hours),-Advanced-Core-Courses-(12-semester hours),-and-Electives-(42-semester-hours),---Gore-Gourses-are-those-listed-above for-the-M.S.-program,-not-including-the-M.S.-elective-courses,-but-with-the addition-of-MAS-645-Economic-Models-I.

ADVANCED-CORE

616------Network-Flows
620----Stochastie-Systems
745-----Economic-Models-II
861-----Man-Machine-Decision-Systems

Having-completed-Gore-and-Advanced-Gore-requirements,-the-student-must-pass written-and-oral-qualifying-examinations-to-be-admitted-to-doctoral-eandidacy.

ELECTIVES (48 - 54 semester hours)

Elective courses in several areas of concentration allow the student a wide range of choices of emphasis of study, and prepare him to undertake dissertation research. The student's specific program of studies is developed with his adviser from the list of elective courses. General dissertation requirements are listed on Pages of this catalog.

[Elective-Gourses-in-the-three-areas-of-concentration-(Management-Seionco, Business-Systems, -Societal-Systems)-allow-the-student-a-wide-range-of-choices-of emphasis-of-study, -and-prepare-him-to-undertake-dissortation-research.--The-student's-specific-program-of-studies-is-developed-with-his-advisor-from-the-list-of elective-courses.--General-dissortation-requirements-are-listed-on-pages-34-35.]

Course Descriptions

Course	Description
5152	Introduction to Programming FORTRAN (1 semester hour) An introduction to FORTRAN programming based primarily on self-study materials. (1-0)
5153	Introduction to Programming COBOL (1 semester hour) An introduction to COBOL programming based primarily on self-study materials. (1-0)
5154	Introduction to Programming APL (1 semester hour) An introduction to APL programming based primarily on self-study materials. (1-0)
<u>5309</u> [509]	Special Topics/TAGER (3 semester hours) (3-0)
5311 [5 1 1]	Mathematics for Management Sciences I (3 semester hours) Elementary mathematics including basic elements of differential and integral calculus set theory and logic and relevant topics from advanced calculus with specific applications in management and administrative sciences. (3-0)

5312 [5±2]	Mathematics for Management Sciences II (3 semester hours) Elementary mathematics including linear and matrix algebra vector spaces and relevant topics from difference and differential equations with specific application in management and administrative sciences. (3-0)
5313 [611]	Quantitative Management Sciences I (3 semester hours) An introduction to the basic theory and application of statistics in management and business. Topics include: frequency distributions, probability theory, basic probability distributions, estimation, testing hypotheses. Prerequisite: MAS 5311, 5312 [511,-512.] (3-0)
5331 [63±]	Accounting I (3 semester hours) Principles of managerial accounting. Detailed analysis of the profit and loss statement, balance sheet, cash budget, funds of flow statement, and pro forma financial statements. Institutions of interest will not be restricted to business firms. (3-0)
5351	Computer Systems Management (3 semester hours) An introduction to computer data processing, including: data representation, fundamentals of data processing, basic architecture of computers, fundamentals of software, topics in programming. Corequisites: MAS 5152, 5153 and 5154. (3-0)
5355 [7 53]	Project Management (3 semester hours)[*] Provides insight into present theories concerning the administration and control of research and business organizations. 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, GERT. [Prerequisite:MAS-612,652] (3-0)
5361 [661]	Behavioral Management Science I (3 semester hours) Introduction to behavioral science, including organization theory and human motivation and behavior. (3-0)
5363 [763]	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, Seashore and so on. (3-0)

630 <u>1</u> [675]	Industrial Property (3 semester hours)[*] Legal aspects of patents, trademarks, trade secrets, and proprietary data and the relationship to business. (3-0)
6305 [674]	Readings in Management I (3 semester hours) Integrated reading seminar in marketing, production, value theory, sociology, psychology, computers in society, organization, decision- making, management-policy, communication and other topics. (3-0)
6306	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 complex organizations. Case studies. (3-0)
6312 [612]	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, 5313, [551,-611] or permission from instructor. (3-0)
6313 [6 13]	Mathematical Programming I (3 semester hours) A detailed discussion of optimization techniques of linear models. Topics include review of simplex method, revised simplex method, production form of inverse, degeneracy, duality theory, two-person, zero-sum games, dual simplex algorithm, self-dual algorithm, primal- dual algorithm, transportation problem, min-cost flow problem, sen- sitivity analysis, parametric programming, upper bounds, separable programming, large scale problems, computer linear programming codes. Prerequisite: MAS 5312, 6312, [612] or permission from instructor. (3-0)
6314 [72 0]	Scheduling (3 semester hours)[*] Concepts and theory of scheduling problems with business applications. Techniques presented are combinatorial approaches for simple systems, and queuing/simulation methods for large and/or complex systems. Prerequisite: MAS 6312 [612] or permission from instructor. (3-0)
6316 [620]	Stochastic Systems (3 semester hours)[*] Stochastic systems and their properties. Included are random walk models. Poisson process, birth and death processes, Markov chains, renewal theory. Prerequisite: MAS 5313 [611] or permission from instructor. (3-0)
6317 [62 1]	Forecasting Techniques (3 semester hours)[*] Introduction to the development and use of forecasting models. Discussion of sources of data, sampling intervals, time series models, correlation, smoothing techniques and error measurement and analysis. Prerequisite: MAS 5313 [611] (3-0)
6325 [725]	Operations Research Techniques for Environmental Quality (3 semester hours)[*] Applications of operations research techniques to problems of environmental quality. Critical review of current literature. Prerequisite: MAS 6312 [613]. (3-0)

Seminar on the Rural-Urban Interface (3 semester hours)[*]

[764] The process and problems of urban development in the perspective of

law, social and mathematical sciences. (3-0)

Land Use and Resource Management (3 semester hours)[*]

[767] Seminar or selected topics in optimal land use models and the environmental economic trade-offs necessary for effective management. (3-0)

6331 Accounting II (3 semester hours)

Role of accounting information in the process of management decision—making and control in profit seeking and non-profit organizations.

Topics will include cost accounting, break-even analysis, auditing and data processing with an emphasis placed on relating recent advances in the quantitative and behavioral sciences to the accounting function. Prerequisite: MAS 5331 [63] or permission from instructor. (3-0)

6341 Financial Management (3 semester hours)

[641] Theoretical and procedural considerations in the administration of the finance function in the individual business firm: planning, fund raising, controlling of firm finances; specific emphasis is given to working capital management, capital budgeting and cost of capital.

(3-0)

6342 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 function of the security analyst; and the theoretical and applied approaches to efficient portfolio management. Prerequisite: MAS 6341 [641] or permission from instructor. (3-0)

6348 Economic Models I (3 semester hours)

[645] 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, 6312 [511; -61]; or permission from instructor. (3-0)

6351 Management Systems I (3 semester hours)

A study of the basic technology and techniques that are utilized in the development of management information systems, including: data base management systems, information structures, information organization and retrieval, cybernetics, and systems theory. Students will program in high-level languages. Prerequisite: MAS 5351 or permission from instructor. (3-0)

[651-----Management-Systems-I-(3-semester-hours)

An-introduction-to-computer-data-processing,-including:--societal impact-of-computers,-data-representation,-fundamentals-of-data processing,-basic-architecture-of-computers,-fundamentals-of-software, management-of-data-processing,-and-economic-evaluation-of-computer applications---Students-will-program-applications-in-high-level languages,--Prerequisite:--MAS-631-or-permission-from-instructor; (3-0)]

Management Systems II (3 semester hours)

The study of the design, analysis, and development of computer-based management systems. Case studies utilizing computer data processing decision theory, statistics, economic analysis, and operations research techniques such as CPM, PERT, GERT. Prerequisite: MAS 6312, 6341, 6351 or permission from instructor. (3-0)

Production Planning and Control (3 semester hours)[±]

Analysis of the manufacturing organization as a production system.

Emphasis placed on forecasting, inventory and production control.

Analytical tools such as critical path scheduling, operations research techniques, and computers are considered. Prerequisite:

MAS 6317 [621]. (3-0)

Behavioral Management Science II (3 semester hours)

The analysis of the human's role in systems. Utilizes basic experimental data from the areas of physiology, sensation and perception, motor performance, and cognition as the basis for the design and evaluation of complex integrated systems. (3-0)

Human Factors in Systems Design I (3 semester hours)

Topics in human performance, with emphasis on the development and application of concepts within specific operating environments. Topics such as definition of muscle fatigue and recovery functions, performance functions under image magnification, tool design criteria, and paced and unpaced decision functions. Prerequisite: 5361 [662]. (3-0)

Readings in Management II (3 semester hours)[*]

An integrated reading seminar involving in-depth reading in various type business and public institutions, social problems, and the interactions between the two sets of information. (May be repeated for credit.) (3-0)

Mathematical Programming II (3 semester hours)

Nonlinear programming problems and solution techniques. Areas covered include modeling, convexity and concavity, Kuhn-Tucker conditions, saddle point theorems, max-min and Wolfe dual. In unconstrained minimization, classical methods (e.g., steepest descent, Newton's method) are discussed as well as recently developed methods (e.g., variable metric methods). Constrained minimization techniques include quadratic programming, separable programming, cutting plane methods, penalty functions, Rosen's gradient projection, generalized reduced gradient method, methods of feasible directions. Prerequisite: MAS 6313 [613] or permission from instructor. (3-0)

Integer Programming (3 semester hours)[*]

Problems of discrete optimization and related solution techniques.

Presentation of modeling concepts (discontinuities, discrete variables, disjunctive and conditional constraints, nonconvex separable functions) and typical applications (e.g., capital budgeting, plant and warehouse location, cutting stock problem) is followed by discussion of solution techniques, including fractional and all-integer cuts, branch and bound, implicit enumeration, Bender's method, group theoretic approaches. Prerequisite: MAS 6313 [613] or permission from instructor. (3-0)

Network Flows (3 semester hours)

Network flow models and solution algorithms. Topics include matrix representations and properties, max-flow algorithms, min-cost flow algorithms, circulation and feasibility theorems, sensitivity analysis, integrality property of solutions, shortest route methods. Problems with special structure: CPM-PERT, multicommodity flows, matching, traveling salesman problem. Prerequisite: MAS 6313 [61-3] or permission from instructor. (3-0)

Optimal Control (3 semester hours)[*]

Optimization theory and applications of discrete and continuous control models. Principle of optimality, dimensionality problems, state and decision inversion, maximum principle. Prerequisite: MAS 6312

[612] or permission from instructor. (3-0)

Large Scale Optimization Systems (3 semester hours)

Optimization methods of large mathematical programs. Dantzig-Wolfe decomposition algorithm, column generation schemes, compact representation of matrix inverse, restriction and relaxation, outer and inner linearization, partitioning. Prerequisite: MAS 6313 [613] or permission from instructor. (3-0)

Queuing Theory (3 semester hours)[*]

Queuing systems and their properties. Single-server and multiserver queues, priority queues, finite population case, busy period distribution, imbedded Markov chain analysis for M/G/1 and GI/M/1, asymptotic behavior for almost saturated systems. Prerequisite: MAS 6316 [620] or permission from instructor. (3-0)

Optimization in Stochastic Processes (3 semester hours)[*]

Decision trees, Markov Processes involving decisions, Howard's algorithm, stochastic replacement problems, decisions in Semi-Markov processes. A broad range of business applications is included for each area. Prerequisite: MAS 6312, 6316 [612, 620] or permission from instructor. (3-0)

Simulation of Management Systems for Environmental Evaluation (3 semester hours)[★] Applications of simulation languages and methodologies to problems of environment. Analysis of data generated by simulation models and validation of models and results. (3-0) 7326 Economic Planning of the Public Sector (3 semester hours)[*] Presents a variety of applications of operations research techniques [768] in the areas of economics, environmental engineering and urban planning. Several quantitative models are examined and the advantage of limitations of each are investigated from a methodological and practical viewpoint. (3-0) 7327 Urban, Regional and Social Problems in Environmental Design [769] (3 semester hours) Theory of economic discrimination, racial composition of employment and unemployment, discrimination in housing and their environmental interface. Topics also include rural poverty, transportation and tax proposals. (3-0) 7328 Problems in Environmental Health, Sanitation and Community Planning [784] (3 semester hours)[*] Seminar on the relationship of environmental health to sanitation and community planning. Qualitative and quantitative models will be evaluated. (3-0)7346 Advanced Financial Management Systems (3 semester hours) Selected topics from the functions of the financial management system [746] are emphasized. Includes advanced problems in capital budgeting theory, working capital management, and capital structure decisions. Prerequisite: MAS 6341, 6312. [641,-612] (3-0) 7347 Advanced Investment Management (3 semester hours) Special emphasis on computer-based decision models for the management [747] of financial assets. Includes advanced work in financial information structure, security analysis, and portfolio building procedures in a system decision framework. Prerequisite: MAS 6341, 6312. [641,-612] (3-0) 7349 Economic Models II (3 semester hours) Fluctuations and growth or economic activity in a modern complex 745] society. Measurement and determinants of national income; nature and role of money and interest rates; inflation; and monetary and fiscal policies designed to promote stability and progress. Elementary econometric systems will be introduced. Prerequisite: MAS 5313, $6348 \ [611, -645]$ or permission from instructor.

Systems Simulation (3 semester hours)

[751] Discrete simulation models and comparison of discrete change simulation languages. Simulation methodology including generation of random numbers and variates, design of simulation experiments for optimization, analysis of data generated by simulation experiments, and validation of simulation models and results. Emphasis will be placed on the application of simulation. Prerequisite: MAS 5313, 6351.

[611, -651] (3-0)

7353 Man-Machine Decision Systems (3 semester hours) Coverage of interactive use of computers including hardware, software and human factors. Particular emphasis will be placed upon the requirements for using computers interactively in decision-making process. Prerequisite: MAS 6351 or permission from instructor. (3-0) Data Base Management Systems (3 semester hours) 7354 Both descriptive and normative analysis of data base management systems. Consideration of hardware and operating system interface, use in batch and teleprocessing mode, access through programming languages, as well as non-programming inquiries. Prerequisite: MAS 6351. (3-0) 7363 Human Factors in System Design II (3 semester hours) [664] The application of human performance research to the optimization of man-machine systems. Design of commonly used prediction and training systems under random and constant demands, learning functions, the statistical distributions of the population concerning manual skills, and methods of evaluating human capabilities and attitudes. In addition limitations of the human body in coping with stressful situations. Concepts to be included are: skeletal muscle physiology and mechanics, skeletal articulation and mechanics, circulatory and pulmonary system function and limitations, and nervous system control and limitations. Prerequisite: 6363 [663]. (3-0) 8100-8110 Colloquium Series in Management and Administrative Sciences (1 semester hour) (S-U Grading) (May be repeated for credit) Topics 8100 Management Science 8101 Management Information Systems 8102 Behavioral Management Science Business Systems: Distributional 8103 8104 Business Systems: Financial Business Systems: Manufacturing 8105 8106 Criminal Justice Systems

Educational Management Systems

Health Care Systems

Library Systems

Regional Planning

8107

8108

8109

8110

8320-8330 Readings Series in Management and Administrative Sciences
(3 semester hours)
Investigation into the literature of topical areas of management and administration. (May be repeated for credit)

Topics

8320	Management Science
8321	Management Information Systems
8322	Behavioral Management Science
8323	Business Systems: Distributional
8324	Business Systems: Financial
8325	Business Systems: Manufacturing
8326	Criminal Justice Systems
8327	Educational Management Systems
8328	Health Care Systems
8329	Library Systems
8330	Regional Planning

[881-----Readings-in-Management-and-Administrative-Sciences (1-6-semester-hours)

Investigation-into-the-literature-of-topical-areas-of-management-and administration---(May-be-repeated-for-eredit)--(1-variable)

A.---Management-Science

B----Management-Information-Systems

C. -- Behavioral-Management-Science

D. -- Business-Systems: -- Distributional

E.---Business-Systems:--Financial

F.---Business-Systems:--Manufacturing

G---Criminal-Justice-Systems

H.---Educational-Management-Systems

I .--- Health-Care-Systems

J.---Library-Systems

K .--- Regional-Planning]

```
Seminar Series in Management and Administrative Sciences
8340-8350
              (3 semester hours)
              Discussion of selected concepts and theories in management and
              administration. (May be repeated for credit).
                      Management Science
             8341
                      Management Information Systems
             8342
                      Behavioral Management Science
             8343
                        Business Systems: Distributional
             8344
                      Business Systems: Financial
                      Business Systems: Manufacturing
             8345
             8346
                    Criminal Justice Systems
             8347
                      Educational Management Systems
             8348
                      Health Care Systems
             8349
                     Library Systems
             8350
                     Regional Planning
[885-----Seminar-in-Management-and-Administrative-Sciences
             (3-semester-hours)
             Discussion-of-selected-concepts-and-theories-in-management-and
             administration -- (May-be-repeated-for-credit)-(3-0)
             A.---Management-Science
             B.---Management-Information-Systems
             6---- Behavioral-Management-Science
             D.--Business-Systems:--Distributional
             E----Business-Systems:--Financial
             F----Business-Systems:-- Manufacturing
             6----Griminal-Justice-Systems
             H----Educational-Management-Systems
             1---Health-Care-Systems
```

J.---Library-Systems K.---Regional-Planning]

```
8360-8370
             Special Topics Series in Management and Administrative Sciences
             (3 semester hours)
             (May be repeated for credit)
             8360
                      Management Science
             8361
                      Management Information Systems
             8362
                      Behavioral Management Science
             8363
                      Business Systems: Distributional
             8364
                      Business Systems: Financial
             8365
                      Business Systems: Manufacturing
             8366
                      Criminal Justice Systems
             8367
                      Educational Management Systems
             8368
                      Health Care Systems
             8369
                      Library Systems
             8370
                     Regional Planning
[899-----Special-Topics-in-Management-and-Administrative-Sciences
             (3-semester-hours)
             (May-be-repeated-for-credit)-(3-0)
             A----Management-Science
             B .-- Wanagement-Information-Systems
             6---Behavioral-Management-Science
             D.---Business-Systems:--Distributional
             E----Business-Systems:--Financial
             F----Business-Systems:--Manufacturing
             G---Criminal-Justice-Systems
             H.---Educational-Management-Systems
             I---Health-Care-Systems
             J.---Library-Systems
             K----Regional-Planning]
```

```
Research Series in Management and Administrative Sciences
8380-8390
               (3 semester hours)
               (May be repeated for credit)
              8380
                        Management Science
              8381
                        Management Information Systems
                        Behavioral Management Science
              8382
              8383
                        Business Systems: Distributional
                        Business Systems: Financial
              8384
                        Business Systems: Manufacturing
              8385
              8386_
                        Criminal Justice Systems
              8387
                        Educational Management Systems
              8388
                        Health Care Systems
              8389
                       Library Systems
              8390
                       Regional Planning
[901-----Research-in-Management-and-Administrative-Sciences
              (1-12-semester-hours)
              (May-be-repeated-for-credit)-(1-variable)
              A----Management-Seience
              B.---Management-Information-Systems
              5:---Behavioral-Management-Science
              D----Business-Systems:--Distributional
E----Business-Systems:--Financial
              F.---Business-Systems:--Manufacturing
              G----Criminal-Justice-Systems
              H --- Educational - Management - Systems
              1.---Health-Care-Systems
              J----Library-Systems
              K.---Regional-Planning]
              Thesis (3 semester hours)
8398
[806]
              (May be repeated for credit) (0-9)
              Dissertation (3 semester hours)
8399
[<del>989</del>]
              (May be repeated for credit) (0-9)
```

GRADUATE PROGRAM IN MATHEMATICAL SCIENCES (M.S., M.A.T., Ph.D.)

Members of Faculty currently participating:

PROFESSORS: Patrick L. Odell (Mathematical Sciences), Istvan Ozsvath (Mathematical Sciences), Wolfgang A. Rindler (Mathematical Sciences), Ivor Robinson (Mathematical Sciences)

ADJUNCT PROFESSORS: Wanzer Drane (Mathematical Sciences), David Mishelevich (Mathematical Sciences), Donald B. Owen (Mathematical Sciences)

[ADJUNCT-PROFESSOR:--Donald-B.-Owen-(Hathematical-Sciences)]

ASSOCIATE PROFESSORS: John W. Van Ness (Head) (Mathematical Sciences),

James E. Midgley (Physics)

ASSISTANT PROFESSORS: Henry Fuchs (Mathematical Sciences), Joe W. Duran (Mathematical Sciences), Portia Isaacson (Mathematical Sciences), Christopher A. Parr (Chemistry)

John H. Davis (Mathematical Sciences), Vytas Gylys (Mathematical Sciences), Carl M. Peters (Mathematical Sciences), Raymond Veenkant (Mathematical Sciences)

[LECTURERS:--Raj-S.-Chhikara-{Mathematical-Sciences},-Donna-K.-Dunaway-{Mathematieal-Sciences),-Dal-C.-Gerneth-(Mathematical-Sciences),-Carl-M.-Peters (Mathematical-Sciences)

OBJECTIVES

The need for applied mathematics, computer science and statistics is constantly growing as other sciences mature; problems which require its use are numerous and pressing, and its practitioners are eagerly employed. [For-some-years-to-come,] The University of Texas at Dallas M[m]athematical[s] Sciences P[p]rogram will concentrate on these areas [applied-mathematics], 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 can do a major part of his work in certain areas of applications. These programs [This] could lead to careers in the three major areas themselves as well as in such fields as [mathematics; but-it-could-also tead-to-work-in] physics, environmental sciences, management science, and so on. [The-aim-will-be-to-turn-out-thoroughly-modern-applied-mathematicians,-i:e:,-those conversant-with, -and-not-hostile-to,-the-powerful-language-and-concepts-of-basic modern-pure-mathematics.]

PROGRAMS

The Ph.D. degree program is administered jointly with The University of Texas at Arlington and with The University of Texas Health Sciences Center at Dallas. This has the effect of pooling the mathematical sciences resources at the three institutions. Thus, for example, certain courses in mathematics might be taken at UTA while others in medical computing or medical statistics might be taken at UTHSCD. Joint research efforts are also encouraged. The University of Texas at Dallas does not propose to establish separate graduate programs in applied mathematics, pure mathematics, computer science, and statistics. Rather, it proposes a single Graduate Program in Mathematical Sciences with options allowing the student considerable flexibility in choosing a track to suit his interests. The present program will also train the student in the use of the tools of the mathematical sciences to solve problems in the other areas.

MASTER OF ARTS IN TEACHING [M.A.T.)

This degree program is designed for persons who are teaching or plan to teach mathematics and/or mathematical sciences at the pre-college or college level. Several courses in the requirements are electives.

MASTER OF SCIENCE

This degree program has three basic options (computer science, statistics and applied analysis) each of which has [and-within-each-of-these] several tracks. Each basic option contains a "straight" track (applied statistics, computer science, and applied analysis) and several joint tracks which require that approximately half of the work be done in one of the areas of application. The emphasis of the latter will be upon obtaining an operational knowledge of a mathematical science [an-area of-applied-mathematics] and upon training in the use of these methods in the respective field[s] of application.

DOCTOR OF PHILOSOPHY

This degree program again has three basic options and is intended to have the same flexibility as the M.S. Program. We do not list tracks but instead attempt to tailor the degree program to the student. The student must arrange his course program with the guidance and approval of the $\underline{G}[\mathbf{g}]$ raduate $\underline{A}[\mathbf{a}]$ dviser. Adjustments can be made as the student's interests develop and a specific thesis topic is chosen. There must be available a thesis adviser or group of thesis advisers willing to guide This thesis. These theses may be completely within Mathematical Sciences [applied-mathematics] or they may involve considerable work in an area of application.

FACILITIES

Students in Mathematical Sciences who interact with ongoing research efforts at UT-Dallas, UT-Arlington or UT-Health Science Center at Dallas, will, of course, have the available facilities in those areas necessary to carry out their part of the research. The UT-Regional Computer Center in North Texas, serving UTD, UTA and UTHSCD, contains an $\overline{\text{IBM}}$ [a] 370/155 and a wide range of peripheral equipment. Smaller computers are located on the UTD campus.

SPECIFIC DEGREE REQUIREMENTS

For general degree requirements, see "Procedures and Requirements for Graduate Degrees," page . Specific degree requirements for students in Mathematical Sciences are as follows. The student entering the Mathematical Sciences Program must have undergraduate preparation equivalent to a baccalaureate degree in a quantitative science such as mathematics, physics, engineering, etc. The student entering the M.A.T. P[p]rogram must have undergraduate preparation equivalent to that described in the previous sentence or a teaching field in mathematics. A student entering a program with some graduate credits already completed may receive advanced standing if approved by the Graduate Adviser. A student lacking undergraduate prerequisites for graduate courses in his option must complete these prerequisites or receive approval from the Graduate Adviser and the course instructor. At the discretion of the Graduate Adviser a diagnostic exam may be required.

MASTER OF ARTS IN TEACHING

The Master of Arts in Teaching degree requires 36 semester hours of coursework. It involves 27 semester hours of Mathematical Sciences and 6 semester hours of professional education. The remaining 3 semester hours must be taken in multicultural studies (SCE 5303) by students seeking the Professional Certificate; other students may take any three-hour graduate course.

Coursework should be distributed as follows:

M.A.T. Core (Required): MMS 5301, 5302, 5305, 5306, 5319.

Resource Area: 9 semester hours in Mathematical Sciences (approved by Graduate Adviser).

Professional Education (Required): MMS 5361, SCE 5304.

Elective: Any 5000 level course (must be SCE 5303 for those seeking the Professional Certificate).

[This-is-a-36-hour-plan---It-involves-30-hours-of-mathematical-sciences-and-6 hours-in-professional-education-to-be-distributed-as-follows:

M:A:T:-Core:-MMS-501;-502;-505;-506;-513;-519;-12-hours-of-electives-in-Mathematical-Sciences-(approved-by-the-Graduate-Adviser):--6-hours-of-professional-education:--561;-562;]

MASTER OF SCIENCE

The student may choose a thesis plan or a non-thesis plan in any of the options listed below. The thesis plan requires 27 hours of courses (as specified in the chosen option track below) plus completion of an approved thesis ([6-hours-of]) MMS 8698[908]). This thesis is directed by a Supervising Professor and must be approved by the Mathematical[s] Sciences Program. The non-thesis plan requires 36 hours of courses as specified by the chosen option and track. The student must demonstrate proficiency in computer programming.

The student must pass a comprehensive exam as soon as it is offered after the end of his first year (after completing 6 of the required semester courses). This exam will be offered twice a year. If the student fails this exam, he will not be allowed to continue in the degree program. A conditional fail allows the student to continue until the exam is offered again at which time he must retake and pass the exam.

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 Graduate Program.

All electives must be approved by the Graduate Adviser. Substitutions for required courses may sometimes be made if approved by the Graduate Adviser.

- 1. STATISTICS OPTION: The core requirements are MMS $\underline{6337}$, $\underline{6338}$, $\underline{6339}$ [$\underline{637}$, $\underline{-638}$, $\underline{639}$] and one course from among MMS $\underline{6340}$, $\underline{7330}$, $\underline{7331}$, $\underline{7335}$ and $\underline{7338}$ [$\underline{640}$, $\underline{-739}$ 0 $\underline{731}$, $\underline{-734}$, $\underline{-735}$ -and $\underline{-738}$].
- TRACK 1A. APPLIED STATISTICS: Complete three courses not taken for the option core from among MMS 6313, 6314, 6340, 7330, 7331, 7334, 7335 and 7338 [536, -640, -730, 731, 734, -735, and -738]. Complete the required number of course hours by choosing MMS electives numbered 5000 and above. Non-thesis students may choose 6 hours of graduate courses outside of MMS.

- TRACK 1B. STATISTICAL COMPUTING: Designed to help fill the demand for people who can assist in effectively implementing statistical procedures on a computer. The student must complete four courses from among MMS 5330, 5331, 5340, 5345, 6313, 6314 [530,-531,-540,-545,-613,-614]. Non-thesis students choose remaining electives from MMS courses numbered 5000 or above.
- TRACK 1C. ENVIRONMENTAL STATISTICS: Designed for those who wish to work on the many interesting quantitative problems in Environmental Sciences. The student must complete any one of the following three pairs of ENV courses: 5301, 5302 or 5301, 5320 or 5303, 5311 [501, 502 or 501, 520 or 510, 511]. Complete two additional ENV courses. Choose remaining electives from ENV courses and/or MMS courses numbered 5000 or above. Recommended courses are MMS 6313, 6314, 6329, 7331, 7338 [536, 629, 731, 738]. In addition GEO courses (particularly 5400 and 5341) [500-and-543] may be taken.
- TRACK 1D. CHEMICAL STATISTICS: Designed to exploit ongoing [on-going] research in chemistry for areas of innovative application of statistics. The student must complete CHM 5351 [551] and one of 5431 [531] or 5383 [583] and one of 5411, 5314 [511, 514] or 5385 [585]. Electives may be chosen from courses in chemistry, biochemistry, chemical physics or MMS courses numbered 5000 or above.
- TRACK 1E. STATISTICS AND OPERATIONS RESEARCH: Complete MAS $\underline{6312}$, $\underline{6313}$ $\underline{[612,-613]}$ and two courses from MAS $\underline{6316}$, $\underline{7311}$, $\underline{7312}$, $\underline{7313}$, $\underline{7316}$ $\underline{[614,-615,-616,-620,-622]}$. Choose remaining electives from MAS or MMS courses numbered $\underline{5000}$ or above.
- TRACK 1F. 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) [(642), (631, 632), (651, 652), (661, 662), (745)]. Choose one additional MAS course at 6000 level or above and remaining electives from MAS or MMS courses numbered 5000 or above. MMS 7330 [730] is recommended.
- TRACK 1G. APPLICATION OF STATISTICS IN BIOLOGY: Designed for those interested in statistical aspects of biological experimentation and stochastic modeling. Take four courses from BIO as advised by the Biology Faculty. These courses will usually include BIO $\underline{5425}$ [$\underline{520}$] and $\underline{5430}$ [$\underline{530}$]. Choose remaining electives from BIO or MMS courses numbered 5000 or above.
- TRACK 1H. PHYSICAL STATISTICS: Designed to exploit ongoing [en-going] research in physics for areas of innovative application of statistics. The student must complete PHY 5313, 5421, 5330 [513, 521, 530] and one course from among PHY 5323, 5360, 5381 [523, 560, 581] and 6330 [630]. Electives may be chosen from PHY and/or MMS courses numbered 5000 or above.
- TRACK II. STATISTICS IN GEOSCIENCES: Designed to provide expertise in geoscience data handling and modeling problems. The student must complete GEO 5400, 5341, 5370 [500, 501, 502, 507] and one course from among GEO 5321, 5342, 5391, 5405, 5430, 5461, and 5462 [534, 543, 561 and 584]. Choose remaining courses from GEO, MMS and/or ENV courses numbered 5000 or above. MMS 6329 [629] is recommended.
- TRACK 1J. APPLICATION OF STATISTICS IN MEDICINE: Designed for those who desire careers in the application of statistics in medical research and clinical medicine. Take four courses as advised by the Department of Medical Computer Science (MCS) at The University of Texas Health Science Center at Dallas. These courses will usually include Biometrical Analysis I and II and Physiology for Biomedical Engineers. Choose remaining electives from MCS courses or MMS courses numbered 5000 or above.

- 2. COMPUTER SCIENCE OPTION: The core requirements are four courses from aong MMS 5330, 5331, 5337, 5340 [530,-531,-537,-540] and 5345 [545].
- TRACK 2A. COMPUTER SOFTWARE: Choose three courses from among MMS 5333, 5345, 5348, 6355, 6313 [533,-545,-548,-655,-613] and 6314 [614]. Take remaining electives from among MMS courses numbered 5000 or above and/or PHY 5323, 6324, 6325, 6326 [523,-624,-625,-626]. Non-thesis students may take 6 hours of graduate courses outside of MMS.
- TRACK 2B. COMPUTER HARDWARE: Choose three courses from among PHY 5323, 6324, 6325, 6326 [523, 624, 625, 626]. Take remaining electives from among PHY 6324, 6325, 6326 [624, 625, 626] or MMS courses numbered 5000 or above. Non-thesis students may take 6 hours of graduate courses outside of MMS.
- TRACK 2C. COMPUTER APPLICATIONS IN ENVIRONMENTAL SCIENCE: Designed to train people in the effective use of computers in the numerical approach to environmental problems. The student must complete any one of the following three pairs of ENV courses 5301, 5302 [501, 502] or 5301, 530 [501, 530] or 5303, 5311 [510, 511]. Complete two additional ENV courses. Choose remaining electives from ENV courses or MMS courses numbered 5000 above. Recommended courses are MMS 6313 [613] and 6314 [614]. In addition GEO courses (particularly 5400 [500] and 5341 [543]) may be taken.
- TRACK 2D. COMPUTER SCIENCE AND OPERATIONS RESEARCH: Complete MAS 6312, 6313 [612, 613] and two courses from among 6316, 6352, 7311, 7312, 7313, [614, 615, 616, 620, 652, 653] and 7351 [751]. Remaining electives may be chosen from MAS and MMS courses numbered 5000 and above.
- TRACK 2E. COMPUTER SCIENCE APPLICATIONS TO BIOLOGY: Designed for those interested in the study of mathematical simulation and analysis in biology. Take four courses from BIO as advised by the Biology Faculty. These courses will usually include BIO $\underline{5425}$ [520] and $\underline{5430}$ [530]. Choose remaining electives from BIO or MMS courses numbered 5000 or above.
- TRACK 2F. COMPUTER APPLICATIONS IN MEDICINE: Designed for those who wish to work in the area of computer applications in medicine. Take four courses advised by the Department of Medical Computer Science (MCS) at The University of Texas Health Science Center at Dallas. These courses will usually include Clinical Information Systems I and II, Real-Time Computation and Communication and Physiology for Biomedical Engineers although substitute or additional electives may be occasionally selected from MCS courses or MMS courses numbered 5000 or above.
- TRACK 2G. APPLICATION OF COMPUTERS IN CHEMISTRY: Designed to train people to integrate computers into ongoing [on-going] research in chemistry. The student must complete CHM 5351 [551] and one of 5431 [531] or 5383 [583] and one of 5411, 5314, [511,-514,] or 5385 [585]. Electives may be chosen from courses in chemistry, biochemistry, chemical physics or MMS courses numbered 5000 and above.
- 3. APPLIED ANALYSIS OPTION: The core requirements are four courses from among MMS 5301, 5302, 6301, 6302, 6303, 6304, 6313, 6314, 6315, 6316, 7313 [521, 524, 536, 601, 602, 603, 604, 613, 614, 615, 616, 7313] and 7314 [714], with at least one 2-semester sequence included.
- TRACK 3A. APPLIED ANALYSIS: Complete three more courses from the above list and/or MMS 6329, 7301, 7302, 7305 [629, -701, -702, -705]. Choose remaining electives from MMS courses numbered 5000 and above. Non-thesis students may choose 6 hours of graduate courses outside of MMS.

- TRACK 3B. RELATIVITY THEORY: Complete MMS 5393, 5394, 5395 [593,-594] and 5396 [596]. Choose remaining electives from among PHY and/or MMS courses numbered 5000 and above. Non-thesis students may choose 6 hours of graduate courses outside of MMS.
- TRACK 3C. ENVIRONMENTAL MATHEMATICAL MODELING: Designed for those interested in the modeling and mathematical analysis of environmental problems. The student must complete any one of the following three pairs of ENV courses: 5301, 5302 [501, 502] or 5301, 5320 [501, 520] or 5303, 5311 [510, 511]. Complete two additional MMS courses numbered 5000 or above. Recommended courses are MMS 6315, 6316, 6329, 7313 [615, 616, 629, 713] and 7314 [714]. In addition GEO courses (particularly 5400 [500] and 5341 [543]) may be taken.

DOCTOR OF PHILOSOPHY

The student must complete such courses and engage in such duties as required by the Graduate Program. While there are no specific course requirements, few students would be considered prepared for the Ph.D. research thesis with less than 15 one-semester graduate courses in MMS. The Ph.D. program can be considered as divided into three options with several tracks in each option (for examples see the M.S. program).

Each student must pass the preliminary exam as soon as it is offered after the end of his first year (after completing 6 of the required one-semester courses). After completion of all or most of his course program the student must pass a qualifying exam. The student will not be allowed to continue if he fails either exam. A conditional fail allows the student to continue until the exam is offered again at which time he must retake and pass the exam.

A thesis is required and must be approved by the Graduate Program. The student may have one thesis adviser from the Graduate Program or a thesis advisory committee with at least one member from the Mathematical [s] Sciences Faculty. The latter would be appropriate for a student writing his thesis in an interdisciplinary area.

- 1. STATISTICS OPTION: Most degree programs would include MMS $\underline{6331}$, $\underline{6332}$, $\underline{6337}$, $\underline{6338}$, $\underline{6339}$, $\underline{6340}$, $\underline{6344}$ $\underline{[631, -632, -637, -638, -639, -640, -644]}$ and some of the $\underline{7000}$ level statistics courses. The remaining course work would depend on the thesis area.
- 2. COMPUTER SCIENCE OPTION: Most degree programs would include MMS 5330, 5331, 5340, 5345, 5348, 6313, 6314, 6355, 6362 [530, 531, 540, 545, 548, 613, 614, 655, 662] and 6363 [663].
- 3. APPLIED ANALYSIS OPTION: If the student plans to study relativity theory, he would probably take MMS 5393, 5394, 5395, 5396 [593, 594, 595, 596] and PHY 6397 [697]. In addition, depending on his needs, he would make an extensive selection of courses from such courses as MMS 5313, 5314, 6301, 6302, 6303, 6304, 6305, 6316, 7301, 7302, 7313, 7314 [513, 514, 601, 602, 603, 604, 605, 616, 701, 702, 713, 714]. Similarly, if a student plans to study differential equations, he would take the various differential equations courses offered plus the necessary mathematical topics to support research in his chosen area.

Mathematical Sciences Courses

Course

Description

- $\frac{5109-5609}{[509]}$ Special Topics/TAGER ($\frac{1-6}{9}$ [3] semester hours) ($\frac{1-6}{9}$ [3-0])
- 5301[5θ1] Elementary Analysis I (3 semester hours)
 Real numbers, functions of several variables, limits, continuity, differentiability, integrals, vectors and vector functions. Prerequisite: one year of calculus. (3-0)
- 5302[502] Elementary Analysis II (3 semester hours)
 Infinite series, convergence tests, improper integrals, uniform convergence power series. Prerequisite: MMS 5301 [501]. (3-0)
- Computer Science I (3 semester hours)
 Introduction to algorithmic processes. Elementary computer systems.
 Programming concepts. Program structure. Introduction to programming languages (e.g., FORTRAN, APL, etc.). Numerical and non-numerical problems. History and social implications of computing. (3-0)
- 5305[505] Higher Geometry (3 semester hours)
 Affine, homogeneous and projective coordinates, projective transformations, projective line and plane coordinates, duality, cross ratios, conics. (3-0)
- Non-Euclidean [Euclidian] Geometry (3 semester hours)
 The relation between elliptic, Euclidean and hyperbolic geometries, special studies of elliptic and hyperbolic geometries, the problem of space forms in two and three dimensions. Prerequisite: MMS 5305 [505]. (3-0)
- 5313[5±3] Intermediate Modern Algebra I (3 semester hours)
 Study of modern algebra involving groups, rings, [and] fields and
 Galois theory. (3-0)
- Modern Algebra II (3 semester hours)
 Continuation of 5313 [5±3] including tensors and exterior algebra.
 Prerequisite: MMS 5313 [5±3]. (3-0)
- 5319[5±9]

 Intermediate Linear Algebra (3 semester hours)

 Determinants, vector spaces over a field, modules, matrices, solution of linear equation systems, linear transformations, eigenvalues, quadratic forms, generalized inverses. (3-0)
- [521------Applied-Ordinary-Bifferential-Equations--(3-semester-hours)

 First-order-differential-equations, elementary-integration-methods,
 formulation-of-existence-and-uniqueness-theorems, -normal-systems,
 linear-equations-with-constant-and-variable-coefficients---Applications---Prerequisite:--One-year-of-calculus---(3-0)
- 524------Applied-Partial-Differential-Equations--(3-semester-hours)

 Second-order-linear-equations-with-constant-coefficients,-hyperbolie,
 elliptic-and-parabolie-equations,-initial-and-boundary-value-problems.
 Applications.--Prerequisite:--MMS-521:--(3-0)]

- Computer Science II (3 semester hours)

 Computer structure and organization, machine language, instruction execution, addressing techniques, and digital representation of data symbolic coding and assembly systems. Use of assembly language for various programming applications. Prerequisite: MMS 5303 or 3331 [503]. (3-0)
- Computer Science III (3 semester hours)

 Emphasis on computer systems organization. Including topics such as assemblers, macro-assemblers, compilers, file and table structures, time sharing, and telecommunications. Applications using higher level languages such as PL/I, FORTRAN, APL, etc. Prerequisite: MMS 5330 [530]. (3-0)
- [Modern] Applied Algebra (3 semester hours)

 This is a computer science oriented course. Topics in algebra, with an emphasis on semigroups; algebraic theory of machines and languages, Boolean algebra, introduction to graph theory. Prerequisite: A semester of modern algebra. (3-0)
- [536------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:--Linear-algebra,-one-year-of-calculus
 and-knowledge-of-a-programming-language.--(3-0)]
- Survey of Programming Languages (3 semester hours)
 Structure of algorithmic languages; expressions and statements, storage reservation, data organization, looping control, linkages. Study of representative languages: COBOL, SNOBOL, GPSS, ALGOL, FORTRAN, PL/I.
 Prerequisite: MMS 5303 or 3331 [503] with MMS 5330 [530] recommended.

 (3-0)
- Computer Organization and Hardware (3 semester hours)
 Basic digital circuits, Boolean algebra, data representation and transfer, and digital arithmetic. System organization, control functions, input-output facilities, and reliability. Features needed for multiprogramming, multiprocessing, and real-time systems. Prerequisites:

 MMS 5330 [530] and applied modern algebra. (3-0)
- Computer-Assisted Instruction (3 semester hours)
 Concepts of computer-assisted instruction. Organization of instructional material. Principles of interaction between student and machine. Evaluation techniques. Use of the interactive terminals to develop meaningful course material in the student's field of interest. This course is particularly recommended for teachers. Prerequisite: Knowledge of a programming language. (3-0)
- Data Structures (3 semester hours)

 Basic concepts: linear lists, strings, arrays, and orthogonal lists; storage systems and structures, and storage allocation; multilinked structures; symbol tables and searching techniques; formal specification of data structures. Application to scientific and business systems. Prerequisite: MMS 5330 [530] and 5333 or 3319 [applied-modern algebra]. (3-0)

- Systems Programming (3 semester hours)
 Review of batch processing systems. Implementation techniques for parallel processing. Overall structure of multiprogramming systems. Addressing techniques, core management, file system design and management, system accounting. Traffic control, interprocess communication, design of system modules, and interfaces. Prerequisites:

 MMS 5340 [549] and 5345 [545]. (3-0)
- Probability and Statistics I (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 from the physical, social, and management sciences. This is a basic course in probability and it uses calculus extensively. Prerequisite: One year of calculus. (3-0)
- Probability and Statistics II (3 semester hours)
 An introduction to the theory and methods of statistical inference.
 The major statistical topics are discussed with some of the more mathematically elementary derivations as well as many examples from the physical, social and management sciences. Prerequisite: MMS 5351 [551].

 (3-0)
- Sampling Theory (3 semester hours)[*]
 This course is designed to provide students understanding of the sampling theory of surveys, a common modern practice in obtaining the statistical data for planning programs and assessing results or opinions. Different methods of sample selections with associated error analysis are presented at an intermediate level. Survey applications are considered from various areas. Prerequisite: MMS 5352 [552]. (3-0)
- 5361[56±] Seminar in the Teaching of Mathematics (3 semester hours)

 Selection and analysis of mathematics concepts from such fields as set theory, linear algebra, geometry, and probability. Development of varied learning experiences productive of students' understanding of these and other concepts. (3-0)
- [562--------Seminar-in-Education-and-Psychology-of-Learning--(3-semester-hours)
 Topics-vary:--Suggested-topics:--systematic-approach-to-instruction;
 human-variability-and-classroom-learning;-goal-setting-and-measurable
 achievement;-learning-theory;-and-the-role-of-the-teacher:--(3-0)]
- Saga [593] Relativity, The Special Theory I (3 semester hours)[*]

 Geometry of spacetime with special emphasis on null structures; tensor algebra; bivectors, quaternions, and the Lorentz transformation; Doppler shift, aberration, visual appearance of moving objects; and particle and continuum mechanics. (3-0)
- Relativity, The Special Theory II (3 semester hours)[*]
 Covariant formulation of electromagnetic theory: Maxwell's equations and the stress-energy tensor; null congruences and pure radiation; advanced and retarded fields, radiation reaction; spinor calculus and its applications to the Lorentz group, electromagnetic theory, and other topics in special relativity. Prerequisite: MMS 5393 [593]. (3-0)

- Relativity, The General Theory I (3 semester hours)

 Elements of differential geometry; Einstein's field equations; the linear approximation; equations of motion; algebraic classification of the curvature tensor; Schwarzchild's solution, plane waves, and some other exact solutions. (3-0)
- Relativity, The General Theory II (3 semester hours)

 Degeneracy and shear; systematic investigation of degenerate solutions; the Kerr metric; spatially homogeneous cosmological models; casual structure; Cauchy problem; singularities; gravitational collapse and black holes. Prerequisite: MMS 5395 [595]. (3-0)
- Real Analysis I (3 semester hours)

 Point set topology in metric and general spaces. Theory of measure and integration. Prerequisite: Advanced calculus. (3-0)
- Real Analysis II (3 semester hours)
 Continuation of 6301 [60 \pm]. Prerequisite: MMS 6301 [60 \pm]. (3-0)
- Theory of Complex Functions I (3 semester hours)[*]

 Complex integration, Cauchy's theorem, calculus of residues, power series, entire functions, Riemann mapping theorems, Riemann surfaces, conformal mapping with applications. Prerequisite: Advanced calculus. (3-0)
- Theory of Complex Functions II (3 semester hours)[\pm] Continuation of 6303 [603]. Prerequisite: MMS 6303 [\pm 03]. (3-0)
- Introduction to Topology (3 semester hours)[*]

 Topological spaces, produce and quotient spaces, compactness, connectedness, continuity, metric spaces, function spaces, fixed-point theorems. Prerequisite: Advanced calculus or MMS 5302 [502]. (3-0)
- Numerical Analysis I (3 semester hours)

 A study of numerical methods including interpolation and integration, numerical solutions of algebraic and transcendental equations, of ordinary and partial differential equations, and of the solution of linear systems. Prerequisites: Linear algebra and advanced calculus. (3-0)
- $\frac{6314 [614]}{\text{Continuation of MMS}} \frac{6313}{6313} [613]. (3-0)$
- Differential Equations I (3 semester hours)
 The theory of differential equations with emphasis on modern methods of solution. Prerequisite: Advanced calculus. (3-0)
- 6316[616] Differential Equations II (3 semester hours)
 Continuation of MMS 6315 [615]. Prerequisite: MMS 6315 [615]. (3-0)
- Applied Probability (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 [55±]. (3-0)

- Statistical Inference I (3 semester hours)[*]

 An intensive mathematical survey of the fundamental topics of statistics. Many applied examples are included. Mathematical derivations are given at the advanced calculus level. Intended for graduate students in the field of statistics and the more mathematically inclined student from other areas. Prerequisite: Advanced calculus and either MMS 5352 [552] or MMS 5351 [551] and MMS 6338 [638]. MMS 6301 [601] should be taken before or concurrently. (3-0)
- Advanced Statistical Methods I (3 semester hours)
 This is a course meant to develop statistical maturity as opposed to mathematical maturity. It is intended for both statistics majors and for researchers planning to get involved in data analysis. Mathematical derivations will not be emphasized. Students will be involved with real data projects which will require some elementary computer programming. Prerequisite: Calculus and MMS 5351. (3-0)
- Advanced Statistical Methods II (3 semester hours) Continuation of $\underline{6337}$ [637]. Prerequisite: MMS $\underline{6337}$ [637]. (3-0)
- 6339[639] Linear Statistical Models I (3 semester hours)
 Experimental design, regression, analysis of variance and covariance.
 Prerequisite: MMS 5352 [552] or MMS 6338 [638]. (3-0)
- Linear Statistical Models II (3 semester hours)
 Continuation of MMS $\underline{6339}$ [$\underline{639}$]. Prerequisite: MMS $\underline{6339}$ [$\underline{639}$]. (3-0)
- Advanced Probability (3 semester hours)

 This is a measure theoretic coverage of mathematical probability theory. Students are assumed to have had at least one semester of measure theory. Those special topics of real analysis of interest to the probabilist are covered in full mathematical detail. Prerequisite: MMS 6301 [601]. (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 5340 [540]. (3-0)
- System Simulation (3 semester hours)
 Discrete simulation models and introduction to queueing theory and stochastic processes. Simulation methodology including generation of distributions and design of simulation experiments. Computer applications and simulations. Prerequisite: MMS 5330 [530]. (3-0)
- Analog and Hybrid Computing (3 semester hours)

 Analog to digital and digital to analog conversions. Analog, hybrid and related digital techniques for the solutions of scientific problems and process control. Prerequisite: MMS 5330 [530], PHY 5323 [523] or instructor's consent. (3-0)

- Non-Numerical Computing (3 semester hours)
 Use of computers in applications where information is non-numerical.
 Word and text processing. Language translation. Library management and information retrieval systems. Prerequisite: MMS $\underline{5330}$ [530]. (3-0)
- Automata Theory (3 semester hours)
 Introduction to Turing machines and unsolvability results. Machines with restrictions on memory access, memory and computing time. Automata and formal languages. Recursive function theory and complexity classification. Equivalence of recursive function, Turing machines and algorithms. Prerequisite: MMS 5330 [530] and modern algebra. (3-0)
- Computer Graphics (3 semester hours)[*]

 Analytical geometry supporting computer graphics. Manipulation of points, lines, planes, etc. Passive and interactive computer graphics. Computer-aided drafting and typesetting. Displays. Pattern recognition. Data structures for computer graphics. Survey of hardware and software. Computer-aided design. Computer animation. Prerequisite:

 MMS 5303 or 3331 [593]. (3-0)
- 7301[701] Differential Geometry I (3 semester hours)
 Classical differential geometry of curves and surfaces by vector methods, tensor methods. Prerequisite: Advanced calculus. (3-0)
- 7302[702] Differential Geometry II (3 semester hours)
 Tensors, Riemannian geometry, exterior calculus, applications to general relativity. Prerequisite: MMS 7301 [701]. (3-0)
- 7305[705] Calculus of Variations (3 semester hours)[*]

 Euler-Lagrange equations, sufficient conditions, application to eigenvalue problems, geometry, mechanics; direct methods, Dirichlet's principle. Prerequisite: Advanced calculus, one semester of ordinary differential equations, and one semester of partial differential equations. (3-0)
- 7313[713] Partial Differential and Integral Equations I (3 semester hours)
 General theory of partial differential and integral equations, with
 emphasis on existence, uniqueness, and qualitative properties of solutions. Prerequisite: MMS 6302 [602]. (3-0)
- 7314[714] Partial Differential and Integral Equations II (3 semester hours)
 Continuation of 7313 [713]. Prerequisite: MMS 7313 [713]. (3-0)
- 7319[719] Functional Analysis in Applied Mathematics I (3 semester hours)[*]
 Covers those areas of functional analysis most relevant to modern
 applied mathematics. Prerequisite: MMS 6302 [602]. (3-0)
- $\frac{7320[720]}{(720)}$ Functional Analysis in Applied Mathematics II (3 semester hours)[*] Continuation of $\frac{7319}{(710)}$ Prerequisite: MMS $\frac{7319}{(710)}$ (3-0)

7330[730] Decision Theory (3 semester hours) This course is important for developing statistical maturity. elegant statistical decision theory and Bayesian inference is developed at an intermediate mathematical level. Great controversy in statistics is centered around Bayesian inference and one cannot understand modern statistical development without knowledge of this area. Prerequisites: advanced calculus and either MMS 5352 [552] or MMS <u>6338</u> [638]. (3-0) 7331[731] Multivariate Analysis (3 semester hours) Covers techniques used when the observations are vector-valued, as they frequently are in practice. Sampling distributions of various estimators in the multivariate normal case. Multivariate analysis of variance. Canonical correlations. Classification. The mathematical level is intermediate. Prerequisite: MMS 5352 [552] or MMS 6338[638]. (3-0)7334[734] Non-parametric Statistics (3 semester hours)[*] This course consists of non-parametric methods of statistics which are widely applicable and deal with major areas of statistical inference. Among others, topics of order statistics, theory of rank tests and goodness of fit are emphasized. The mathematical level is intermediate. Prerequisite: MMS 5352 [552] or MMS 6338 [638]. (3-0) 7335 [735] Sequential Analysis (3 semester hours)[*] The course is designed to cover methods of sequential analysis as applied to decision-making. The sequential sampling approach as compared to the fixed sample size approach may be considered more appropriate in decision-making process. The theory of sequential probability ratio tests constitutes one of the important branches of statistics. Prerequisite: MMS 5352 [552] or MMS 6338 [638]. (3-0) Time Series Analysis (3 semester hours) 7338[738] This course studies correlated observations observed sequentially in time. Stationary processes, power spectra, stationary models fitting, correlation analysis, regression. Prerequisite: MMS 5352 [552] or MMS 6329 [629] or MMS 6338 [638]. (3-0)8101-8601 Seminar in Advanced Problems (1-6 [3] semester hours) [(3-0)][901] 8102-8602 Topics in Computer Science (1-6 [3] semester hours) [(3-0)][902] 8103-8603 Topics in Statistics (1-6 [3] semester hours) [(3-0)] [903] 8104-8604 Topics in Mathematics (1-6 [3] semester hours) [(3-9)][994]Topics in Relativity Theory (1-6 [3] semester hours) [(3-0)]8105-8605 1905] Research in Mathematical Sciences $(1-9[\frac{1}{2}]$ semester hours) 8107-8907 [907] Open to students with advanced standing subject to approval of the Graduate Adviser. (0-9) Thesis (1-9 [3] semester hours) 8198-8998

May be repeated for credit) (0-9)

[908]

 $\frac{8199-8999}{[909]} \qquad \begin{array}{c} \text{Dissertation} \quad (\underline{1-9} \ [3] \text{ semester hours}) \\ \text{(May be repeated for credit)} \quad (0-9) \end{array}$

GRADUATE PROGRAM IN MOLECULAR BIOLOGY (M.S., Ph.D.)

Members of Faculty currently participating:

PROFESSORS:

Hans Bremer (Biology), Royston C. Clowes [{Head}] (Biology), Walter Harm (Biology), Daniel Harris (Biology), John Jagger (Biology), Dimitrij A. Lang (Biology), [P.-James-McCarquodale-{Biology},] Claud S. Rupert (Head) (Biology)

Edmund W. Guttes (Biology), Herbert Gutz (Biology), ASSOCIATE PROFESSORS:

Michael H. Patrick (Biology), Harold Werbin (Biology)

Richard G. Cutler (Biology), Donald M. Gray (Biology), ASSISTANT PROFESSORS:

Jost Kemper (Biology)

OBJECTIVES

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.

PROGRAMS

First-year students will normally complete a body of Core Courses that 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 nucleic-acid and protein metabolism; structure and physical chemistry of polynucleotides, nucleic acids, and viruses; structure and function of genetic elements; gene function in viruses and microorganisms; the mechanism of recombination; the cell cycle of eukaryotes; sexual cycle in yeast; molecular aspects of aging; radiation biology, and ultraviolet photochemistry and photobiology.

FACTLITTES

Major equipment in present use by faculty and available for the teaching and research of graduate students includes: a Siemens electron microscope facility; Spinco Model E analytical ultracentrifuge; eight Spinco preparative centrifuges; Joyce-Loeb1 microdensitometer; Hewlett-Packard desk computer; two Coulter counters, a variety of electrophoresis units; Beckman amino-acid analyzer; 200-liter and 10liter fermentors; Harvey biological material oxidizer; batch lyophilizer; 150kilovolt X-ray machine; several planchet counters; five scintillation counters; gas chromatograph; Coleman flame photometer; four micromanipulators; two B&L ultraviolet grating monochromators; a pulsed nitrogen laser and many spectrophotometers (Gilford, Zeiss PMQ, Cary recording, Perkin-Elmer infrared, Perkin-Elmer recording spectrofluorimeter, Aminco-Chance duochromator, and Bonet-Maury biophotometer). A Cary Model 61 circular dichrometer interfaced with a computer is available for circular dichroism studies. A nuclear-magnetic-resonance facility is available in the building.

Centralized and shared facilities include: a darkroom, balance room, cold working laboratory, three constant-temperature rooms, three rooms housing special equipment such as spectrophotometers and scintillation counters, a chromatography room, an electrophoresis room, a media kitchen with several autoclaves and automatic washing machines, and a fully equipped workshop.

In addition to these specific facilities, a number of University general facilities are available to the student, such as the UT-Regional Computer Center in North Texas (see "General Information").

PROCEDURES FOR DEGREE CANDIDATES

For full participation in the graduate program in Molecular 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 (for prospective Ph.D. candidates) the written Preliminary Examination, the student will enter either an M.S. program or a Ph.D. program. A Supervising Professor will then 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). 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). Students seeking the Ph.D. in Molecular Biology 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 (see pages). There is no foreign language requirement.

Molecular Biology Courses

Core Curriculum

Introduction to Quantitative Biology (4 semester hours)

Staff
An introduction to the quantitative approaches used in modern molecular biology, biochemistry, and biophysics. The principal function of the course is to provide training in quantitative problem solving in biology.

Calculus, general chemistry and general physics highly recommended)

[Prerequisite:—ealeulus,—general-physics.] (S-U grading)

(4-0)

Biological Chemistry (4 semester hours)

Staff

 $\frac{5410}{[5\overline{\pm}0]} \\ \text{Biological Chemistry (4 semester hours)} \\ \text{Chemistry and metabolism of cellular constituents: proteins, nucleic acids, carbohydrates, lipids, vitamins, and cofactors. (4-0)} \\$

<u>5425</u> [525]	Molecular Genetics (4 semester hours) Molecular approach to structure, replication, recombination, mutation and phenotypic expression of genetic material of viruses and prokaryotes. Recombination, mutation, gene-regulation and cytoplasmic inheritance in eukaryotes. (4-0)
5430 [530]	Macromolecular Physical Chemistry (4 semester hours) Analysis of the nature and properties of macromolecules; thermodynamics of macromolecular solutions, transport processes, interaction with electromagnetic radiations. (Prerequisite: 5401 or equivalent.) (4-0)
5445 [5 4 5]	Cell Biology (4 semester hours) Molecular organization and function of cells and subcellular organelles; membranes and transport processes; excitation and response; regulation of metabolism; chromosomal structure, DNA replication, transcription and translation in eukaryotes. (4-0)
<u>5450</u> [550]	Methods in Molecular Biology I (4 semester hours) Staff $[\frac{1ndividual}{L[\frac{1}{2}]}]$ Staff biochemical techniques. Supplementary lectures and demonstrations. (2-4)
5551 [551]	Methods in Molecular Biology II (5 semester hours) Staff Biochemical and biophysical experiments in molecular biology. Individual laboratory instruction, demonstrations and lectures. (2-6)
5552 [552]	Methods in Molecular Biology III (5 semester hours) Staff Biological experiments in molecular biology. Individual laboratory instruction, demonstration and lectures. (2-6)

Collateral Courses

These courses may be taken by the student at any point in his graduate career.

Courses offered in other Graduate Programs of The University of Texas at Dallas, in particular those in computer techniques, may be taken for credit by the student in Molecular Biology with the approval of the Graduate Adviser and the course instructor. Some courses may be taken for credit at nearby universities, if similar approvals are obtained.

if similar ap	provals are obtained.
Course	Description
5191 [591]	Science and Human Values (1 semester hour) A series of informal discussions among faculty, students and invited speakers dealing with the impact of science on society, avenues for pursuing rational solutions to social problems, and the responsibility of the scientist. (S-U grading) (1-0)
5309 [509]	Special Topics/TAGER (3 semester hours) (3-0)
6201 [601]	Scientific Writing (2 semester hours) Lectures and workshop on the principles of clear scientific exposition and the requirements for preparation of scientific papers for publication. Normally taken by students about to begin writing a thesis or dissertation. (S-U grading) (2-0)

Science Education (M.A.T.) Support Courses

Course	Description
5315	Topics in Biology (2-5 semester hours) Staff
5342 [542]	Biology of Differentiation (3 semester hours) Cellular differentiation in plants and animals. [Membrane-structure and-functionPlant-and-animal-virusesTheories-of-oncogenesis.] (3-0).
5411 [511]	Chemistry of Macromolecules (4 semester hours) The structure, synthesis, function and properties of biologically important molecules: nucleic acids, proteins, polysaccharides, lipids, steroids. (4-0)
5421 [52±]	Molecular Basis of Heredity (4 semester hours) Introduction to microbial genetics. The sequence hypothesis, genetic code, DNA replication, mutation and recombination. Protein synthesis and its regulation. [{Prerequisite-BIO-511}] (4-0)
5441 [541]	Molecular and Cell Biology (4 semester hours) Mendelian genetics of eukaryotes. Cytogenetics, chromosome structure and chromosomal rearrangements. Replication, transcription, and translation in eukaryotic cells. [Prerequisite-BIO-521.] (4-0)

Advanced Study

Work is offered beyond the Core Curriculum in four major areas that parallel four of the lecture-type Core Courses. Each area provides elective courses, advanced colloquia, and dissertation opportunities. The student may select a course program appropriate to his speciality and interests.

[General-Electives-are-offered-every-year:--Special-Electives-are-offered-on-a systematic-rotation-over-several-years,-permitting-the-student-to-select-a-course program-appropriate-to-his-speciality-and-interests-]

TOPICS IN BIOLOGICAL CHEMISTRY

Bremer, Harris, [McGorquodale,] Patrick, Werbin

General Electives

Course	Vescription
6411 [631]	Macromolecular Biosynthesis (4 semester hours) Mechanisms of DNA, RNA, and protein biosynthesis by viruses, bacteria, and eukaryotes. (4-0)
6412 [6 12]	Regulation of Biosynthetic Pathways (4 semester hours) Staff Mechanisms that regulate the output of various metabolic pathways-allostery, feedback inhibition, repression, enzyme half-life, etc. (4-0)

Special Electives

Course	Description	
6413 [613]	Nucleic Acids (4 semester hours) Chemical and physical properties of nucleic acids and their ent nucleotides, nucleosides, sugars, and bases. (S-U grad be repeated for credit) $(2-4)$ [$(4-0)$]	

Proteins (4 semester hours) 6414 Harris, Werbin Chemical and physical properties of proteins: primary, secondary, [614]tertiary, and quaternary structure, sequence analysis, chemical modification, purification methods, classification of proteins and enzymes, conformation of catalytic sites. (S-U grading) (May be repeated for credit) (2-4) 6415 Enzymology (4 semester hours) The development of enzyme kinetics from basic principles; activation, [615]inhibition, cooperativity, pH, ionic strength, temperature effects; reaction mechanisms; prosthetic groups and active sites. (S-U grading) (May be repeated for credit) (2-4) 6417 Transcription of Bacteriophage Templates (4 semester hours) Purification and properties of bacterial RNA polymerase, methods for [617]study of template binding. Reaction kinetics and chain elongation; DNA-RNA hybridization competition experiments, specificity of initiation and termination. Transcription patterns of various coliphages. (S-U grading) (May be repeated for credit) (2-4) 6418 Regulation of Phage Development [McCorquodale] Staff [648] (4 semester hours) Patterns of development of DNA and RNA phages including processes of phage adsorption and of transfer of phage DNA to host cells; effects of host cell metabolism; temporal expression of phage genes; phage morphogenesis and cell lysis. (S-U grading) (May be repeated for credit) (2-4) 6219-6519 Topics[Golloquium] in Biological Chemistry (2-5 semester hours) Staff $[6\pm 9]$ 7216 Biophysical Chemistry of Nucleic Acids (2 semester hours) Relationship between different aspects of DNA structure and biologi-[716] cal function especially with respect to replication, recombination, and repair. (S-U grading) (May be repeated for credit) (2-0) [(2-4)]TOPICS IN GENETICS Clowes, Cutler, Gutz, Harm, Kemper, [McGorquodale] General Electives

Course

Description

Molecular Biology of Eukaryotes (4 semester hours)

Molecular and quantitative approach to structure, replication, transcription and translation of genetic material of eukaryotic cells and their viruses. (4-0)

General Genetics of Eukaryotes (4 semester hours)

Life cycles and Mendelian genetics of eukaryotes; mechanisms of recombination; mutations; chromosomal rearrangements; structure of chromosomes; regulation of gene activity; mitotic recombination; cytoplasmic inheritance; principles of population genetics. (4-0)

Bacterial and Phage Genetics (4 semester hours) Staff [627] Bacterial conjugation, sex factors and plasmids. Growth, physiology and recombination in virulent DNA phages. Genetics of RNA phages. Transformation and transfection, temperate phages, transduction and genetics of λ phage. Genetics of regulatory mechanisms. (4-0)

Special Electives

Description Course 6424 Fungal Genetics (4 semester hours) Staff T6241 Genetics of Ascomycetes and Basidiomycetes, including cytoplasmic inheritance, genetics of development. (S-U grading) (May be repeated for credit) (2-4) [4-0] 6425 Extrachromosomal Factors (4 semester hours) Clowes Genetics, structure, replication and expression of bacterial [625] plasmids; sex factors, colicin factors, infectious drug-resistance factors. (S-U grading) (May be repeated for credit) (2-4) 6428 Lysogeny and Transduction (4 semester hours) [628] Control mechanisms in the lysogenic pathway; regulation of repression; integration, excision, release of repression. Specialized and generalized transduction. (S-U grading) (May be repeated for credit) (2-4)6229-6529 Topics[Golloquium] in Genetics (2-5 semester hours) Staff [629] 7426 Yeast Genetics (4 semester hours) Gutz [726]Genetic regulation of life cycles; mechanisms of meiotic and mitotic recombination; isolation and characterization of mutants; extranu-

clear inheritance. (S-U grading) (May be repeated for credit) (2-4)

TOPICS IN BIOPHYSICS

Gray, Harm, Jagger, Lang, Patrick, Rupert

General Electives

Course

Description

T430
Biopolymers (4 semester hours)
Staff
Structure and properties of biologically important macromolecules.
Biophysical approaches. (4-0)

Radiobiology and Photobiology (4 semester hours)
Ionizing, ultraviolet and visible radiations; their nature, production, and measurement; their interactions with biological matter; properties of radiation lesions in cells; sensitization, protection, and repair phenomena. (4-0)

Special Electives

Course Description

6432 Electron Microscopy (4 semester hours) Lang
Theory and practice of electron microscopy, with emphasis on in vitro studies of macromolecules. (S-U grading) (May be repeated for credit) (2-4)

6433 [633]	Theoretical Biophysics (4 semester hours) Equilibrium and nonequilibrium thermodynamics; atomic and molecuse spectroscopy; quantum biochemistry; excitation and bonding of molecules. (S-U grading) (May be repeated for credit) (4-0)	
6435 [635]	Molecular Photobiology (4 semester hours) Survey of phenomena and molecular mechanisms of biological effector and near-ultraviolet radiation (carcinogenesis, killing, metion, growth inhibition, photosensitization) and visible light (photodynamic action, photomorphogenesis, phototropism, photosythesis, vision). (S-U grading) (May be repeated for credit) (2)	ıta- yn-
6239-6539 [639]	Topics[Golloquium] in Biophysics (2-5 semester hours)	Staff
7436 [736]	Biophysical Mechanisms of DNA Repair (4 semester hours) Specific mechanisms for DNA restoration and their interactions (photoenzymatic repair, excision-resynthesis, recombinational a other processes). (S-U grading) (May be repeated for credit) (2	
7437 [73 7]	Recovery of Viruses and Cells from Radiation Damage (4 semester hours) Description, analysis and biological significance of recovery phenomena, their genetic control, interaction and experimental modification. Biological consequences of unrepaired damage. (grading) (May be repeated for credit) (2-4)	Harm (S-U
7438 [738]	Optical Properties of Biological Macromolecules (4 semester hours) Survey of information available on biological macromolecules from measurements of optical properties (absorption and circular did ism). (S-U grading) (May be repeated for credit) (2-4) [(4-0)]	chro-

TOPICS IN CELL BIOLOGY

Bremer, Cutler, Guttes, Gutz, Harris, Jagger, [MeGorquodale,] Rupert

General Electives

Course

6444	Developmental Biology (4 semester hours) Staff
[644]	Cellular differentiation in protozoa and multicellular organisms.
	Regulation of macromolecular synthesis during early cleavage. Se- lected examples of developmental processes in plants (e.g. phyto-

hormones, response to external factors, phytochrome systems, internal growth rhythms). (4-0)

Description

Microbiology and Virology (4 semester hours)

Survey of major groups of microorganisms with special emphasis on 7440 Staff [740] their physiology and role in nature. An introduction to representative viruses of mammalian, plant, and insect tissues, with emphasis on tumor viruses. (4-0)

Special Electives

8399 [909]

Special Elect	tives
Course	Description
6446 [646]	Cellular Gerontology (4 semester hours) General physiology of mammalian aging processes, evolution of longevity and specific life maintenance processes. Molecular mechanisms of cellular and extracellular aging processes; neuron stability, immunological competence, hormone secretion, and defective protein synthesis; recent working hypotheses and theories. (S-U grading) (May be repeated for credit) (2-4)
6447 [647]	The Cell Cycle (4 semester hours) Phenomena of cell growth and mitosis. Discussion of experiments dealing with factors involved in division control, as well as hypothetical models. (S-U grading) (May be repeated for credit) (2-4)
6249-6549 [64 9]	<u>Topics[Golloquium]</u> in Cell Biology (2-5 semester hours) Staff
General Cours	ses
Course	Description
6191 [69 1]	Seminar in Molecular Biology (1 semester hour) (S-U grading) (May be repeated for credit)
6193 [693]	Colloquium in Molecular Biology (1 semester hour) (S-U grading)
6194 [69 4]	Papers in Molecular Biology (1 semester hour) (S-U grading)
6195 [695]	Recent Trends in Molecular Biology (1 semester hour) (S-U grading) (May be repeated for credit)
6196-6396 [696]	New Research in Molecular Biology (1 to 3 semester hours)
6392-6692 [692]	Readings in Molecular Biology (3 to 6 semester hours)
8101-8901 [90±]	Research in Molecular Biology (1 to 9 [12] semester hours) (May be repeated for credit)
<u>8398</u> [908]	Thesis (3 semester hours) (May be repeated for credit)

Dissertation (3 semester hours) (May be repeated for credit)

GRADUATE PROGRAM IN PHYSICS (M.S., Ph.D.)

Members of Faculty currently participating:

PROFESSORS:

<u>Carl B. Collins, Jr., (Head) (Physics)</u>, Ervin J. Fenyves (Engineering and Applied Sciences), William B. Hanson (Physics), Walter J. Heikkila (Physics), Francis S. Johnson (Physics),

Polykarp Kusch (Physics), Istvan Ozsvath (Mathematical Sciences), Donald Rapp (Physics), Wolfgang A. Rindler (Mathematical Sciences), Ivor Robinson (Mathematical Sciences)

[VISITING-PROFESSOR:--Chun-C:-Lin-{Physics}]

[Carl-B.-Collins,-In.-(Head)-(Physics)], John H. Hoffman ASSOCIATE PROFESSORS:

(Physics), James E. Midgley (Physics), Brian A. Tinsley

(Physics)

Edward L. Breig (Physics), Roy C. Chaney (Physics), ASSISTANT PROFESSORS:

Augustine James Cunningham (Physics), Stephen M. Curry

(Physics)

LECTURER: Brian Johnson (Physics)

OBJECTIVES

The basic objective of the Graduate Program in Physics is to identify and develop individuals who will ultimately contribute in the most advanced and creative way to the pressing needs of a technologically dependent society. In pursuit of this objective the Master's Program seeks to provide a thorough grounding in the fundamentals of physics and in the techniques of research. The Doctoral Program proceeds from this point to build a capability of contributing in a significant way to the body of physical knowledge.

PROGRAMS

There are currently eight areas of research specialization in the Physics Program: Applied Physics and Instrumentation; Atmospheric and Space Physics; Atomic and Molecular Physics; Chemical Physics; Plasma Physics; Quantum Electronics; Relativity and Cosmology; and Solid State Physics. Both experimental and theoretical work is done in most of these areas, and it is expected that a student will gain familiarity with several of them in addition to specializing in a particular one.

FACILITIES

For atmospheric and space physics there are facilities for the design, fabrication and testing of such rocket and satellite-borne instrumentation as electron probes, mass spectrometers, and cosmic ray detectors. 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 rocket and satellite programs, including Apollo, Pioneer, ISIS, IMP, and OGO. A modular recoverable rocket probe designed and built entirely in-house provides rapid turnaround time for ionospheric experiments. Atmospheric optical emissions are studied at an affiliated mountain laboratory.

In atomic and molecular physics there exist both pulsed and flowing afterglow systems with visible and ultraviolet tandam double monochromators, a vacuum ultraviolet spectrometer and a microwave interferometer available for diagnostics. An H-P 2116A on-line instrumentation computer is available 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 studied in a unique fluorescent spectroscopy system employing several tuneable dye lasers. Related facilities support several projects concerned with the investigation of exciton fluorescence of crystals at liquid helium temperatures, excited by radiation from ultraviolet lasers.

Small computers are available for use in applied physics projects concerned with the optimization of real time measurement, analysis and control systems.

Theoretical activities in solid state physics and relativity are facilitated by extensive software libraries.

PROCEDURES FOR DEGREE CANDIDATES

The central principle in the structure of the graduate program is that a student's progress and ultimate success is best served by early and varied research experiences coupled with individually tailored course sequences.

For graduate work in most of the options in physics it is assumed that the student has an undergraduate background that includes the following: Mechanics, at the level of chapters 1-7 of Goldstein, Classical Mechanics; Electromagnetism, at the level of Reitz and Milford, Foundations of Electromagnetic Theory; Thermodynamics, at the level of Zemansky, Heat and Thermodynamics; and some upper-division course(s) in quantum mechanics and atomic physics.

Full-time students are expected to register for at least three hours of research every semester. Unless a student already knows unquestionably in which option he wishes to specialize, he will be encouraged to participate in a different type of research each semester, until he has had experience with several types.

Each student in consultation with the Graduate Adviser, or other faculty members, chooses his own curriculum and before registration files a "degree plan," which is approved by the Graduate Adviser and Program Chairman, and subject to the subsequent review of the Committee on Graduate Studies in Physics. As the student's interests mature, he is free to amend his degree plan at any time, subject to the same approvals and with the concurrence of his Supervising Professor when he has one.

There are three basic courses, fundamental to all graduate physics, ten supplementary courses, each of which is important to at least half of the degree options, and twenty-four specialized courses keyed to the particular degree options. A degree plan will contain a core normally made up of the basic courses and two other courses fundamental to the student's degree option, and sufficient supplementary and specialized courses to give the student a broad understanding of his field. Any core courses listed in a student's degree plan may be passed by a special written examination, if the student has previously obtained credit for an equivalent course at another institution.

SPECIFIC DEGREE REQUIREMENTS FOR M.S. AND Ph.D. DEGREES

The candidate for either the M.S. or Ph.D. must satisfy the general institutional requirements (see pages —) and in addition he must have obtained a B or better on each of the core courses listed in his degree plan. In addition, for the Ph.D. degree at least one of the core course grades must be an A, and the student must pass a two-part sequence of written and oral Qualifying Exams. The first part covers general physics and includes both written and oral examinations. It is administered twice a year and may be repeated until passed, although normally a student will be expected to pass it in his first two years. The second part is taken when the student has undertaken his dissertation research; it consists of a public seminar given by the student outlining the state of knowledge in the area in which he is working, followed by a private oral exam on that area of physics.

[The candidate for either the M.S. or Ph.D. must satisfy the general institution requirements (see page 32) and in addition he must have an overall grade-point
average of 3.0 and have obtained a bor better on each of the core-courses listed
in his degree plan. In addition, for the Doctor of Philosophy degree at least one
of the core-course grades should be an A, and the student must present a public
seminar outlining the state of knowledge of some contemporary problem in the field,
preferably the problem which the student intends to attack. The general oral examination normally follows this seminar within a few days.]

PHYSICS COURSES

Basic Courses

Course Description

5400 Quantum Mechanics I (4 semester hours)

[500] Fundamental principles of quantum theory with applications to one and three dimensional systems under various potentials: free particle; found particle; harmonic oscillator; and hydrogen atom. Emphasis is placed on the use of the computer both for evaluation of the energies and wave functions of the systems and for subsequent visualization of the results. (5401 [50t] concurrently, 5305 [505] concurrently). (4-0)

Mathematical Methods of Physics I (4 semester hours)

Solution of ordinary differential equations by power series, analytic approximation, WKB method, and numerical integration; classification and numerical integration of partial differential equations, solution by separation of variables; eigenfunctions; Legendre functions and spherical harmonics; Bessel functions; Green's functions; Vectors and Matrices; Probability and statistics. (Previous exposure to most of the topics is assumed.) (4-0)

Electromagnetism I (4 semester hours)

[521] Electrostatics, Laplace and Poisson equations, boundary values problems, dielectric materials, multipole expansion; magnetostatics, field of steady currents, magnetic materials; time-varying fields, Maxwell's equations; introduction to four vector formalism; plane waves, reflection, refraction, polarization. (Normally follows

<u>5401</u> [501.]) (4-0)

Supplementary Courses

Course	Description
5303 [503]	Computer Organization and Usage (3 semester hours) Computer language, symbolic coding; data acquisition, representation, and transfer; control functions. (3-0).
<u>5305</u> [505]	Computer Languages and Applications (3 semester hours) Introductions into the usage of the Fortran, APL and Job Control languages with applications to matrix diagonalization and inversion, Fourier analysis, curve fitting, solution of finite difference equa- tions and numerical integration. (3-0).
<u>5307</u> [507]	Quantum 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. (Normally follows $5400 \ [500v]$) (3-0)
5308 [508]	Perspectives on Fundamentals of Physics (3 semester hours) Selected topics in both classical and modern physics with emphasis on the interpretation of the observed physical reality. (3-0)
5309 [599]	Special Topics/TAGER (3 semester hours). (3-0)
5311 [5±±]	Classical Mechanics (3 semester hours) LaGrange's equations; two-body problem; motion of a rigid body, inertia tensor; Hamilton's equations, canonical transformations. (3-0).
5313 [513]	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; equation 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. (3-0)
5322 [522]	Electromagnetism II (3 semester hours) Simple radiating systems; properties of waves at microwave frequencies, laboratory techniques for investigating these properties; waveguides, measurement of impedance and discontinuities, impedance matching, resonant cavity modes, and field configurations. (Normally follows 5421 [521]) (3-0)
5341 [541]	Concepts of Physics I (3 semester hours) A critical examination of fundamental physical laws for those involved in teaching physics. The stress is on developing an intuitive understanding of physical phenomena rather than in gaining expertise in theoretical formalisms. Kinematical frameworks, mechanics, structure of matter, heat, and statistical interpretations of thermodynamics. (3-0)
5342 [54 2]	Concepts of Physics II (3 semester hours) Continuation of 5341 [541] Electromagnetism, waves, optics, waveparticle duality, and quantum phenomena. $(3-0)$

5395 Electromagnetic Theory (3 semester hours) Development of time dependent electromagnetic theory using the four-[595] vector formalism of special relativity; Lienard Wichert potentials;

radiation reaction; radiation from relativistic particles; synchrotron, Cherenkov, bremsstrahlung radiation; multipole radiation.

(Normally follows 5421 [521-]) (3-0)

5402 Mathematical Methods of Physics II (4 semester hours) [502]

Infinite series, summation and transformation; contour and saddle point integration; integral transforms; Hypergeometric, Mathieu, and Elliptic functions; perturbation theory; integral equations; calculus of variations; tensor analysis; group representations. (Normally

follows 5401 [501.]) (4-0)

6108 Physics Seminar (1 semester hour)

[608] Special course to prepare students for Oral Qualifying Exam by helping them discover and remedy any deficiencies across the broad range of physics. Each week the class is given a written exam question on a different topic and then meets again to discuss the question and

related matters. (Graded Pass-Fail; may be repeated for credit.)

6309 Special Topics in Mathematical Physics (3 semester hours)

[609]Topics vary from semester to semester. (May be repeated for credit.)

6400 Quantum Mechanics II (4 semester hours)

[600] Operator theory; matrix mechanics and transformation theory, angular momentum; perturbation and variational methods; atomic structure; elementary scattering theory. As in Quantum Mechanics I, emphasis is placed upon learning modern numerical, computer oriented, techniques

for performing the theoretical computations. (Normally follows

5400 [500+] (4-0)

Chemical Physics

Description Course

6319 Special Topics in Chemical Physics (3 semester hours)

[619] Topics vary from semester to semester. (May be repeated for credit.)

Research in Chemical Physics (3-9 [42] semester hours) 8310-8910

[910]

Applied Physics

Description Course

Elements of Digital Circuits (3 semester hours) 5323

Introduction to digital hardware; theory and operation of discrete [523] and integrated logic circuits; logic families; MOS devices, simpli-

fication of logic functions; logic design of counters, shift registers, and arithmetic circuits. Lab fee required. (2-2)

6324

Logic Design and Digital Systems (3 semester hours)
Analysis and synthesis of digital systems; random access, sequential [624]and read only memory systems; synchronous and non synchronous logic

systems; fixed and micro-programmable logic systems; computing systems, input-output devices; parallel and serial devices. Lab fee

required. (Normally follows 5323 [523.] (2-3)

6325 Data Acquisition and Computer Interfacing (3 semester hours) [625] Real time data acquisition; linear-digital conversions, nonlinear systems, sampling systems; instrumentation techniques; feedback theory, stability, monitoring and control functions. Lab fee (Normally follows 5323 [523 -]) (2-3)required. 6326 Operating Systems for Data Acquisition (3 semester hours) [626] Organization and programming of executive control systems for data requisition; multiprogramming; time-sharing; access control; parallel processing; resource allocation. (3-0) Special Topics in Applied Physics (3 semester hours) 6329 Topics may vary from semester to semester. (May be repeated for [629] credit.) (3-0) Research in Applied Physics $(3-9 [\frac{12}{2}])$ semester hours) 8320-8920 Quantum Electronics Description Course 5330 Introduction to Quantum Electronics (3 semester hours) Classical treatment of the interaction of radiation with matter; [530] resonant structures and normal modes; stimulated emission; nonlinear optics. (3-0) Physics of Lasers (3 semester hours) 6330 Advanced topics in the physics of quantum electronics and lasers; [630]gas lasers and excitation transfer reactions; line narrowing and induced transparency superradiancy and liquid lasers; high energy pulsed lasers. (Normally follows 5330 [530.]) (3-0) Statistical Optics (3 semester hours) 6331 [631]Correlation functions and coherent states; interaction of light with photodetectors; photon counting, heterodyning and Brown-Twiss experiments; interference and spatial coherence; transform spectroscopy. (3-0) Special Topics in Quantum Electronics (3 semester hours) 6339 Topics vary from semester to semester. (May be repeated for credit.) [639] (3-0)8330-8930 Research in Quantum Electronics (3-9 semester hours) [930] Atomic and Molecular Physics Description Course Quantum Theory of Atoms and Molecules (3 semester hours) 6351 Application of quantum mechanics to atomic and molecular structure, [651] physical properties, and spectra. Time dependent quantum theory applied to transitions in collisions and in interactions with light. Introduction to the theory of atomic and molecular and in inter-

actions with light. Introduction to the theory of atomic and molecular collisions. (Normally follows 6400 [600.]) (3-0)

D - 184

6352 [652]	Atomic and Molecular Spectroscopy [Quantum Theory of Atoms and Molecules] (3 semester hours) Atomic structure; spin-orbit interaction, auto-ionization, selection rules, and effect of external fields; diatomic and polyatomic molecules, symmetry and applications of group theory; molecular vibrations and rotations; electronic band spectra; selection rules and intensities. (3-0)
6353 [653]	Atomic and Molecular Processes I (3 semester hours) Study of theory and experimental methods applied to elastic scattering, excitation and ionization of atoms and molecules by electron and ion impact, electron attachment and detachment, and charge transfer processes. (Normally follows 6351 [651-]) (3-0)
6354 [654]	Atomic and Molecular Processes II (3 semester hours) Theory and experimental methods applied to photoabsorption and emission, mobility and ion transport in ionized gases, recombination of ions with electrons, lasers, metastable states, and ion-molecule reactions. (Normally follows 6353 [653.] (3-0)
6355 [655]	Topics in Atomic and Molecular Physics (3 semester hours) Discussion of selected problems in molecular and atomic physics with special emphasis both on the nature of the physical phenomena that occur as well as on the experimental methodology through which they are investigated. The course is intended to cultivate physical insight and scientific imagination. (3-0)
6159-6359 [65 9]	Special Topics in Atomic Physics (1-3 semester hours) Topics vary from semester to semester. (May be repeated for credit.) (3-0)
8350-8950 [950]	Research in Atomic & Molecular Physics $(3-9)$ [$\frac{1}{2}$] semester hours)
Plasma Physic	:s
Course	Description
5360 [560]	Plasma Generation (3 semester hours) Lecture and laboratory course on the fundamental properties of plasmas and their methods of generation; fundamental gas and surface
	processes; electron and ion motions in gases; breakdown; measurement of plasma properties. (2-3)
6361 [66±]	
	of plasma properties. (2-3) Plasma Waves and Radiation (3 semester hours) Magnetoionic theory, dispersion equation, modes, phase and group velocities; antennas, and probes in plasmas; plasma resonances, review of magnetohydrodynamic propagation, anisotropy, two-stream and
[66 ±]	of plasma properties. (2-3) Plasma Waves and Radiation (3 semester hours) Magnetoionic theory, dispersion equation, modes, phase and group velocities; antennas, and probes in plasmas; plasma resonances, review of magnetohydrodynamic propagation, anisotropy, two-stream and crossfield instabilities. (Normally follows 6363 [663.]) (3-0) Plasma Theory (3 semester hours) Statistical behavior of plasmas; distribution functions; Boltzmann equation, kinetic theory; magnetohydrodynamic theory; Fokker-Planck

Solid State Physics

portd prace	I HYSICS
Course	Description
6371 [674]	Solid State Physics (3 semester hours) Lattice vibrations and thermal properties of solids; band theory of solids; transport properties of metals and semiconductors; optical properties; magnetic properties; magnetic relaxation; superconductivity. (3-0)
6373 [673]	Quantum Theory of Solids (3 semester hours) Crystalline symmetry; lattice dynamics; anharmonic processes; band theory; electron-electron interaction; electron-phonon interaction; transport properties; optical properties, Fermi surface; magnetism. (3-0)
6375 [675]	Group Theory as Applied to Crystals (3 semester hours) Finite group theory and applications to solid state physics; symmetry operators of crystals; space groups, reciprocal lattice and brillouin zones; group of the k vector; crystal field splitting; construction of wave functions for band structure calculations. (3-0)
6379 [679]	Special Topics in Solid State Physics (3 semester hours) Topics vary from semester to semester. (May be repeated for credit.) (3-0)
8370-8970 [970]	Research in Solid State Physics $(3-9)$ [12] semester hours)
Atmospheric a	and Space Physics
Course	Description
<u>5381</u> [581]	Introduction to Space Physics (3 semester hours) A survey of the development, experimental techniques and results of the space program; introduction to the physics of the upper atmosphere, ionosphere, magnetosphere, radiation belts, and interplanetary environment. (3-0)
6383 [683]	Space Age Astronomy (3 semester hours) Physics of the sun and corona; the solar wind and its interaction with solid bodies and magnetic fields; asteroids, meteroids and comets; origin of the solar system; basic methods of X-ray, optical radio, and radar astronomy; stellar populations; review of galactic structures and cosmology. (3-0)
6385 [685]	Upper Atmospheres (3 semester hours) Characteristics of the neutral upper atmosphere of the earth and planets; photodissociation and chemical reactions; tides, circulation, winds, and wave propagational diffusion, eddy mixing and heat balance; satellite drag. (Normally follows 5381 [581]) (3-0)
6387 [687]	Ionospheric Phenomena (3 semester hours) Formation and properties of the major ionospheric regions; thermal plasma in the magnetosphere; radiation belts and their interaction with the ionosphere; aurora. (Normally follows 5381, 6363, [581, -663:]) (3-0)

6389 Special Topics in Space Physics (3 semester hours) [689] Topics will vary from semester to semester. (May be repeated for credit.) (3-0) 8380-8980 Research in Atmospheric and Space Physics (3-9 semester hours) [980] Relativity Course Description 5391 Relativity (3 semester hours Mach's principle and the abolition of absolute space; the principle [591] of relativity; the principle of equivalence; basic cosmology; fourvector calculus; special relativistic kinematics, optics, mechanics, and electromagnetism; basic ideas of general relativity. (3-0) <u>5392</u> Relativity and Cosmology (3 semester hours) [592] Tensor calculus and Riemannian geometry; mathematical foundation of general relativity; the crucial tests; the linearized theory; fundamentals of theoretical relativistic cosmology; the Friedmann model universes; comparison with observation. (Normally follows 5391 [591 -]) (3-0)6397 Relativistic Quantum Mechanics (3 semester hours) Relativistic formalism: one particle relativistic wave equations; [697]Klein-Gordon and Dirac equations; fundamentals of quantum field theory and quantum electrodynamics; interaction of charged particles and photons; strong and weak interactions; symmetry principles and conservation laws. (Normally follows 5400 [500.]) (3-0)

6399 Special Topics in Relativity (3 semester hours)

[699] Topics vary from semester to semester. (May be repeated for credit.)

(3-0)

8390-8990 Research in Relativity (3-9) [$\frac{12}{2}$] semester hours)

[990]

Thesis and Dissertation

Course Description

Thesis (3 semester hours). (0-9)8398

[908]

8399 Dissertation (3 semester hours). (0-9)

[909]

Typical Degree Plans

The following degree plans are illustrative of the course sequence for typical doctoral students in each of the eight options. Only the first two years is shown in each case; normally a few electives may be taken in the third and later years, but most of the student's time is spent in research. The "core" courses in each case are in bold type.

	<u>Year</u>	<u>Fall</u>	<u>Spring</u>	Summer
Applied	1	5400, 5401, 6108, 8320	5421, 5323, 5303, 8320	5322. 8320
Physics	2	5307, 6324, 8320	6325, 6326, 8320	8320
A 1 2 -	1	5/00 5/01 6100 0000	5/01 5070 5001 0000	6060 0000
Atmospheric and Space	$\frac{1}{2}$	5400, 5401, 6108, 8380 5307, 6361, 6383, 8380	5421, 5313, 5381, 8380 6385, 8380	6363, 8380
and space	<u></u>	3307, 0301, 0303, 0300	6385, 8380	6387, 8380
Atomic and	1	5400, 5401, 6108, 8350	5421, 5313, 6400, 8350	5322, 8350
Molecular	2	6352, 6353, 8350	6354, 6331, 8350	8350
Chemical	1	5400, 5401, Ch 1, 8310	Ch 2, 5313, 6400 8310	8310
Physics	2	5421, 6351, Ch 3, 8310	6352, Ch 4, Ch 5, 8310	8310
Plasma	11	5400, 5401, 6108, 8360	5421, 5313, 5360, 8360	
Physics	2	6400, 6361, 8360	6369, 8360	5322, 8360
Quantum	1	5400, 5401, 6108, 8330	5421, 5313, 6400, 8330	5322 8330
Electronics	2	5402, 5330, 8330	6330, 6331, 8330	8330
Relativity	<u> </u>		5421, 5392, 5400, 8390	
	2	5402, 6397, 6399, 8390	5313, 8390	8390
Solid	1	5400, 5401, 6108, 8370	5421, 6371, 6400, 8370	6375 8370
State	2	5402, 5313, 6373, 8370	5303, 8370	8370
	Year	Fall	Spring	Summer
Annlind			, -	
		500,-501,-608, -920	521,-52 3,- 503,-920 -	522,-920
			521,-52 3,- 503,-920 -	522,-920
Physies Atmospherie-		5 00,-501,-608, -920 507,-624,920 500,-501,-608,-9 80	521523503920 625626920	522,-920 920 683,-980
Physies Atmospherie-		500,-501,-608,-920 -507,-624, 92 0 -	521523503920 625626920	522,-920 920 683,-980
Physics Atmospheric- and-Space	<u>1</u>	500,-501,-608,-920 507,-624,920 500,-501,-608,-980	521,-523,-503,-920 625,-626,920 521,-513,-581,-980	522,-920 920 683,-980 687,-980
Atmosphericand-Space		500,-501,-608,-920 507,-624,920 500,-501,-608,-980 507,-661,-683,-980	521;-523;-503;-920 625;-626;920 521;-513;-581;-980 685;980	522,-920 920 683,-980 687,-980
Atmosphericand-Space		500,-501,-608,-920 507,-624,920 500,-501,-608,-980	521;-523;-503;-920 625;-626;920 521;-513;-581;-980 685;980	522,-920 920 683,-980 687,-980
Atmosphericand-Space Atomicand Molecular Chemical	-1	500, -501, -608, -920507, -624,		522,-920 683,-980 687,-980 522,-950 950
Atmosphericand-Space Atomicand Molecular Chemical	-1	500,-501,-608,-920 507,-624,920 500,-501,-608,-980 507,-661,-683,-980 500,-501,-608,-950		522,-920 683,-980 687,-980 522,-950 950
Physics Atmosphericand and	-12			522,-920 683,-980 687,-980 522,-950 950
Physics Atmosphericand Space Atomic and Molecular Chemical Physics	-1	500, -501, -608, -920507, -624,		522,-920 683,-980 687,-980 522,-950 950 910 910
Physics	-1 -2 -1 -2 -1 -2			522,-920 683,-980 687,-980 522,-950 910 910 552,-960
Physics	-1 - 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 - 2 2 2 2 2 2 2 2 2 2 2 - 2 2 2 2 2 2 - 2 2 - 2 2 - 2 - 2 - 2 2 - 2			522,-920 683,-980 687,-980 522,-950 910 910 522,-960 552,-960
Physics	-1			522,-920 683,-980 687,-980 522,-950 910 910 522,-960 552,-960
Physics	-1			522,-920 683,-980 687,-980 522,-950 910 910 552,-960 522,-930 930
Physics	-1			522,-920 683,-980 687,-980 522,-950 950 910 552,-960 552,-960 522,-930 595,-990
Physics	-1			522,-920 683,-980 687,-980 522,-950 910 910 552,-960 522,-930 522,-930 595,-990
Physics	1 - 2 - 1 - 2 - 1 - 2 - 2 - 1 - 2 - 2 -			522,-920 683,-980 687,-980 522,-950 910 910 522,-960 522,-960 522,-930 595,-990 930

GRADUATE PROGRAM IN POLITICAL ECONOMY* (M.A., Ph.D.)

Members of the Faculty currently participating:

PROFESSORS: Alexander L. Clark (Acting Head) (Management Sciences)

OBJECTIVES

The Program in Political Economy leading to the degrees of Master of Arts and Doctor of Philosophy emphasizes the interaction of political and economic factors in the public and private sectors. The Program trains students to analyze and evaluate both the impact of political decisions on the operation of private and public economic institutions and the impact of economic enterprises on political life. The requisite tools, background, and knowledge include: a) the fundamentals of economic analysis, b) the public choice approach to political decision making, c) economic models of interdependent decision making, d) the public finance approach to evaluating societal decisions, and e) the use of quantitative tools.

Political Economy explores the roles of man in political conflict situations in national, international, and multi-cultural settings; the distribution and use of power; and political and economic relations in groups and institutions. The Program in Political Economy strives to provide competence that enables students to analyze, understand, and propose operative solutions to political economic conflicts of consequence to the national and international communities. Stress is placed upon statistical and interdisciplinary research to ensure the widest possible grounding in knowledge relating to political economic behavior.

Graduates of the Program in Political Economy are prepared to assume professional roles in government, industrial and financial institutions, consumer and public interest organizations, and academia. In many cases, a graduate's interdisciplinary training in the Program will provide opportunities for innovative positions in his chosen area.

PROGRAMS

There are four areas of concentration in the Political Economy Program. They are a) Theory and Methodology, b) Urban Political Economy, c) Cross-National Political Economy, and d) Industrial Political Economy. Students pursuing the Master of Arts degree will select one of the areas for specialization; students pursuing the Ph.D. degree will choose two areas of specialization.

FACILITIES

Facilities at The University of Texas at Dallas which support other graduate programs are available to students in the Political Economy Program. The resources of the programs in Environmental Sciences, Mathematical Sciences, Management and Administrative Sciences, and International Management Studies are particularly valuable for synthesizing the subjects of political science and economics.

The University has an IBM 370/155 computer which is available for student use through the UT-Regional Computer Center in North Texas. Additional smaller computers are located on the UTD campus.

*The M.A. degree cannot be awarded before 1976-77 academic session; the Ph.D. degree cannot be awarded before 1978-79 academic session; however, course work leading to those degrees may be taken starting September, 1976.

SPECIFIC DEGREE REQUIREMENTS

Individuals entering the Graduate Program in Political Economy should have preparation equivalent to the baccalaureate degree. They should have a knowledge of both differential and integral calculus (or the equivalent of a two-semester course) and of introductory micro- and macro-economics. If the student is not sufficiently prepared, additional work may be required which will not be counted toward the degree.

For general degree requirements, see "Procedures and Requirements for Graduate Degrees," page (32).

Master of Arts in Political Economy

Each Master of Arts student must complete the basic core courses in Political Economy (24 semester hours) and select one of two alternate routes for completing the requirements:

(1) M.A. with thesis: 3 courses from area of concentration (9 semester hours)

3 courses of electives (9 semester hours)

thesis (6 semester hours)

(2) M.A. with Examination: 4 courses from area of concentration (12 semester hours)

4 courses of electives (12 semester hours)

The student who elects the M.A. with thesis option prepares a thesis which complements the area of concentration. The student who elects the M.A. with examination option will be expected to demonstrate proficiency by examination in that area of concentration.

Doctor of Philosophy in Political Economy

Each doctoral student must complete the following requirements:

- A. Basic core courses in Political Economy (24 semester hours).
- B. Two additional theoretical or methodological courses (6 semester hours).
- C. Four courses in one area of concentration (12 semester hours).
- D. Three courses in a second area of concentration (9 semester hours).
- E. Five additional courses from Program electives and related fields (15 semester hours).
- F. Demonstration of proficiency through the completion of both oral and written comprehensive examinations.
- G. Preparation of a dissertation prospects prior to the admission to candidacy.
- H. Research which culminates in a doctoral dissertation.

Political Economy Courses

Core Courses

Course Description 5301 Public Choice I (3 semester hours) Introduction to the fundamentals of Public Choice including rationality, self-interest, utility theory, problems in the supply of collective goods, cyclical majorities, the general impossibility theorem, single peaked preferences, coalitions of minorities, and theories of voting. 5302 Public Choice II (3 semester hours) Analysis of interdependent decision making concentrating on game theoretic approaches. Includes two person games, in extensive and normal form, zero-sum and non-zero-sum, negotiated and nonnegotiated and n-person games in extensive, normal and characteristic function form. 5303 Data Analysis I (3 semester hours) Introductory probability, descriptive statistics and collection and organization of raw data, data processing, basic principles of inference and bivariate analysis. 5304 Data Analysis II (3 semester hours) Multivariate data analysis with emphasis on multiple regression and time series analysis. 5305 Price Theory and Economic Organizations (3 semester hours) An advanced survey of neoclassical and contemporary theories of the major determinants of prices and the role of prices in economic organizations. Theories of Public Finance (3 semester hours) 5306 A treatment of governmental revenues, debts, and financial administration, and their relationship to governmental expenditure and social welfare. 5307 Macro Economic Theory (3 semester hours) An examination of monetary, fiscal and business cycle theories.

Urban Political Economy

5308

6301

Course Description

Urban Politics (3 semester hours) The study of the workings of power in the city. Topics include types of city government organization, the politics of urban service pro-

Applied econometrics, multi-equation systems, non-recursive models, and system methods of estimation.

Advanced Data Analysis (3 semester hours)

vision, electoral politics, and political aspects of urban growth, decay suburbanization, and intergovernmental relations.

6302 Urban Economics (3 semester hours) The study of the city as an economic phenomenon. Topics covered include the origin, growth, and decay of cities, location theory, land use, transportation, housing, the urban public sector, urban education, urban externalities, urban poverty, and intergovernmental relations. Justice and Equity in the City (3 semester hours)
Concepts of justice and equity are examined, followed by studies in <u>6</u>303 topical areas, including the nature and distribution of public services within the city and the political economy of welfare and income distribution. 6310 Topics in Urban Political Economy (3 semester hours) Topics vary from semester to semester. (May be repeated for credit.) Cross-National Political Economy Course Description 6321 International Economics (3 semester hours) 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. 6322 Economic and Political Development (3 semester hours) 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, role of culture and tradition in the development process, and relationships between political and economic development. Comparative Economic Systems (3 semester hours)

A survey of different approaches to the organizations of an economy: 6323 capitalism, centrally planned socialism, and market socialism are studied and compared. Topics in Cross-National Political Economy (3 semester hours) 6330 Topics vary from semester to semester. (May be repeated for credit.) Industrial Political Economy Course Description 6341 Social Control of Industry (3 semester hours) Analysis of how and where the market system fails, necessitating public intervention. In-depth study of the economic theory, history, and political and legal aspects of anti-trust policy, regulation and public ownership. 6342 Political Economy of the Consumer (3 semester hours) Political, economic, and legal aspects of the role of the consumer in American society, the role of consumer organizations, the use of the courts, lobbying, and the political economy of environmental quality. Labor Economics (3 semester hours) 6343 A survey of the economics of labor. Topics include comparative labor movements, the theory of wages and employment, collective bargaining, supply of labor, human capital analysis, and public policy toward labor.

Topics in Industrial Political Economy 6350 Topics vary from semester to semester. (May be repeated for credit.) Theory and Methodology Description Course 6361 History of Economic Thought (3 semester hours) A survey of economic analysis, from Adam Smith and his precursors through Ricardo, Malthus, Mill, Walras, Marx, Bohm, Bawert, Schumpeter, and Keynes to Samuelson, Friedman, and Arrow. 6362 Design and Implementation of Survey Research (3 semester hours) 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. 6370 Topics in Public Choice (3 semester hours) Topics vary from semester to semester. (May be repeated for credit.) Research Courses (May be repeated for credit.) 8101-8301 Independent Study (1-3 semester hours) Independent study of readings and/or research. Open only to graduate students with approval of the Graduate Adviser. 8398 Thesis (3 semester hours) 8399 Dissertation (3 semester hours)

GRADUATE PROGRAM IN SCIENCE EDUCATION (M.A.T.)

Members of Faculty currently participating:

PROFESSORS: Martin Halpern (Geosciences), Walter Harm (Biology), Daniel Harris (Biology), Emile A. Pessagno, Jr. (Geosciences), Donald Rapp (Physics), Wolfgang A. Rindler (Mathematical Sciences)

ASSOCIATE PROFESSORS: Richard A. Caldwell (Chemistry), Edmund W. Guttes (Biology)

Herbert Gutz (Biology), [Martin-Halpern-{Geosciences } ;] William I. Manton (Geosciences),

James E. Midgley (Physics), Richard M. Mitterer (Geosciences), [Emile-A.-Pessagno,-Ir.-{Geosciences},]
Dean C. Presnall (Geosciences), James B. Urban (Head)
(Geosciences), Harold Werbin (Biology)

Roy C. Chaney (Physics), Stephen M. Curry (Physics), ASSISTANT PROFESSORS:

Lynn A. Melton (Chemistry), Christopher A. Parr (Chemistry), A. Dean Sherry (Chemistry), William R. Thompson (Chemistry)

OBJECTIVES

The program leading to the degree of Master of Arts in Teaching in Science is designed to develop teachers who combine competence in science with the ability to stimulate learning in the classroom and laboratory. The program provides broad and rigorous training in the sciences and particular training in science teaching. It meets an important need expressed by both secondary and community college teachers.

The program is designed primarily for teachers employed during the academic year, but who are relatively free during the summer months. Nevertheless, fulltime students are encouraged to enroll in the program.

MASTER OF ARTS IN TEACHING

The Master of Arts in Teaching (M.A.T.) in Science is unique in that it stresses competency in the science of major specialization, yet incorporates serious training in topics related to the art of teaching. It is a professional degree, and the requirements emphasize quality. The M.A.T. program is designed for students and professionals with significant ability in a discipline, as well as serious commitment to teaching. It constitutes an effective opportunity for the professional development of experienced teachers.

FACILITIES

Equipment at The University of Texas at Dallas which supports other graduate programs in the sciences is available to students in the M.A.T. program. The facilities in Chemistry, Environmental Sciences, Geosciences, Molecular Biology, and Physics are briefly described in those sections of The University of Texas at Dallas Graduate Catalog associated with specific graduate programs.

SPECIFIC DEGREE REQUIREMENTS

- A student may be admitted to this program if he meets the general requirements of The University of Texas at Dallas as outlined in the Graduate Catalog.
- 2. A student must maintain a B average in the four required courses in his primary area of specialization.

- 3. A thesis is not required. However, within a primary area of specialization, experience in research methods or in ongoing research efforts may be required.
- 4. Thirty-six semester hours are required.
- 5. The courses SCE <u>5301</u>, <u>ED 5304</u> [SCE 502], and <u>ED 5305</u> [SCE 503] are required, but alternative courses may be approved by the Head of the Graduate Program in Science Education.
- 6. The course distribution requirements are as follows:
 - A. 12-16 semester hours in the primary area of science specialization (Chemistry, Environmental Sciences, Geosciences, Molecular Biology or Physics). Table 1 outlines the required courses for each area of specialization.
 - B. 6-8 semester hours in a secondary area of science specialization. Table 2 lists course options that would constitute a valid secondary area of science specialization.
 - C. 6 semester hours professional education. (See Graduate Instruction in Education)
 - D. 3-12 semester hours of electives to complete the required minimum of 36 semester hours. The student seeking to fulfill the requirements for the Professional Certificate must elect ED 6300.
- 7. For general degree requirements, see "Procedures and Requirements for Graduate Degrees," page .

REQUIRED COURSES IN PRIMARY AREA OF SPECIALIZATION

Table 1

MOLECULAR BIOLOGY	CHEMISTRY	ENVIRONMENTAL SCIENCES	GEOLOGICAL SCIENCES	PHYSICS
BIO <u>5411</u> [BIO-511	CHEM <u>5381</u> 	ENV 5301 ENV-501	GEO <u>5400</u> GEO-500-and [GEO-507-(hab)]	
BIO <u>5421</u> [BIO-521	CHEM 5383 CHEM-583	ENV 5302 ENV-502	GEO <u>5420</u> GEO-510-and [GEO-511-(Lab)]	PHY <u>5342</u> PHY-542]
BIO <u>5441</u> [BIO-541	CHEM <u>5385</u> CHEM-5 85	ENV <u>5303</u> ENV-510	GEO <u>5312</u> CE O- 512	*PHY 5400, -*PHY-500,] 5311, 5323, [511,-523,] 5330, 5381 [530,-581]
BIO <u>5342</u> [BIO-542	CHEM <u>5387</u> CHEM-587	ENV <u>5311</u> ENV-511	GEO <u>5375</u> GEO-575	and 5341 -and-591]

^{*}Select two courses from this list.

REQUIRED COURSES IN SECONDARY AREA OF SPECIALIZATION

Table 2

MOLECULAR BIOLOGY	CHEMISTRY	ENVIRONMENTAL SCIENCES	GEOLOGICAL SCIENCES	PHYSICS
BIO <u>5411</u>	*CHEM <u>5381</u> , *GHEM-581	*ENV <u>5301</u> , *ENV- 501,	*GEO <u>5400</u> , *GEO-500-and	PHY <u>5341</u>
	5383, 5385	5302, 5303 502, 510	5420,	_
BIO <u>5342</u>	and 5387	and <u>5311</u>	and-511-(Lab)	PHY <u>5342</u>
[0			5312 and 5375 [512-and-575]	

*Select two courses from this list.

Basic Courses

Course

Description

5301 [SGE-501] History and Philosophy of Natural Sciences (3 semester hours) Staff An examination of selected problems in the methodological and philosophical foundations of the natural sciences. Topics covered may include scientific explanation, the role of theories of science, probability and induction, and problems arising out of the context of physical theories, such as the nature of space and time. (3-0)

the-teacher.--(3-0)]

GRADUATE PROGRAM IN SPECIAL EDUCATION (M.S.)[≿]

Members of Faculty currently participating:

PROFESSOR: W. Beth Stephens (Head) (Special Education), [Patrick L. Odell

(Acting-Head) - (Mathematical-Sciences)]

ASSISTANT PROFESSOR: Edwin K. Hammer (Communication Disorders)

LECTURERS: Nancy A. Bray (Special Education), Robert E. Estes (Special Education), Raleigh J. Huizinga (Special Education), Nancy E. O'Conner (Special Education), Ruth Turner (Special Education)

OBJECTIVES

The program in special education leading to the degree of Master of Science emphasizes clinical experiences and academic studies designed to facilitate the educational development of exceptional children. Objectives of the program include competence in the analysis of learning processes, synthesis of behavioral objectives, strategies of intervention and evaluation of outcomes. The program utilizes an hypothetical-deductive approach within a [neuro]scientific framework [base] to better prepare individuals to educate children who, because of physical, mental, social or emotional differences[s], fail to realize their potential abilities in routine educational settings, and who, therefore, require special strategies to facilitate learning.

The program is especially planned to assist individuals presently in the teaching profession, who desire professional development, and those involved in the delivery of educational and training services to exceptional persons. Such individuals may include 1) those wishing to enter the field of special education; 2) those already working with one disability area who seek additional expertise in the commonality of disabilities; 3) those employed as regular classroom teachers; and 4) those seeking more comprehensive knowledge of exceptional children, and those involved in the education and training of exceptional persons in a variety of settings.

MASTER OF SCIENCE

The program in special education leading to a Master of Science utilizes a scientific base in developing observational skills, in planning and implementing intervention strategies, and in measuring outcomes of intervention. Competence in the science of teaching exceptional children will be balanced by equivalent competence in the art of teaching exceptional children. This balance will be achieved by providing opportunities to integrate knowledge and research with practice in real life situations throughout the program.

CERTIFICATION PROGRAMS

For those who hold the Provisional Certificate and have three years of teaching experience, completion of the M.S. in Special Education will fulfill requirements for the Professional Certificate. UTD offers two special education endorsement programs which have been approved by the Texas Education Agency:

- (a) Language/Learning Disabilities Endorsement on the Provisional Certificate.
- (b) Generic Special Education Endorsement on the Provisional Certificate.

Candidates for endorsement in Special Education should consult with the Head of Graduate program in Special Education for an approved choice of study.

[*Program-will-begin-no-later-than-September,-1975;-however,-students-may-initiate application-at-any-time,-but-no-later-than-January,-1975.]

PREREQUISITES

Applicant must hold or be eligible for a Provisional Certificate in the State of Texas. Applicant should have a background in behavioral sciences such as psychology, sociology, speech pathology, or education.

FACILITIES

Facilities at The University of Texas at Dallas which support other graduate programs are available to students in the program. In addition there are a number of special schools and resources in the area which offer unique opportunities for observation, demonstration projects, internships, and practica. Among these are the Research and Evaluation Center for Learning, the Callier Center for Communication Disorders, the University of Texas Health Science Center, many private schools and learning resource centers, as well as the public schools in the communities adjacent to the campus of The University of Texas at Dallas.

SPECIFIC DEGREE REQUIREMENTS

General degree requirements may be found in "Procedures and Requirements for Graduate Degrees," page .

- A. A prerequisite broad knowledge in the behavioral sciences (i.e., psychology, sociology and education).
- B. A formal investigation project reported in thesis format or a demonstration project which reports data showing the effects of measurable intervention techniques.
- C. The satisfactory completion of at least thirty-six semester hours of graduate course work.
- D. This course work must include SED 5300[500], SED 5301[501], SED 5302[502], SED 5303[503], SED 5404[504], SED 5206[506], SED 8305[901], and 8306[902]. 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. Twenty-two semester hours of core course work. Table 1 outlines the areas covered.
 - 2. Eleven semester hours of specialized course work. Selection of the specialization is predicted upon the prior training of the student, the recommendation of the faculty, and career aspirations of the student. Table 2 categorizes the options available in the advanced course work.
 - 3. Three semester hours in thesis or demonstration projects.

CORE COURSES Table I

(Required of all students)

Area 1	Area 2	Area 3	Area 4
Learning Theory SED 5300[500]	Techniques SED <u>5302[502]</u>	Practica SED <u>5304[504</u>]	Research SED <u>8305[901]</u>
SED <u>5301</u> [501]	SED <u>5303</u> [503]	SED <u>5206</u> [596]	SED $8306[902]$

Area 4

ADVANCED ELECTIVES

Table II

Area 2

Area 1

(Student may select eleven credits from the following list of courses.)

Area 3

		1,200	111 Ca -				
Learning Theo SED 5310[510] SED 5311[511] SED 5312[512] SED 5313[513]	SED <u>5314[514]</u> SED <u>5315[515]</u> SED <u>5120</u> [520]	Practica SED 6123-6323[5: SED 6124-6324[5: SED 6125-6325[5: SED 6127-6327[5:	24] 26]				
	Special Education	n Courses					
Course	Description						
<u>5120</u> [529]	Placement for Exceptional Pupil Issues and Trends (1 semester & Analyses of educational problem exceptional children.	hour)					
<u>5121</u> [521]	Analysis of [Understanding] ted	Teachers' Roles in Parent Services (1 semester hour) Analysis of [Understanding] techniques for teachers to employ in parent interviews, conferences and referrals. (1-0)					
<u>5122</u> [522]	Developing Community Resources (1 semester hour) Knowledge of practical aspects of organization and development of community resources and problems of public relations. (1-0)						
5206[506]	Academic Rotation (2 semester hours) Participation in ongoing academic programs [providing-pre-academic readiness-activities], in order [elementary-level-academic, and secondary-level-academics] to gain field centered knowledge of intervention strategies in academic curricula which are appropriate for exceptional children. (0-4)						
<u>5300</u> [500]	Research Studies of Exceptional A general overview of the field search studies available in the	d of special education					
<u>5301</u> [501]	Learning Theories and their App (3 semester hours) A study of theoretical approach operant conditioning, maturatic applied to the learning of exce	nes to learning (cogr on, sensory—neural pr	nitive development,				
<u>5302</u> [502]	Strategies for Teaching: Affect A review of the effects of emot deviant behaviors and their eff the provision of appropriate sevelopment of children. (3-0)	cional development <u>or</u> fects on learning, an	n[of] learning, of nd experience in				
<u>5303</u> [503]	Strategies for Teaching: Cognia A review of research and theory reasoning [thought] and express tive development and procedures Piagetian theory in the classro environment, patterns of malada children, and effective approact (3-0)	y dealing with the desion, strategies for sto be used in the stoom and at home. [manapetive thought-process	evelopment of assessing cogni- implementation of aging-the-learning sses,-creativity-in				

- Service Rotation (3 semester hours)

 A clinically oriented rotation assignment involving [through] various classrooms, clinics, private day schools, residential facilities, and other settings where exceptional children participate in educational activities appropriate to their needs (0-6[0-4])
- Language and Learning (3 semester hours)

 A study of basic concepts of <u>language development and verbal communication proceeding from (1) sequential development of language (2)[1] its acoustic characteristics and phonemic description through (3)[2] the application of information and learning theory to (4)[3] language as a social behavior. (3-0)</u>
- [5311[544] [Child] Growth and Development and the Exceptional Child
 (3 semester hours)

 Knowledge of human development from conception onward with concern for the effects of physiological malfunction at any stage of development, plus analysis of developmental scales and programmatic consideration for the motor impaired person. (3-0)
- Parents and Family: Relation to Exceptional Children's Educational Progress (3 semester hours)
 Understanding the cultural, social and economic factors of learning as they may be applied to working with parents and families with exceptional children, plus experience in parent training. (3-0)
- 5313[513] Sensory Processes in Learning (3 semester hours)
 Understanding the roles of auditory, visual, kinesthetic, tactile
 modalities and their various combinations in the process of learning; includes review of screening and assessment techniques. (3-0)
- 5314[514] Systems Approaches to Teaching Exceptional Children (3 semester hours)
 Developing competency in a systems approach to designing new and improved strategies in the existing curricula for exceptional children.

 (3-0)
- Individualized Academic Instruction [Individual-Testing-and-Super-vised-Practicum-in-Testing] (3 semester hours)

 Understanding and application of individualized instruction with special emphasis on remediation of reading and mathematical disabilities. [Understanding-the-techniques-of-comprehensive-modern measurement-programs-for-individuals-to-the-end-that-students-will understand-the-application,-administration,-and-interpretation-of-a variety-of-such-instruments-] Prerequisite: Introductory tests and measures. (3-0)
- Internship in Language and Learning Disorders ([1-]3 semester hours) Supervised and directed experiences in language and learning disorders. The adviser will schedule regular observations of internship experiences. Conferences with the student will follow. Written summaries and evaluations of the internship will be prepared independently by the student, a representative of the cooperating agency and the adviser. (0, [2-]6)
- Internship in Emotionally and Socially Maladjusted Children

 [Affective-Dysfunction-in] ([1-]3 semester hours)

 Supervised and directed experiences in affective dysfunction. (0, 2-6)
- [325[525] Internship in Early Childhood Education for Handicapped Children ([1-]3 semester hours)

 Supervised and directed experiences in early childhood education for handicapped children. (0, [2-]6)

Internship in Multihandicapped Children's Program ($[\frac{1}{2}]$ 3 semester hours) Supervised and directed experiences in a multihandicapped children's program. (0, $[\frac{2}{2}]$ 6)

program. (U, [2-]0)

6127-6327 Internship in Teaching Gifted and Talented Children (1-3 semester hours)

Supervised and directed experiences working with the gifted and talented children. (0, 2-6)

8103-8303 Seminar in Exceptional Children (1-3 semester hours)
[903] Topic 1: Research Methods in Special Education

Topic 2: Differential Diagnosis: Interdisciplinary Team

Topic 3: Current Research in Exceptional Children
Topic 4: Research of Children with Visual Problems
Topic 5: Research of Children with Auditory Problems

Topic 6: Research of Gifted and Talented Children

(May be repeated for credit.) (0, 2-6)

 $\frac{8104-8304}{[904]}$ Independent Study (1-3 semester hours) (0, 3-9)

B305[901] Documentation Procedures (3 semester hours)

Experience in developing procedures to be used to collect and describe data (charting, anecdotal records, staffings, video taping, behavioral objectives). Studies of ways to implement documentation procedures including basic descriptive statistics. (0-6[0-3])

B306[902]

Descriptive Assessment and Programming [Eveluation] in Special Education (3 semester hours)

Experience in formal assessment procedures: testing and interpretation of results, medical reports and their application to the exceptional child psychological reports social work assessment of home

tion of results, medical reports and their application to the exceptional child, psychological reports, social work assessment of home and family. How to apply these data. Informal assessment procedures: observation of behaviors, staffings, clinical impression. How to develop techniques to delineate the problems presented by the child which cannot be assessed by formal methods. Formative evaluation: self-correcting procedures used in a day-by-day basis to keep the service on target. Summative evaluation: development of data to present the total outcome of the program either to staff personnel or other decision-makers. Devising individually appropriate programs: based on profiles of student performance. (0-6[9-3])

8307[995] Demonstration Projects (3 semester hours) (0-9)

8398[908] Thesis (3 semester hours) (0-9)

THE UNIVERSITY OF TEXAS AT EL PASO El Paso, Texas

March 25, 1975

Chancellor Charles A. LeMaistre The University of Texas System 601 Colorado Austin, Texas 78701

Dear Chancellor LeMaistre:

The docket for the April 28, 1975 meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.

EP-1

THE UNIVERSITY OF TEXAS AT EL PASO El Paso, Texas

Docket for Meeting April 28, 1975

Nr.C The following gift has been received and I recommend acceptance by the Board.

Donor

1. International Business Machines Corporation Armonk, New York 10504 Mr. H. A. Faw, Jr., Assistant Treasurer

Purpose and Condition

IBM Graduate Scholarship program for Spanishsurnamed graduate students in Mechanical and Electrical Engineering

Amount

\$6,000.00

Grants, THE UNIVERSITY OF TEXAS AT EL PASO Contracts and Agreements (Non-Governmental) April 28, 1975

NXD

The following contracts, grants and amendments have been signed by the appropriate official upon the recommendation of the respective technical directors. I recommend your approval and ratification of the signatures.

Renewal Grant AH-498 by which the Robert A. Welch Foundation, Houston, Texas, provides an additional sum of \$51,000.00 for support of research entitled "Studies of Ion Pair Complexes in Low Dielectric Constant Solvents." The grant renewal is effective for the period June 1, 1975 through May 31, 1978 and the research will be under the direction of Dr. Michael P. Eastman, Associate Professor in the Department of Chemistry.

THE UNIVERSITY OF TEXAS AT EL PASO Grants, Contracts and Amendments (Federal) April 28, 1975



The following contracts, grants and amendments have been negotiated and have been signed by me upon the recommendation of the directors of the projects. I recommend your approval and ratification of the signatures.

- 1. Modification P0001, dated December 12, 1974, to order No. DAKF19-75-C-0104, to Educational Service Agreement DAKF49-74-A-0093, whereby the Contracting Officer, Procurement Division, DIO, P. O. Box 9174, Fort Riley, Kansas 66442, adds one named student to the 2nd Semester and, therefore, increases the total estimated amount from \$330.00 to \$551.00. The majority of the expenditures from this award will be made in El Paso County.
- 2. Purchase Order No. DAKF19-75-C-0252, dated December 20, 1974, to Educational Service Agreement DAKF49-74-A-0093, whereby the Contracting Officer, Procurement Division, DIO, P. O. Box 9174, Fort Riley, Kansas 66442, authorizes one named student to be enrolled for the Spring Semester and half of the Summer 1974-75 for a total cost of \$1,019.00. The majority of the expenditures from this award will be made in El Paso County.
- 3. Grant Number 5 S06 RR08012-04 GRS, dated December 26, 1974, whereby the Acting Director, Office of Operations, Minority Biomedical Support Program, Division of Research Resources, National Institutes of Health, Bethesda, Maryland 20014, awards \$106,348.00 and authorizes the expenditure of the unobligated balance from prior budget periods of \$10,719.00 for the Biomedical Research Intern Program for the period January 1, 1975 through December 31, 1975. The majority of the expenditures from this award will be made in El Paso County.
- 4. Modification P0001, dated January 22, 1975, to Purchase Order DAKE19-75-C-0252 to Educational Service Agreement DAKF49-74-A-0093, whereby the Contracting Officer, Procurement Division, DIO, P. O. Box 9174, Fort Riley, Kansas 66442, adds one named student to be enrolled for one half of the summer, and increases the total amount from \$1,019.00 to \$1,310.00. The majority of the expenditures from this award will be made in El Paso County.
- 5. Veterans Administration Renewal Agreement, dated January 28, 1975, to Contract No. V349V-2375, whereby the Veterans Services Officer, 1400 North Valley Mills Drive, Waco, Texas 76710, extends the contract from the termination date of January 30, 1975 to January 31, 1976. All other terms and conditions remain unchanged.
- 6. Veterans Administration Renewal Agreement, dated January 28, 1975, to Contract No. V349V-2376, whereby the Veterans Services Officer, 1400 North Valley Mills Drive, Waco, Texas 76710, extends the Contract period from the termination date of January 31, 1975 to January 31, 1976. All other terms and conditions remain unchanged.
- 7. Modification MO1, dated January 30, 1975, to Delivery Order No. F29651-75-86571, to Contract No. F29651-75-90038, whereby the Contracting Officer, Base Procurement Division, P. O. Drawer S, Holloman Air Force Base, New Mexico 88330, increases the order by \$112.50 for a new total of "Not to Exceed \$225.00." The majority of the expenditures from this award will be made in El Paso County.
- 8. Extension of Contract Agreement, dated February 5, 1975, to TCIES contract, whereby the Executive Director, Education Service Region Center, Region XIII, 6504 Tracor Lane, Austin, Texas 78721, authorizes this contract to be extended from August 31, 1974 to June 30, 1975. The total amount of the contract remains unchanged.
- 9. Grant No. 1R01 MH26108-01 ESR, dated February 18, 1975, whereby the Chief, Grants and Contracts, Management Branch, National Institute of Mental Health, Rockville, Maryland 20852, awards \$71,597.00 for the project entitled "Life Changes and Illness: A Multicultural Approach", for the period March 1, 1975 through February 29, 1976. The majority of the expenditures from this award will be made in El Paso County.

10. Delivery Order No. DABT51-75-D-5615, dated March 4, 1975, to Basic Agreement No. DABE32-73-A-0002, whereby the Contracting Officer, Procurement Division, DIO, P. O. Box 6078, Fort Bliss, Texas 79906, authorizes 7 students for a total of 33 semester hours, to be enrolled at The University of Texas at El Paso for the Spring Semester, 1975, for a total cost of \$359.50. The majority of the expenditures from this award will be made in El Paso County.

THE UNIVERSITY OF TEXAS AT EL PASO Amendments to 1974-75 Operating Budget April 28, 1975

EDUCATIONAL AND GENERAL RESIDENT INSTRUCTION COLLEGE OF BUSINESS ADMINISTRATION

Accounting

- 1. Reappoint Angela W. Finley (non-tenure) as Instructor (1/2 Time) effective January 16, 1975 for the 1975 Spring Semester, at her full-time nine-months rate of \$8,000.00 with the necessary funds in the amount of \$2,000.00 to come from Unallocated Salaries Faculty. (RBC 367)
- 2. Reappoint Charles M. Fruithandler (non-tenure) as Instructor (3/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at his full-time nine-months rate of \$8,544.00 with the necessary funds in the amount of \$3,204.00 to come from Unallocated Salaries Faculty. (RBC 368)
 - 3. Reappoint Sharon Hoffmans (non-tenure) as Instructor (1/2 Time) effective January 16, 1975 for the 1975 Spring Semester, at her full-time nine-months rate of \$8,000.00 with the necessary funds in the amount of \$2,000.00 to come from Unallocated Salaries Faculty. (RBC 369)
 - 4. Reappoint Murray J. Manning (non-tenure) as Instructor (1/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at his full-time nine-months rate of \$8,544.00 with the necessary funds in the amount of \$1,068.00 to come from Unallocated Salaries Faculty. (RBC 370)

Business

- 5. Reappoint Gerald A. Graves (non-tenure) as Lecturer (1/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at his full-time nine-months rate of \$8,000.00 with the necessary funds in the amount of \$1,000.00 to come from Unallocated Salaries Faculty. (RBC 371)
- 6. Appoint George E. Grondin (non-tenure) as Lecturer (3/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at a full-time nine-months rate of \$6,400.00 with the necessary funds in the amount of \$2,400.00 to come from Unallocated Salaries Faculty. (RBC 372)
- 7. Appoint Roberto M. Kaplun (non-tenure) as Lecturer (1/2 Time) effective January 16, 1975 for the 1975 Spring Semester, at a full-time nine-months rate of \$8,000.00 with the necessary funds in the amount of \$2,000.00 to come from Unallocated Salaries Faculty. (RBC 373)
- 8. Reappoint David R. Rosado (non-tenure) as Lecturer (1/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at his full-time nine-months rate of \$8,544.00 with the necessary funds in the amount of \$1,068.00 to come from Unallocated Salaries Faculty. (RBC 374)
- 9. Reappoint Sue M. Smith (non-tenure) as Lecturer (3/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at her full-time nine-months rate of \$6,400.00 with the necessary funds in the amount of \$2,400.00 to come from Unallocated Salaries Faculty. (RBC 375)
- 10. Appoint James D. Wright (non-tenure) as Lecturer (1/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at a full-time nine-months rate of \$5,000.00 with the necessary funds in the amount of \$625.00 to come from Unallocated Salaries Faculty. (RBC 376)
- 11. Accept the resignation of John C. McArdle, Jr. (non-tenure), Lecturer (1/2 Time), effective January 15, 1975, and lapse to Unallocated Salaries Faculty \$2,136.00 budgeted for this position. (RBC 384)

Economics and Finance

12. Reappoint Robert N. Chaplin (non-tenure) as Lecturer (1/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at his full-time nine-months rate of \$8,544.00 with the necessary funds in the amount of \$1,068.00 to come from Unallocated Salaries - Faculty. (RBC 377)

RESIDENT INSTRUCTION (CONTINUED)
COLLEGE OF BUSINESS ADMINISTRATION (CONTINUED)
Economics and Finance (Continued)

- 13. Appoint Alvin W. Clark (non-tenure) as Lecturer (1/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at a full-time nine-months rate of \$8,000.00 with the necessary funds in the amount of \$1,000.00 to come from Unallocated Salaries Faculty. (RBC 378)
- 14. Appoint Richard J. Pane (non-tenure) as Lecturer (1/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at a full-time nine-months rate of \$8,544.00 with the necessary funds in the amount of \$1,068.00 to come from Unallocated Salaries Faculty. (RBC 379)
- 15. Reappoint Michael J. Roth (non-tenure) as Lecturer (1/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at his full-time nine-months rate of \$8,544.00 with the necessary funds in the amount of \$1,068.00 to come from Unallocated Salaries Faculty. (RBC 380)
- 16. Reappoint Margaret J. Taylor (non-tenure) as Lecturer (1/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at her full-time nine-months rate of \$8,000.00 with the necessary funds in the amount of \$1,000.00 to come from Unallocated Salaries Faculty. (RBC 381)

COLLEGE OF EDUCATION

Curriculum and Instruction

- 17. Appoint Walter Lazdowski (non-tenure) as Assistant Instructor effective January 16, 1975 for the 1975 Spring Semester. He will serve without salary from the University. (RBC 329)
- 18. Appoint Frank Ciriza (non-tenure) as Assistant Instructor effective January 16, 1975 for the 1975 Spring Semester, without salary from the University. Mr. Ciriza is Director (Full-time) of the High School Equivalency Program and receives his salary from this grant. (RBC 330)
- 19. Reappoint Angela J. Schroder (non-tenure) as Lecturer effective January 16, 1975 for the 1975 Spring Semester, at her nine-months rate of \$9,387.00 with the necessary funds in the amount of \$4,693.50 to come from Unallocated Salaries Faculty. (RBC 331)
- 20. Reappoint Katherine S. Davison (non-tenure) as Lecturer effective January 16, 1975 for the 1975 Spring Semester, at her nine-months rate of \$9,387.00 with the necessary funds in the amount of \$4,693.50 to come from Unallocated Salaries Faculty. (RBC 332)
- 21. Appoint Olga Mapula (non-tenure) as Lecturer effective January 16, 1975 for the 1975 Spring Semester, at a nine-months rate of \$9,387.00 with the necessary funds in the amount of \$4,693.50 to come from Unallocated Salaries Faculty. (RBC 333)
- 22. Accept the resignation of Frances H. Rice (non-tenure), Instructor, effective January 15, 1975, and lapse to Unallocated Salaries Faculty \$4,418.00 budgeted for this position. (RBC 335)
- 23. Change the status of Eldon E. Ekwall (tenure) from Professor (Full-time) to Professor (3/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at his full-time nine-months rate of \$16,162.00 and lapse to Unallocated Salaries Faculty \$2,020.00 budgeted for this position. He will also serve as Professor (1/4 Time) in HEW Grant OEG-0-73-1267 Teacher Corps, 8th CYC, 2nd Year, In Service Training Program. (RBC 385)
- 24. Change the status of Luiz F. Natalicio (tenure) from Associate Professor (Full-time) to Associate Professor (1/2 Time) effective January 16, 1975 for the 1975 Spring Semester, at his full-time nine-months rate of \$16,038.00 and lapse to Unallocated Salaries Faculty \$4,010.00 budgeted for this position. He will also serve as Associate Professor (1/4 Time) in PHS Grant 1 T21 MH 13629-01 Evaluation Research Training Program and as Associate Professor (1/4 Time) in HEW Grant OEG-0-73-1267 Teacher Corps, 8th CYC, 2nd Year, In Service Training Program. (RBC 387)

RESIDENT INSTRUCTION (CONTINUED) COLLEGE OF EDUCATION (CONTINUED)

Curriculum and Instruction (Continued)

- 25. Change the status of Marie E. Barker (non-tenure) from Assistant Professor (Full-time) to Assistant Professor (3/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at her full-time nine-months rate of \$11,702.00 and lapse to Unallocated Salaries - Faculty \$1,463.00 budgeted for this position. She will also serve as Assistant Professor (1/4 Time) in HEW Grant OEG-0-73-1267 -Teacher Corps, 8th CYC, 2nd Year, In Service Training Program. (RBC 412)
- 26. Appoint Joseph J. Jones (non-tenure) as Lecturer (1/2 Time) effective January 16, 1975 for the 1975 Spring Semester, at a full-time nine-months rate of \$8,836.00 with the necessary funds in the amount of \$2,209.00 to come from Unallocated Salaries - Faculty. He will also serve as Lecturer (1/2 Time) in HEW Grant OEG-0-74-2855 - Prepare Teachers to Educate Handicapped Children. (RBC 427)

Educational Psychology and Guidance 27. Change the status of Maximino Plata (non-tenure) from Assistant Professor (Full-time) to Assistant Professor (3/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at his full-time nine-months rate of \$13,884.00 and lapse to Unallocated Salaries - Faculty \$1,736.00 budgeted for this position. will also serve as Assistant Professor (1/4 Time) in HEW Grant OEG-0-73-1267 -Teacher Corps, 8th CYC, 2nd Year, In Service Training Program. (RBC 390)

28. Appoint Rosalie Y. Martin (non-tenure) as Lecturer (1/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at a full-time nine-months rate of \$8,000.00 with the necessary funds in the amount of \$1,000.00 to come from Unallocated Salaries - Faculty. (RBC 396)

Educational Administration and Supervision

- 29. Reappoint Ronald J. Barber (non-tenure) as Assistant Professor (Visiting) (1/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at his fulltime nine-months rate of \$8,544.00 with the necessary funds in the amount of \$1,068.00 to come from Unallocated Salaries - Faculty. (RBC 336)
- 30. Appoint Emmaline Lovitt (non-tenure) as Assistant Professor (Visiting) (1/2 Time) effective January 16, 1975 for the 1975 Spring Semester, at a full-time nine-months rate of \$8,544.00 with the necessary funds in the amount of \$2,136.00 to come from Unallocated Salaries - Faculty. (RBC 337)
- Appoint Jose Hernandez (non-tenure) as Associate Professor (Visiting) (1/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at a fulltime nine-months rate of \$8,544.00 with the necessary funds in the amount of \$1,068.00 to come from Unallocated Salaries - Faculty. (RBC 382)
- 32. Reappoint John E. Uxer (non-tenure) as Associate Professor (Visiting) (Part-time) effective January 16, 1975 for the 1975 Spring Semester, at his full-time nine-months rate of \$12,800.00 with the necessary funds in the amount of \$1,200.00 to come from Unallocated Salaries - Faculty. (RBC 397)
- 33. Reappoint James T. Mancill (non-tenure) as Assistant Professor (Visiting) (1/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at his fulltime nine-months rate of \$8,000.00 with the necessary funds in the amount of \$1,000.00 to come from Unallocated Salaries - Faculty. (RBC 398)

Health and Physical Education

34. Reappoint Margaret Lemone (non-tenure) as Instructor (1/4 Time) effective January 16, 1975 for the 1975 Spring Semester, and increase her full-time ninemonths rate from \$8,000.00 to \$9,600.00 with the necessary funds in the amount of \$1,200.00 to come from Unallocated Salaries - Faculty. (RBC 324)

COLLEGE OF ENGINEERING Electrical Engineering

35. Change the status of Jack Smith (tenure) from Professor (Full-time) to Professor (3/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at his full-time nine-months rate of \$19,261.00 and lapse to Unallocated Salaries -Faculty \$2,408.00 budgeted for this position. He will also serve as Research Engineer (1/4 Time) in Contract DAAD07-74-C-0103 - Data Collection and Analysis Development. (RBC 392)

RESIDENT INSTRUCTION (CONTINUED)
COLLEGE OF ENGINEERING (CONTINUED)
Electrical Engineering (Continued)

36. Change the status of Clyde R. Nichols (non-tenure) from Professor Emeritus (1/8 Time) to Professor Emeritus (1/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at his full-time nine-months rate of \$16,544.00 with the necessary additional funds in the amount of \$1,034.00 to come from Unallocated Salaries - Faculty. (RBC 399)

Mechanical and Industrial Engineering

37. Appoint Juan M. Herrera (non-tenure) as Instructor effective January 16, 1975 for the 1975 Spring Semester, at a nine-months rate of \$6,300.00 with the necessary funds in the amount of \$3,150.00 to come from Unallocated Salaries - Faculty. (RBC 400)

COLLEGE OF LIBERAL ARTS

Criminal Justice Program

- 38. Reappoint William E. Rodriguez (non-tenure) as Lecturer (Visting) (Parttime) effective January 16, 1975 for the 1975 Spring Semester, at his full-time nine-months rate of \$4,000.00 with the necessary funds in the amount of \$565.00 to come from the appropriation for Lecturers, Part-time. (RBC 420)
- 39. Reappoint Chester C. McLaughlin (non-tenure) as Lecturer (Part-time) effective January 16, 1975 for the 1975 Spring Semester, at his full-time nine-months rate of \$5,981.00 with the necessary funds in the amount of \$339.00 to come from the appropriation for Lecturers, Part-time. (RBC 421)
- 40. Appoint Henry Pena (non-tenure) as Lecturer (Visiting) (1/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at a full-time nine-months rate of \$2,712.00 with the necessary funds in the amount of \$339.00 to come from the appropriation for Lecturers, Part-time in the amount of \$189.00 and from Unallocated Salaries Faculty in the amount of \$150.00. (RBC 422)
- 41. Appoint Karl W. Dissly (non-tenure) as Lecturer (Visiting) (1/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at a full-time ninemonths rate of \$2,712.00 with the necessary funds in the amount of \$339.00 to come from Unallocated Salaries Faculty. (RBC 423)
- 42. Appoint Gary B. Weiser (non-tenure) as Lecturer (Visiting) (1/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at a full-time ninemonths rate of \$3,616.00 with the necessary funds in the amount of \$452.00 to come from Unallocated Salaries Faculty. (RBC 424)

English

- 43. Reappoint Brigid M. Murphy (non-tenure) as Instructor (3/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at her full-time nine-months rate of \$6,400.00 with the necessary funds in the amount of \$2,400.00 to come from Unallocated Salaries Faculty. (RBC 401)
- 44. Appoint Martha L. Broaddus (non-tenure) as Instructor (1/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at a full-time nine-months rate of \$6,400.00 with the necessary funds in the amount of \$800.00 to come from Unallocated Salaries Faculty. (RBC 402)
- 45. Reappoint Marjorie Lawson (non-tenure) as Instructor (1/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at her full-time nine-months rate of \$6,400.00 with the necessary funds in the amount of \$800.00 to come from Unallocated Salaries Faculty. (RBC 403)
- 46. Reappoint Nancy Kohutek (non-tenure) as Instructor (3/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at her full-time nine-months rate of \$6,400.00 with the necessary funds in the amount of \$2,400.00 to come from Unallocated Salaries Faculty. (RBC 404)
- 47. Correct RBC 409. Increase in nine-months rate given to Mary L. Collingwood (tenure), Assistant Professor, effective February 1, 1975 should be \$14,005.00 instead of \$13,305.00 with the necessary additional funds in the amount of \$311.12 to come from Unallocated Salaries Faculty. (RBC 415)

RESIDENT INSTRUCTION (CONTINUED) COLLEGE OF LIBERAL ARTS (CONTINUED)

History

- 48. Appoint John W. Brinsfield, Jr. (non-tenure) as Adjunct Assistant Professor effective January 16, 1975 for the 1975 Spring Semester, without salary from the University. (RBC 338)
- 49. Appoint Oscar J. Martinez (non-tenure) as Instructor (1/2 Time) effective January 16, 1975 for the 1975 Spring Semester, at a full-time nine-months rate of \$12,000.00 with the necessary funds in the amount of \$3,000.00 to come from Unallocated Salaries Faculty. He will also serve as Co-Director (1/2 Time) in the Institute of Oral History. (RBC 359)
- 50. Accept the resignation of Wayne E. Fuller (tenure), Professor, as Department Chairperson effective January 15, 1975. He will return to full-time teaching. (RBC 431)
- 51. Appoint Kenneth B. Shover (tenure), Professor, as Department Chairperson effective January 16, 1975. (RBC 432)

<u>Mass Communication - Radio/Television</u>

- 52. Reappoint Michael McKenzie (non-tenure) as Instructor (1/2 Time) effective January 16, 1975 for the 1975 Spring Semester, at his full-time nine-months rate of \$6,400.00 with the necessary funds in the amount of \$1,600.00 to come from Unallocated Salaries Faculty. (RBC 339)
- 53. Change the status of Robert E. Nitzburg (non-tenure) from Instructor (1/4 Time) to Instructor (1/2 Time) effective January 16, 1975 for the 1975 Spring Semester, at his full-time nine-months rate of \$7,688.00 with the necessary additional funds in the amount of \$961.00 to come from Unallocated Salaries Faculty. (RBC 340)
- 54. Reappoint Penny Byrne (non-tenure) as Instructor (3/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at her full-time nine-months rate of \$9,277.00 with the necessary funds in the amount of \$3,479.00 to come from Unallocated Salaries Faculty. She will also serve as Forensics Coach (1/4 Time) in Forensics. (RBC 341)
- 55. Reappoint Edward Sleighel (non-tenure) as Instructor (1/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at his full-time nine-months rate of \$6,400.00 with the necessary funds in the amount of \$800.00 to come from Unallocated Salaries Faculty. (RBC 342)

Modern Languages

- 56. Reappoint Ricardo D. Aguilar (non-tenure) as Instructor effective January 16, 1975 for the 1975 Spring Semester, at his nine-months rate of \$10,000.00 with the necessary funds in the amount of \$5,000.00 to come from Unallocated Salaries Faculty. (RBC 320)
- 57. Grant leave of absence to Joan H. Bornscheuer (tenure), Assistant Professor, effective January 16, 1975 for the 1975 Spring Semester, and lapse to Unallocated Salaries Faculty \$6,461.00 budgeted for this position. (RBC 334)
- 58. Accept the resignation of Miguel Encinias (non-tenure), Instructor, effective before January 16, 1975, and lapse to Unallocated Salaries Faculty \$5,000.00 budgeted for this position. (RBC 343)
- 59. Appoint V. Emilio Castaneda (non-tenure) as Instructor effective January 16, 1975 for the 1975 Spring Semester, at a nine-months rate of \$10,000.00 with the necessary funds in the amount of \$5,000.00 to come from Unallocated Salaries Faculty. (RBC 344)
- 60. Appoint Ardi C. Peacock (non-tenure) as Assistant Professor (Visiting) (1/2 Time) effective January 16, 1975 for the 1975 Spring Semester, at a full-time nine-months rate of \$10,000.00 with the necessary funds in the amount of \$2,500.00 to come from Unallocated Salaries Faculty. (RBC 345)

Music

61. Accept the resignation of Rene Segapelli (non-tenure), Instructor (1/8 Time), effective January 15, 1975, and lapse to Unallocated Salaries - Faculty \$500.00 budgeted for this position. (RBC 405)

RESIDENT INSTRUCTION (CONTINUED) COLLEGE OF LIBERAL ARTS (CONTINUED)

Music (Continued)

62. Appoint Mark R. Lanham (non-tenure) as Instructor (1/8 Time) effective January 16, 1975 for the 1975 Spring Semester, at a full-time nine-months rate of \$8,010.00 with the necessary funds in the amount of \$500.00 to come from Unallocated Salaries - Faculty. (RBC 406)

Psychology

- 63. Change the status of William G. Lucker (tenure) from Associate Professor (Full-time) to Associate Professor (1/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at his full-time nine-months rate of \$12,760.00 and lapse to Unallocated Salaries Faculty \$4,785.00 budgeted for this position. (RBC 321)
- 64. Reappoint Ted L. Langford (non-tenure) as Assistant Professor (Visiting) effective January 16, 1975 for the 1975 Spring Semester, at his nine-months rate of \$14,358.00 with the necessary funds in the amount of \$7,179.00 to come from Unallocated Salaries Faculty. (RBC 322)
- 65. Appoint Anthony Zold (non-tenure) as Lecturer (1/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at a full-time nine-months rate of \$8,000.00 with the necessary funds in the amount of \$1,000.00 to come from Unallocated Salaries Faculty. (RBC 346)
- 66. Reappoint Dick S. Calkins (non-tenure) as Assistant Professor (Visiting) (3/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at his full-time nine-months rate of \$12,700.00 with the necessary funds in the amount of \$4,763.00 to come from Unallocated Salaries Faculty. He will also serve as Program Research and Evaluation Specialist (1/4 Time) in Grant Region XIII STLCTEC Project FY 75. (RBC 394)

Sociology

- 67. Reappoint Samuel M. Nunez (non-tenure) as Instructor (1/2 Time) effective January 16, 1975 for the 1975 Spring Semester, at his full-time nine-months rate of \$8,544.00 with the necessary funds in the amount of \$2,136.00 to come from Unallocated Salaries Faculty. (RBC 410)
- 68. Change the status of Julius Rivera (tenure) from Professor (Full-time) to Professor (3/4 Time) effective January 16, 1975 for the 1975 Spring Semester, at his full-time nine-months rate of \$22,231.00 and lapse to Unallocated Salaries Faculty \$2,779.00 budgeted for this position. He will also serve as Professor (1/4 Time) in HEW Grant OEG-0-73-1267 Teacher Corps, 8th CYC, 2nd Year, In Service Training Program. (RBC 434)

COLLEGE OF SCIENCE

Biological Sciences

- 69. Appoint William H. Reid (non-tenure) as Assistant Professor effective January 16, 1975 for the 1975 Spring Semester, at a nine-months rate of \$12,200.00 with the necessary funds in the amount of \$6,100.00 to come from Unallocated Salaries Faculty. (RBC 383)
- 70. Accept the resignation of Andrew O. Martinez (non-tenure), Assistant Professor (1/2 Time), effective before September 1, 1974, and lapse to Unallocated Salaries Faculty \$5,874.00 budgeted for this position. (RBC 418)

Geological Sciences

- 71. Accept the resignation of Spencer S. Shannon (tenure), Associate Professor, effective January 31, 1975, and lapse to Unallocated Salaries Faculty \$6,626.25 budgeted for this position. (RBC 416)
- 72. Appoint William S. Strain (non-tenure) as Professor Emeritus (1/8 Time) effective January 16, 1975 for the 1975 Spring Semester, at a full-time nine-months rate of \$16,958.00 with the necessary funds in the amount of \$1,060.00 to come from Unallocated Salaries Faculty. (RBC 417)

RESIDENT INSTRUCTION (CONTINUED)

COLLEGE OF SCIENCE (CONTINUED) Office of the Coordinator of Health Related Programs 73. Transfer of Funds:

From: Unallocated Salaries - Other \$750.00 To: Maintenance and Operation 750.00

For: Transfer between dissimilar appropriations to allow the department to service its needs. (RBC 425)

VARIOUS COLLEGES

Various Departments

74. Increases shown on the attached schedule are recommended to eliminate gender-related and other inequities in faculty salaries. (RBC 409)

1974 - 75

Recommended

Amount

Department and Name		Rank	Time	1974-75 Rate at 1-31-75	Adjusted Rate at 2-1-75 (S.B. 1)	Additional Increase Effective 2-1-75	197 <mark>4-75</mark> Adjusted Rate	Required from Unallocated Faculty Salaries	
		THE PARTY OF THE P							
College of Liberal Arts (Cont.) Modern Languages Diana S. Natalicio Arturo Perez	T T	Associate Professor Assistant Professor	50% : 100%	\$ 13,800.00 12,148.00	\$ 15,039.00 13,239.00	\$ 700.00 700.00	\$ 15,739.00 13,939.00		
Music Marcia T. Fountain	T	Assistant Professor	100%	11,928.00	13,005.00	450.00	13,455.00	\$ 200.00	
Political Science Melvin P. Straus	Ţ	Professor	100%	14,579.00	15,894.00	1,000.00	16,894.00	\$ 444.44	
Sociology Sarah B. Watley		Instructor	100%	11,744.00	12,798.00	400.00	13,198.00	\$ 177.76	
College of Science Biological Sciences Eleanor L. Duke	Т	Associate Professor	100%	13,143.00	14,328.00	500.00	14,828.00	\$ 222.20 \$ 6,972.92	+T*30

1974-75

Recommended

Amount

OPERATION AND MAINTENANCE OF PHYSICAL PLANT

Building Maintenance

Transfer of Funds:

From: Building Maintenance - Salaries \$7,558.71

Building Maintenance - Maintenance and

Operation 7,300.00 Grounds Maintenance - Salaries 258.71

For: Transfer between dissimilar appropriations and departments to allow the Physical Plant

to service its needs more effectively.

(RBC 426)

CONTRACT RESEARCH AND SERVICES

U. S. Army Materiel Command Contract DAAD07-74-C-0103 - Data Collection and Analysis Development

- 76. Appoint Jack Smith as Research Engineer (1/4 Time) effective January 16 through May 31, 1975, at his full-time nine-months rate of \$19,261.00 as Professor of Electrical Engineering with the necessary funds in the amount of \$2,408.00 to come from budgeted salaries for this contract. He will also serve as Professor (3/4 Time) in the Department of Electrical Engineering for the 1975 Spring Semester. (RBC 393)
- 77. Appoint Wang Tang as Research Associate (1/4 Time) effective January 16 through May 31, 1975, at his full-time nine-months rate of \$6,000.00 as Teaching Assistant of Electrical Engineering with the necessary funds in the amount of \$750.00 to come from budgeted salaries for this contract. He will also serve as Teaching Assistant (1/4 Time) in the Department of Electrical Engineering for the 1975 Spring Semester. (RBC 408)

U. S. Army Materiel Command Contract DAAD07-74-C-0263 - Upper Atmospheric Research III

78. Appoint Zvi Salpeter as Research Associate (1/4 Time) effective January 16 through May 31, 1975, at his full-time nine-months rate of \$6,408.00 as Teaching Assistant of Electrical Engineering with the necessary funds in the amount of \$801.00 to come from budgeted salaries for this contract. He will also serve as Teaching Assistant (1/4 Time) in the Department of Electrical Engineering for the 1975 Spring Semester. (RBC 407)

<u>Veterans Administration Contract V349V-2478 - VA Counseling - FY 75</u> 79. Reappoint Ursula M. White as Psychometrist (2/3 Time) effective January 1 through August 31, 1975, and increase her full-time annual rate from \$9,198.00 to \$9,510.00 with the necessary funds in the amount of \$4,226.64 to come from budgeted salaries for this contract. She will also serve as Counseling Psychologist (1/3 Time) in this same contract. (RBC 361)

- 80. Reappoint Ursula M. White as Counseling Psychologist (1/3 Time) effective January 1 through August 31, 1975, and increase her full-time annual rate from \$10,566.00 to \$10,925.00 with the necessary funds in the amount of \$2,428.00 to come from budgeted salaries for this contract. She will also serve as Psychometrist (2/3 Time) in this same contract. (RBC 362)
- 81. Reappoint Frances Z. Mason as Counseling Psychologist effective January 1 through August 31, 1975, and increase her annual rate from \$13,028.00 to \$13,470.00 with the necessary funds in the amount of \$8,980.00 to come from budgeted salaries for this contract. (RBC 363)

Public Health Service Grant 1 T21 MH 13629-01 - Evaluation Research Training Program 82. Appoint Luiz F. Natalicio as Associate Professor (1/4 Time) effective January 16 through May 31, 1975, at his full-time nine-months rate of \$16,038.00 as Associate Professor of Curriculum and Instruction with the necessary funds in the amount of \$2,005.00 to come from budgeted salaries for this grant. He will also serve as Associate Professor (1/2 Time) in the Department of Curriculum and Instruction and Associate Professor (1/4 Time) in HEW Grant OEG-0-73-1267 -Teacher Corps, 8th CYC, 2nd Year, In Service Training Program. (RBC 388)

Public Health Service Grant 5 S06 RR 08012-03 - Biomedical Research Internship 83. Accept the resignation of Andrew O. Martinez, Research Associate (1/2 Time), effective before September 1, 1974, and lapse to unencumbered salaries \$5,874.00 budgeted for this position. (RBC 419)

CONTRACT RESEARCH AND SERVICES (CONTINUED)

Public Health Service Grant 5 306 RR 08012-04 - Biomedical Research Internship - 4th Year

84. Reappoint John R. Bristol as Director (43/100 Time) effective January 1 through May 31, 1975, at his full-time nine-months rate of \$13,702.00 as Associate Professor of Biological Sciences with the necessary funds in the amount of \$3,273.36 to come from budgeted salaries for this grant. He will also serve as Associate Professor (57/100 Time) in the Department of Biological Sciences. (RBC 366)

HEW Grant OEG-0-73-1267 - Teacher Corps, 8th CYC, 2nd Year, In Service Training Program

- 85. Appoint Eldon E. Ekwall as Professor (1/4 Time) effective January 16 through May 31, 1975, at his full-time nine-months rate of \$16,162.00 as Professor of Curriculum and Instruction with the necessary funds in the amount of \$2,020.00 to come from budgeted salaries for this grant. He will also serve as Professor (3/4 Time) in the Department of Curriculum and Instruction for the 1975 Spring Semester. (RBC 386)
- 86. Appoint Iuiz F. Natalicio as Associate Professor (1/4 Time) effective January 16 through May 31, 1975, at his full-time nine-months rate of \$16,038.00 as Associate Professor of Curriculum and Instruction with the necessary funds in the amount of \$2,005.00 to come from budgeted salaries for this grant. He will also serve as Associate Professor (1/2 Time) in the Department of Curriculum and Instruction and Associate Professor (1/4 Time) in PHS Grant 1 T 21 MH 13629-01 Evaluation Research Training Program. (RBC 389)
- 87. Appoint Maximino Plata as Assistant Professor (1/4 Time) effective January 16 through May 31, 1975, at his full-time nine-months rate of \$13,884.00 as Assistant Professor of Educational Psychology and Guidance with the necessary funds in the amount of \$1,736.00 to come from budgeted salaries for this grant. He will also serve as Assistant Professor (3/4 Time) in the Department of Educational Psychology and Guidance for the 1975 Spring Semester. (RBC 391)
- 88. Appoint Marie E. Barker as Assistant Professor (1/4 Time) effective January 16 through May 31, 1975, at her full-time nine-months rate of \$11,702.00 as Assistant Professor of Curriculum and Instruction with the necessary funds in the amount of \$1,463.00 to come from budgeted salaries for this grant. She will also serve as Assistant Professor (3/4 Time) in the Department of Curriculum and Instruction for the 1975 Spring Semester. (RBC 413)
- 89. Appoint Julius Rivera as Professor (1/4 Time) effective January 16 through May 31, 1975, at his full-time nine-months rate of \$22,231.00 as Professor of Sociology with the necessary funds in the amount of \$2,779.00 to come from budgeted salaries for this grant. He will also serve as Professor (3/4 Time) in the Department of Sociology for the 1975 Spring Semester. (RBC 435)
- HEW Grant OEG-0-74-2855 Prepare Teachers to Educate Handicapped Children 90. Appoint Joseph J. Jones as Lecturer (1/2 Time) effective January 16 through May 31, 1975, at his full-time nine-months rate of \$8,836.00 as Lecturer of Curriculum and Instruction with the necessary funds in the amount of \$2,209.00 to come from budgeted salaries for this grant. He will also serve as Lecturer (1/2 Time) in the Department of Curriculum and Instruction for the 1975 Spring Semester. (RBC 428)
- OEO Grant OEO 60868-G High School Equivalency Program 7th Year 91. Promote Raul R. Ceniceros from Resident Counselor to Recruitment and Replacement Specialist effective November 25 through 30, 1974, and adjust his annual rate from \$6,000.00 to \$7,200.00 with the necessary additional funds in the amount of \$20.00 to come from budgeted salaries for this grant. (RBC 327)

Department of Labor Crant DL 99-5-242-31-10 - High School Equivalency Program - 8th Year

- 92. Reappoint Raul R. Ceniceros as Recruitment and Replacement Specialist effective December 1, 1974 through August 31, 1975, at his annual rate of \$7,200.00 with the necessary funds in the amount of \$5,400.00 to come from budgeted salaries for this grant. (RBC 328)
- 93. Reappoint Frank Ciriza as Director effective December 1, 1974 through August 31, 1975, at his annual rate of \$14,822.00 with the necessary funds in the amount of \$11,116.52 to come from budgeted salaries for this grant. (RBC 348)

- CONTRACT RESEARCH AND SERVICES (CONTINUED)

 Department of Labor Grant DL 99-5-242-31-10 High School Equivalency Program 8th Year (Continued)
- 94. Reappoint Linda L. Nance as Science Teacher effective December 1, 1974 through August 31, 1975, at her annual rate of \$7,781.00 with the necessary funds in the amount of \$5,835.77 to come from budgeted salaries for this grant. (RBC 349)
- 95. Reappoint Cassandra Alvidrez as Resident Counselor effective December 1, 1974 through August 31, 1975, at her annual rate of \$5,682.00 with the necessary funds in the amount of \$4,261.50 to come from budgeted salaries for this grant. She will also receive room and board valued at \$110.00 per month. (RBC 350)
- 96. Reappoint Margo C. Andara as Social Studies Teacher effective December 1, 1974 through August 31, 1975, at her annual rate of \$7,464.00 with the necessary funds in the amount of \$5,598.00 to come from budgeted salaries for this grant. (RBC 351)
- 97. Reappoint Walter J. Canchucaja as Math Teacher effective December 1, 1974 through August 31, 1975, at his annual rate of \$7,200.00 with the necessary funds in the amount of \$5,400.00 to come from budgeted salaries for this grant. (RBC 352)
- 98. Reappoint Helen L. Soforo as Literature Teacher effective December 1, 1974 through August 31, 1975, at her annual rate of \$7,896.00 with the necessary funds in the amount of \$5,922.00 to come from budgeted salaries for this grant. (RBC 353)
- 99. Reappoint Evangelina Duarte as English Teacher effective December 1, 1974 through August 31, 1975, at her annual rate of \$7,200.00 with the necessary funds in the amount of \$5,400.00 to come from budgeted salaries for this grant. (RBC 354)
- 100. Reappoint Luis Meraz as Reading Instructor (1/2 Time) effective December 1, 1974 through August 31, 1975, at his full-time annual rate of \$7,544.00 with the necessary funds in the amount of \$2,829.00 to come from budgeted salaries for this grant. (RBC 355)
- 101. Reappoint Pablo Romero as Head Counselor effective December 1, 1974 through August 31, 1975, at his annual rate of \$6,533.00 with the necessary funds in the amount of \$4,899.77 to come from budgeted salaries for this grant. He will also receive room and board valued at \$110.00 per month. (RBC 356)
- 102. Reappoint Jaime Castro as Associate Director effective December 1, 1974 through August 31, 1975, at his annual rate of \$11,178.00 with the necessary funds in the amount of \$8,383.50 to come from budgeted salaries for this grant. (RBC 357)
- 103. Promote Luis Meraz from Reading Instructor (1/2 Time) to Resident Counselor (Full-time) effective January 1 through August 31, 1975, and adjust his annual rate from \$7,544.00 to \$5,682.00. He will also receive room and board valued at \$110.00 per month. (RBC 358)
- Department of the Interior Grant DI G025\(^1\)013 Minerals Availability 10\(^1\). Appoint Thomas Glover as Research Assistant (1/2 Time) effective February 3 through August 31, 1975, at a full-time annual rate of \$7,200.00 with the necessary funds in the amount of \$2,078.57 to come from budgeted salaries for this grant. (RBC 433)
- Texas Education Agency Grant Region XIII STLCTEC Project FY 75

 105. Appoint Dick S. Calkins as Program Research and Evaluation Specialist (1/4 Time) effective January 16.through August 31, 1975, at his full-time ninemonths rate of \$12,700.00 as Assistant Professor (Visiting) of Psychology with the necessary funds in the amount of \$2,645.00 to come from budgeted salaries for this grant. He will also serve as Assistant Professor (Visiting) (3/4 Time) in the Department of Psychology for the 1975 Spring Semester. (RBC 395)
- 106. Appoint Dick S. Calkins as Program Research and Evaluation Specialist (1/4 Time) effective September 1, 1974 through January 15, 1975, at his full-time ninemonths rate of \$12,700.00 as Assistant Professor (Visiting) of Psychology with the necessary funds in the amount of \$1,587.00 to come from budgeted salaries for this grant. He also served as Assistant Professor (Visiting) (3/4 Time) in the Department of Psychology for the 1974 Fall Semester. (RBC 414)

RESTRICTED CURRENT FUNDS JOSEPHINE CLARDY FOX FUND Institute of Oral History

107. Appoint Oscar J. Martinez as Co-Director (1/2 Time) effective January 16 through May 31, 1975 at his full-time nine-months rate of \$12,000.00 as Instructor of History with the necessary funds in the amount of \$3,000.00 to come from budgeted salaries for this department. He will also serve as Instructor (1/2 Time) in the Department of History for the 1975 Spring Semester. (RBC 360)

AUXILIARY ENTERPRISES

Intercollegiate Athletics

108. Increase the full-time annual rate of Andrew H. Cohen, Baseball Coach (1/2 Time), effective February 1, 1975 from \$4,344.00 to \$5,040.00 with the necessary funds in the amount of \$203.00 to come from budgeted salaries for this department. This increase is slightly more than the 13 percent increase. (RBC 411)

The Union - Office of the Union Director

109. Accept the resignation of William L. Cure, Assistant Director-Programs and Services, effective January 31, 1975, and lapse to unencumbered salaries \$6,175.20 budgeted for this position. (RBC 347)

110. Promote Jesus R. Castro from Building Services Supervisor to Assistant Director effective February 1, 1975, and adjust his annual rate from \$8,160.00 to \$11,712.00 with the necessary additional funds in the amount of \$2,072.00 to come from budgeted salaries for this department. (RBC 429)

THE UNIVERSITY OF TEXAS OF THE PERMIAN BASIN

Odessa, Texas 79762

April 1, 1975

Chancellor Charles A. LeMaistre The University of Texas System 601 Colorado Street Austin, TX 78701

Dear Chancellor LeMaistre:

The docket for the April 28, 1975 meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.

Sincerely,

V. R. Cardozier President ad interim

THE UNIVERSITY OF TEXAS OF THE PERMIAN BASIN April 28, 1975 Meeting

N x fr

GRANTS, CONTRACTS AND AGREEMENTS - (NON-GOVERNMENTAL)

1. Modification No. 1 to Contract SBA-2053-PMA-75, by which the Small Business Administration, Lubbock, Texas, provides \$2,500 additional funds for the period January 2, 1975 through June 30, 1975. The program for the support of management counseling and technical assistance to small business concerns continues under the direction of Dr. Bernard M. Tucker, Associate Professor of Management.

THE UNIVERSITY OF TEXAS OF THE PERMIAN BASIN April 28, 1975 Meeting

RECOMMENDED AMENDMENTS TO THE 1974-75 BUDGET

GENERAL ADMINISTRATION:

Office of the President

1. Appoint Dr. John Lawrence Walker as Assistant to the President, (Code 1000), Office of the President at .7500 time at an annual salary rate of \$15,600 for the period of 9/1/74 - 5/31/75 and 1.000 time for the period of 6/1/75 - 8/31/75 at the same salary rate. Source of Funds; \$7950 from budgeted position, \$2925 from Classified Salaries, Office of the Vice President for Business Affairs and \$1800 from Administrative Salaries, Office of the Vice President for Academic Affairs. NOTE: Dr. Walker has a concurrent appointment as Assistant Professor of Spanish at .2500 time at an academic rate of \$11,700 for 9 months for the period of 9/1/74 - 5/31/75. (RBC #46)

GENERAL INSTITUTIONAL EXPENSE:

News and Information

2. Transfer of Funds:

From: Administrative Salaries,

News and Information \$1400

To: Wages, News and

Information \$1400

For: To provide funds for

employment of part-

time workers.

(RBC #108)

RESIDENT INSTRUCTION:

Faculty, College of Management

- 3. Appoint John E. Grist as Lecturer in Finance (without tenure) (Code 0050), Faculty, College of Management for the period 1/16/75 5/31/75 at .1250 time at an academic rate of \$11,200 for 9 months. Source of Funds: Faculty Salaries. (RBC #103)
- 4. Appoint Mr. Larry Hoover as Lecturer in Management (without tenure) (Code 0050), Faculty, College of Management for the period of 1/16/75 5/31/75 for a stipend of \$700 at .1250 time at an academic rate of \$11,200 for 9 months. Source of Funds: Faculty Salaries. (RBC #105)
- 5. Appoint Mr. Dennis Brown as Associate Professor of Law Enforcement Management (without tenure) (Code 0020), Faculty, College of Management for the period of 12/18/74 5/31/75 at an academic rate of \$15,500. Source of Funds: Faculty Salaries. (RBC #106)

Faculty, College of Management (continued)

6. Terminate Dr. John M. Burnham as Associate Professor of Business Management, (Code 0020), Faculty, College of Management effective close 1/31/75. (RBC #109)

Faculty, College of Science and Engineering

- 7. Appoint Dr. William Hackos (without tenure) as Lecturer in Computer Science (Code 0050) at .5000 time at an academic rate of \$7,731 for 9 months from 1/16/75 5/31/75. Source of Funds: Faculty Salaries. NOTE: Dr. Hackos has a concurrent appointment as Computer Programmer I at .5000 time, Computer Services Division. (RBC #107)
- 8. Remove Dr. B. H. Amstead (with tenure) from payroll as Professor of Engineering (Code 0010), Faculty, College of Science and Engineering effective 2/28/75. Dr. Amstead will continue to hold the title of Professor of Engineering with tenure. (RBC #113)

Faculty, College of Arts and Education

- 9. Appoint Dr. John Lawrence Walker (without tenure) as Assistant Professor of Spanish (Code 0030) at .2500 time at an academic rate of \$11,700 for the period of 9/1/74 5/31/75. Source of Funds: Faculty Salaries. NOTE: Dr. Walker has a concurrent appointment as Assistant to the President (Code 1000), Office of the President at .7500 time for the period of 9/1/74 5/31/75 and 1.000 time 6/1/75 8/31/75 at a full time salary rate of \$15,600. (RBC #47)
- 10. Appoint Vicki Lynn Dublin as Lecturer in Communications (without tenure) (Code 0050), Faculty, College of Arts and Education for the period of 1/16/75 5/31/75 at .1250 time at an academic rate of \$8,000 for 9 months. Source of Funds: Faculty Salaries. (RBC #102)
- 11. Appoint Mr. Anthony V. Rao as Lecturer of Sociology (without tenure) (Code 0050), for the period of 1/16/75 5/31/75 for a stipend of \$750 at .1250 time at an academic rate of \$11,680 for 9 months. Source of Funds: Faculty Salaries. (RBC #104)

1975 SUMMER SESSION BUDGET

I recommend approval of the 1975 Summer Session Budget. The budget reflects an expenditure of \$248,541. This amount is available from the allocation for the Summer Session in the 1974-75 Operating Budget plus additional funds from Faculty Salaries.



THE UNIVERSITY OF TEXAS OF THE PERMIAN BASIN

RECOMMENDATIONS FOR SALARY BUDGET FOR SUMMER SESSION 1975

ODESSA, TEXAS
April 28, 1975

THE UNIVERSITY OF TEXAS OF THE PERMIAN BASIN

Odessa, Texas

1975 SUMMER SESSION BUDGET

First Term: 6/1/75 - 7/15/75 Second Term: 7/16/75 - 8/31/75

SOURCE OF FUNDS

Summer Session Appropriation in 74-75 Budget\$234,714 Faculty Salaries, College of Management								
TOTAL 1975 SUMMER SESSION BUDGET\$248,541								
RESIDENT INSTRUCTION								
College of Management								
TOTAL 1975 SUMMER SESSION BUDGET\$248,541								

	COLLEGE OF MANAGEMENT		~ 7 /m 7 m	m 1c/o o	2
	PAYROLL TITLE NAME	9 MOS. RATE		7-16/8-3. F PERCENT OF RY TIME SALA	
	ACCOUNTANCY				
	PROFESSOR & CHAIRMAN				
1.	Eugene A. Nini TT	\$23,286	100 \$ 3,88	81 100 \$ 3,8	81 \$ 7,762
	ASSOCIATE PROFESSOR				
2.	Charles J. Doryland	18,500	024 75	50 100 3,0	83 3,833
	ASSISTANT PROFESSOR				
3.	Sally Jo Wright	17,982	100 2,99	97	2,997
	LECTURER				
4.	Linda M. Felts	13,950	037 83	72 037 8	72 1,744
	BUSINESS MANAGEMENT				
	ASSOCIATE PROFESSOR & CHAIRMAN				
5.	Halsey R. Jones	20,696	100 3,44	49 100 3,4	50 6,899
	PROFESSOR				
6.	Robert H. McIntire TT	20,566	100 3,42	28	3,428
	ASSOCIATE PROFESSOR				
7.	Richard P. Carr	18,747	100 3,12	24 100 3,1	25 6,249
8.	Ronald F. Reimer	18,531		100 3,0	89 3,089
9.	J. Taylor Sims TT	20,566	100 3,42	27 100 3,42	28 6,855
10.	Bernard M. Tucker	17,982	100 2,99	97 100 2,9	97 5,994
	ECONOMICS				
	ASSISTANT PROFESSOR				
11.	Paul E. Hodges	14,985	100 2,49	98	2,498
	INSTRUCTOR				
12.	Jay Dee Martin	13,077		100 2,1	80 2,180
	LAW ENFORCEMENT MANAGEMENT				
	ASSOCIATE PROFESSOR				
13.	Dennis C. Brown	16,893		100 2,8	16 2,816
14.	Thomas G. Nicholson	18,531	050 1,54	14	1,544
	Sub-Total		\$28,96	\$28,92	21 \$57,888

COLLEGE	OF	SCIENCE	AND	ENGINEERING

	PAYROLL TITLE NAME	9 MOS. RATE	6/1-7/ PERCENT TIME SA	r of			TOTAL SALARY
	CHEMISTRY						
	ASSISTANT PROFESSOR						
<u>_</u>	Charles Bibart	\$13,626	100 \$ 2	2,271	\$		\$ 2,271
	VISITING ASSISTANT PROFESSOR						
2.	Jeanette Nappier	13,077	100 2	2,180		THE STEE SALE	2,180
	COMPUTER SCIENCE						
	ASSISTANT PROFESSOR						
3.	Betty A. Sproule	13,077	100 2	2,180	****		2,180
	LECTURER						
4.	William Hackos	8,739	100 1	L,457		****************	1,457
	EARTH SCIENCE						
	ASSOCIATE PROFESSOR						
5.	Emilio Mutis-Duplat	16,623	100 2	2,771	<u></u>	*****	2,771
	ENGINEERING						
	ASSOCIATE PROFESSOR						
6.	Clyde Sprague TT	20,316	083 2	,822	083	2,822	5,644
7.	George Quentin	16,947	083 2	2,354	083	2,354	4,708
	ASSISTANT PROFESSOR						
8.	Charles Max Fry	14,553	083 2	2,021	083	2,021	4,042
	LIFE SCIENCE						
	PROFESSOR & CHAIRMAN						
9.	Edwin Kurtz	21,566			075	2,696	2,696
	ASSISTANT PROFESSOR						
10.	Charles McKinney	15,138	100 2	2,523	- w w		2,523
11.	Charlene Wisdom	14,004	***************************************		100	2,334	2,334
	VISITING ASSISTANT PROFESSOR						
12.	Walter Johnson	13,077	100 2	2,180			2,180

OLLEGE OF SCIENCE AND ENGINEERING

	PAYROLL TITLE NAME	9MOS. RATE	6/1-7/15 PERCENT OF TIME SALARY		TOTAL SALARY
	MATHEMATICS				
	PROFESSOR				
3.	James Nickel	\$17,496	100 \$ 2,916	100 \$ 2,916	\$ 5,832
	ASSISTANT PROFESSOR				
.4.	Douglas Hale	14,553	AND NOW AREA	100 2,426	2,426
	VISITING ASSISTANT PROFESSOR				
.5.	James Hein	13,077	100 2,180		2,180
	PHYSICS				
	ASSISTANT PROFESSOR				
6.	Horace Bledsoe	14,166	050 1,181	050 1,181	2,362
	Sub-Total		\$29,036	\$18,750	\$47,786

)LLEGE OF ARTS AND EDUCATION

			PERCE		PERCEN	·8/31 IT OF SALARY	TOTAL SALARY
	ANTHROPOLOGY AND SOCIOLOGY						
	PROFESSOR						
,	Edwin S. Harwood	\$19,666		>	100 \$	3,278	\$ 3,278
	ASSISTANT PROFESSOR						
	Joseph Bastien	14,715	100	2,453		moved sounce alongs	2,453
	LECTURER						
,	Anthony Rao	12,731	039	819		WMM more some	819
	ART						
	PROFESSOR AND CHAIRMAN						
	William King TT	20,066	100	3,344	100	3,344	6,688
	ASSOCIATE PROFESSOR						
,	Wesley D. Simpson	16,893	100	2,816	100	2,816	5,632
	VISITING ASSISTANT PROFESSOR						
	Thomas Griffard	11,529	100	1,922		***** *****	1,922
	LECTURER						
,	Pamela Price	12,226	059	1,200			1,200
-	David Mead	8,739	050	728	101 mm	**** ****	728
	COMMUNICATION						
	ASSOCIATE PROFESSOR						
	Robert Rothstein	16,353	050	1,363		***************************************	1,363
	ASSISTANT PROFESSOR						
	Michael Sproule	13,077	100	2,180	*****	MARIA AMINA APPAR	2,180
	VISITING ASSISTANT PROFESSOR						
	Robert Lewis	13,625	044	1,000	044	1,000	2,000
	LECTURER						
	Vickie Dublin	9,026	037	550	2000 W-W W-M		550

OLLEGE OF ARTS AND EDUCATION

	PAYROLL TITLE NAME	9 MOS. RATE	6/1-7/15 PERCENT OF TIME SALARY		TOTAL SALARY
	GOVERNMENT				
	ASSISTANT PROFESSOR				
٠	Kevin-John H. McIntyre	\$13,617	050 \$ 1,135	100 \$ 2,270	\$ 3,405
•	Lee Dutter	12,537	050 1,045		1,045
	HISTORY				
	ASSOCIATE PROFESSOR				
	Roger Olien	16,074	100 2,679		2,679
•	Mary Quinlivan	15,804	100 2,634		2,634
	ASSISTANT PROFESSOR				
٠	Frank Samponaro	13,077		100 2,180	2,180
	LITERATURE AND CREATIVE WRIT	ING			
	ASSOCIATE PROFESSOR				
٠	James P. White	14,170	100 2,362		2,362
	VISITING ASSOCIATE PROFESSOR				
٠	Gordon Thomas	14,100	100 2,350		2,350
	ASSISTANT PROFESSOR				
٠	Margaret Neussendorfer	14,553	050 1,213	050 1,213	2,426
o	JoAnn Hackos	13,353	100 2,226		2,226
٠	John Walker	11,700	100 1,950	***************************************	1,950
	LECTURER				
4	Martha King	14,040	043 1,000		1,000
	MUSIC				
	ASSOCIATE PROFESSOR AND CHAI	RMAN			
۰	David Sloan TT	17,442	100 2,907		2,907
	PEDAGOGICAL STUDIES				
	PROFESSOR AND CHAIRMAN				
4	Clarence Kron TT	23,066	100 3,844	100 3,844	7,688

OLLEGE OF ARTS AND EDUCATION

	PAYROLL TITLE NAME	9 MOS. RATE	PERCI	-7/15 ENT OF SALARY	PERC	6-8/31 ENT OF SALARY	TOTAL SALARY
	PEDAGOGICAL STUDIES (contin	ued)					
	ASSOCIATE PROFESSOR						
:6.	Robert F. Ihinger	\$17,550	100	\$ 2,925		\$	\$ 2,925
:7.	Munro Shintani	17,982	100	2,997	100	2,997	5,994
:8.	Scott Irwin	16,893	100	2,816	100	2,816	5,632
<u></u> ?9.	Don Miller	16,893	100	2,816	-		2,816
30.	Terryl Anderson TT	16,074	100	2,679	100	2,679	5,358
	VISITING ASSOCIATE PROFESSO	R					
11.	Richard Miller	16,902	100	2,817	100	2,817	5,634
	ASSISTANT PROFESSOR						
12.	Russell Johnson	15,804	100	2,634	100	2,634	5,268
.3.	G. Peter Ienatsch	14,715	100	2,453	100	2,453	4,906
4.	Thomas Dynneson	14,823	100	2,471	server assess usessay	2000 4000 4000	2,471
5.	Kenneth Smith	14,166	100	2,361	100	2,361	4,722
6.	Spencer Thompson	13,077	100	2,180	<u></u>		2,180
7.	Patricio Jaramillo	13,626	100	2,271	100	2,271	4,542
8.	PART-TIME INSTRUCTORS			500			500
	PHYSICAL EDUCATION AND HEAL	TH					
	ASSOCIATE PROFESSOR AND CHA	IRMAN					
9.	Robert Carlson TT	18,747			100	3,125	3,125
	ASSOCIATE PROFESSOR						
Э.	Juris Terauds	14,715	100	2,453			2,453
	ASSISTANT PROFESSOR						
1.	Lois Smith	13,077	100	2,180			2,180
	LECTURER						
2.	John T. F. Cheffers	14,000	064	1,500		which were water	1,500

)LLE	GE OF ARTS AND EDUCATION		6/1-7/15	7/16-8/31	
	PAYROLL TITLE	9 MOS.	PERCENT OF TIME SALARY	PERCENT OF TIME SALARY	TOTAL SALARY
	NAME	RATE	TIME SALAKI	IIME SALANI	INAUMO
	PSYCHOLOGY				
	ASSOCIATE PROFESSOR AND C	CHAIRMAN			
3.	Jon Swartz	\$17,982	100 \$ 2,997	100 \$ 2,997\$	5,994
	ASSOCIATE PROFESSOR				
4.	Judith Smith	15,804	NAST Spring Adds	100 2,634	2,634
	ASSISTANT PROFESSOR				
5.	James Olson	13,077	100 2,180	100 2,180	4,360
	INSTRUCTOR				
₄ 6 .	Andre Joseph	12,024	100 2,004	100 2,004	4,008
	Sub Total		\$88,954	\$53,913\$	142,867

THE UNIVERSITY OF TEXAS AT SAN ANTONIO Office of the President April 1, 1975

Chancellor Charles A. LeMaistre The University of Texas System 601 Colorado Street Austin, Texas 78701

Dear Chancellor LeMaistre:

The docket for the April 28, 1975 meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

Yours very truly

I recommend approval.

SA-1

THE UNIVERSITY OF TEXAS AT SAN ANTONIO April 28, 1975



GIFTS: Acceptance is recommended for the following gifts which have been received:

	Donor	Purpose and Conditions	Amount
1.	Mr. Hugh L. McMath 2501 Inwood Place Austin, Texas 78712	Gift to the College of Fine and Applied Arts of a collection of photographs of Colonial Mexican Archi- tecture for teaching purposes.	\$ 7,000.00**
2.	Harry and Alma Dietert 1214 Virginia Drive Kerrville, Texas 78028	Gift to the Library of Bibles and other biblical documents to be known as the Perine-Dietert Bible Collection.	\$60,000.00** (estimated)

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.

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 of the Board of Regents for government of The University of Texas System:

 Frank Pino, Jr., Associate Professor, Division of Foreign Languages, March 19, 1975 through April 7, 1975, to Madrid, Spain, to attend and participate in the XVII Congreso del Instituto Internacional de Literatura Iberoamericana. To identify research materials in the Biblioteca Nacional and the Archivo de Indias. No expense to The University.

USE OF TEXTBOOKS WRITTEN BY FACULTY: In accordance with Chapter II, Section 24 of Part One of the Regents' Rules and Regulations for the government of The University of Texas, approval is recommended for use of the following faculty authored publications as textbooks for the 1974-75 Summer Session (1.), and 1975-76 fiscal year (2.).

	<u>Title</u>	Author	Cost to Student	Per Volume Royalty To Author
1.	A Guide to Field Methods In Archaeology	T. R. Hester, R. F. Heizer and J. A. Grah	\$11.00 am	\$.55
2.	C. P. A. Review Program, Tax Section (University of New Orleans)	John Ellett an Ruth H. Bullar	•	None

THE UNIVERSITY OF TEXAS AT SAN ANTONIO GRANTS, CONTRACTS, AND AGREEMENTS (NON-GOVERNMENTAL) April 28, 1975

State

GRANTS, CONTRACTS, AND AGREEMENTS (NON-GOVERNMENTAL): Approval is requested for the following:

Tennessee Valley Authority Knoxville, Tennessee 47901

1. Contract Number TV-42018A

Tennessee Valley Authority Archaeological Investigation

To conduct an archaeological investigation of various uranium properties located in Texas and provide a report of results to the Tennessee Valley Authority.

Dr. Thomas R. Hester, Director, Center for Archaeological Research January 31, 1975 through January 30, 1976 Not to exceed \$10,700.00 plus transportation and subsistence expenses Bexar County, Texas

Guadalupe-Blanco River Authority 933 E. Court Street, P. O. Box 271 Seguin, Texas 78155

2. Agreement

Archaeological Survey of the Coleto Creek Project

To conduct a comprehensive survey of archaeological and historical resources in the Coleto Creek Project.

Dr. Thomas R. Hester, Director, Center for Archaeological Research Approved February 12, 1975 - No specific ending date \$5,028.00

Bexar County, Texas

City of San Antonio P. O. Box 9066 San Antonio, Texas 78285

3. Agreement

Archaeological Survey and Assessment of Emilie and Albert Friedrich Park

To conduct an archaeological survey and assessment of Emilie and Albert Friedrich Park.

Dr. Thomas R. Hester, Director, Center for Archaeological Research March 1, 1975 through June 1, 1975 \$1,164.00

Bexar County, Texas

THE UNIVERSITY OF TEXAS AT SAN ANTONIO GRANTS, CONTRACTS, AND AGREEMENTS (FEDERAL) April 28, 1975



GRANTS, CONTRACTS, AND AGREEMENTS (FEDERAL): Approval is requested for the following:

National Science Foundation

1. Grant No. EPP75-06413 Student Science Training for High Ability Secondary School Students Students who have completed the 11th grade from high schools of 1imited scientific instructional facilities will participate in a laboratoryoriented instructional enrichment program in physics. Dr. Richard F. Sweet, Division of Earth and Physical Sciences February 15, 1975 through October 31, 1975 \$8,160.00 Bexar County, Texas

Department of Agriculture Soil Conservation Service

2. Purchase Order No. 1102-TX-SCS-75, dated February 20, 1975 Amendment No. 1.to Agreement for Chiltipin-San Fernando Creek Watershed Archaeological Survey

This project is to include furnishing necessary materials, equipment and labor to do additional archaeological investigation and prepare a report on site No. 5, Chiltipin-San Fernando Creeks Watershed in accordance with specifications.

Dr. Thomas R. Hester, Director, Center for Archaeological Research \$2,300.00

Bexar County, Texas

THE UNIVERSITY OF TEXAS AT SAN ANTONIO RECOMMENDED AMENDMENTS TO THE 1974-75 BUDGET April 28, 1975

RESIDENT INSTRUCTION

College of Multidisciplinary Studies

Division of Environmental Studies

1. Appoint Dr. Charles H. Stromberg (non-tenure) as Lecturer (33% time), at an academic salary rate of \$10,800.00 for nine months, effective January 16, 1975 through May 31, 1975. Funds for this appointment are available in the division's Faculty Salaries account. (RBC 91)

College of Sciences and Mathematics

Division of Earth and Physical Sciences

- Cancel the appointment of Dr. John Toboada (non-tenure) as Adjunct Professor (without salary), effective January 1, 1975. Dr. Taboada declined to accept the appointment. (RBC 86)
- 3. Cancel the appointment of Dr. Patrick L. Parker (non-tenure) as Adjunct Professor (without salary), effective January 1, 1975. Dr. Parker declined to accept the appointment. (RBC 94)
- 4. Cancel the appointment of Dr. Chase Van Baalen (non-tenure) as Adjunct Professor (without salary), effective January 1, 1975. Dr. Van Baalen declined to accept the appointment. (RBC 95)

Division of Mathematics, Computer Science and Systems Design

5. Appoint Dr. Craig W. Thompson (non-tenure) as Instructor (25% time), at an academic salary rate of \$12,000.00 for nine months, effective January 16, 1975 through May 31, 1975. Funds for this appointment are to come from NSF Grant GZ3376. (RBC 101)

BUDGET TRANSFERS

Transfer of Funds

6. Amount of Transfer: \$5,538.00

From: Institute of Texan Cultures, Unallocated \$5,538.00

To: Institute of Texan Cultures, Physical Plant
Classified Salaries \$5,538.00

For: To provide this department with funds necessary to meet its staffing requirements. (RBC 103)

BUDGET TRANSFERS (continued)

Transfer of Funds

7. Amount of Transfer: \$5,000.00

From:	Office of the President, U. T. San Antonio Foundation	\$5,000.00
To:	College of Business, Office of the Dean, Special Fund	\$1,000.00
	College of Fine and Applied Arts, Office of the Dean, Special Fund	1,000.00
	College of Humanities and Social Sciences, Office of the Dean, Special Fund	1,000.00
	College of Multidisciplinary Studies, Office of the Dean, Special Fund	1,000.00
	College of Sciences and Mathematics, Office of the Dean, Special Fund	1,000.00

For: Administrative expenses of the various college deans' offices. (RBC 102)

1975 SUMMER SESSION

8. Approval of the following proposed 1975 Summer Session Budget in the amount of \$392,586 is requested. This amount is available from the allocation for the Summer Session in the 1974-75 Operating Budget.



RECOMMENDATIONS FOR SALARY BUDGET FOR SUMMER SESSION 1975

> SAN ANTONIO, TEXAS March 24, 1975

SUMMARY OF 1975 SUMMER SESSION BUDGET

(ELEMENTS OF INSTITUTIONAL COST)

SOURCE OF FUNDS

Summer Session Faculty Salaries in 1974-75 Budget (p. 73)

\$569,000

Transfer to Unallocated Accounts:

Unallocated - Faculty Salaries

\$126,414

Unallocated - Classified Salaries

35,000

Unallocated - Maintenance and Operation

15,000

176,414

Funds Available

\$392,586

APPLICATION OF FUNDS

1975 Summer Session Budget

Resident Instruction

Faculty Salaries

\$392,586

1975 SUMMER SESSION BUDGET

First Term: June 1 - July 15

Second Term: July 16 - Aug. 31

RESIDENT INSTRUCTION

COLLEGE OF BUSINESS	
Division of Accounting & Business Data Systems · · · · · · ·	\$ 19,619
Division of Economics and Finance	25,784
Division of Management	33,387
DIVISION Of Management	
Total College of Business	78,790
COLLEGE OF FINE AND APPLIED ARTS	
Division of Art and Design	14,838
Division of Music	6,747
Total College of Fine and Applied Arts	21,585
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES	
Division of English, Classics, and Philosophy	12,424
Division of Foreign Languages	12,822
Division of Social Sciences · · · · · · · · · · · · · · · · · · ·	18,761
Total College of Humanities and Social Sciences	44,007
COLLEGE OF MULTIDISCIPLINARY STUDIES	
Division of Education	100,665
Division of Bicultural-Bilingual Studies	32,240
Division of Environmental Studies	45,075
Total College of Multidisciplinary Studies	177,980
COLLEGE OF SCIENCES AND MATHEMATICS	
Division of Allied Health and Life Sciences	23,758
Division of Earth and Physical Sciences	20,059
Division of Mathematics, Computer Science, & Systems	
Design	26,407
Total College of Sciences and Mathematics	70,224
TAL 1975 SUMMER SESSION BUDGET	\$ 392,586
27.2 27.2 27.2 22.2 22.2 22.2 22.2 22.2	

College	e of <u>Business</u>	Div	vision of	Accounting Data Sys		siness	
Item No.	Title/Name (Discipline)	9-Mo. <u>Rate</u>		Term - 7/15 Salary		Term - 8/31 Salary	Total Salary
	0017 Professor and Director						
1.	Leslie L. McNelis T (Accounting)	21,591	100	3,598	100	3,599	7,197
	0020 Associate Professor						
2.	Ruth H. Bullard (Accounting)	19,566	100	3,261	100	3,261	6,522
3.	Hans V. Johnson (Accounting)	17,700	100	2,950	100	2,950	5,900
	Sub-Total Division of Accou Business Data Systems	inting and		9,809		9,810	19,619

Colleg	ge of <u>Business</u>	Div	vision of	Economic	s and Fir	nance	
Item No.	Title/Name (Discipline)	9-Mo. Rate		Term - 7/15 Salary		Term - 8/31 Salary	Total Salary
1.	O017 Professor and Director Dale B. Truett T (Economics)	21,519	100	3,586	100	3,587	7,173
2.	0012 Visiting Professor Frank R. Keller (Economics)	20,970	100	3,495	100	3,495	6,990
3.	O020 Associate Professor Paul N. Bartlett (Economics)	19,062	100	3,177	100	3,177	6,354
4.	0030 Assistant Professor William S. Franklin (Economics)	15,600			100	2,600	2,600
5.		16,000		* * *	100	2,667	2,667
	Sub-Total Division of Econ	omics & Fi	nance	10,258		15,526	25,784

Colleg	ge of <u>Business</u>	Dí	Division of Management							
Item No.	Title/Name (Discipline	9-Mo. Rate		Term - 7/15 Salary	2nd Term 7/16 - 8/31 % Time Salary		Total Salary			
	0017 Professor and Director	<u>c</u>								
7.	William D. Litzinger (Management)	24,966	100	4,161	100	4,161	8,322			
	0020 Associate Professor									
2.	Gary C. Raffaele (Management)	18,531	100	3,088	100	3,089	6,177			
3.	Richard B. Wadsworth (Management)	20,070	100	3 , 345	100	3,345	6,690			
	0030 Assistant Professor									
4.	Patricia L. Burr (Marketing)	16,353	• • •	• • •	100	2,726	2,726			
5.		16,000		• • •	50	1,334	1,334			
6.	<pre>J. Ronald Carey (Marketing)</pre>	14,985	100	2,498	•••	• • •	2,498			
7.	Charles D. Porterfield (Management)	14,715	100	2,453	100	2,453	4,906			
	0050 Lecturer									
8.	James L. Quinn (Management)	8,811	50	<u>734</u>	•••		734			
	Sub-Total Division o	f Management		16,279		17,108	33,387			
	TOTAL COLLEGE OF BUS	INESS		36,346		42,444	78,790			

Colleg	e of Fine and Applied Art	S	Div	rision of	Art and I	esign)		
Item No.	Title/Name (Discipl	ine)	9-Mo. <u>Rate</u>		Term - 7/15 Salary	7/16	Term - 8/31 Salary	Total Salary
	0017 Professor and Direc	tor						
1.	Leonard Lehrer (Art)	Т	22,941	100	3,823	100	3,824	7,647
	0020 Associate Professor							
2.	Charles T. Field (Art)	T	18,090	100	3,016	50	1,508	4,524
	0022 Visiting Associate	Professor						
3.	(Art History)		16,000	100	2,667	•••	e e e	2,667
	Sub-Total Division	of Art a	nd Design		9,506		5,332	14,838

)lleg	e of <u>Fine and Applied</u>	d Arts	Div	rision of	Music			·····
tem	Title/Name (Dis	scipline)	9-Mo. Rate	• • • •	Term - 7/15 Salary	7/16	Term - 8/31 Salary	Total Salary
	0017 Professor and I	Director						
1.	Gordon H. Lamb (Music)	Т	20,241	100	3,373	100	3,374	6,747
	Sub-Total Div	ision of Mus	ic		3,373		3,374	6,747
	TOTAL COLLEGE	OF FINE AND	APPLIED ART	rs	12,879		8,706	21,585

College of <u>Humanities and Social Sciences</u> Division of <u>English</u>, <u>Classics</u>, & <u>Philosop</u>hy

Item No.	Title/Name (Discipline)	9-Mo. <u>Rate</u>		Term - 7/15 Salary	7/16	Term - 8/31 Salary	Total Salary
	0017 Professor and Director						
1.	Alan E. Craven T (English)	20,916	100	3,486	100	3,486	6,972
	0020 Associate Professor						
2.	John A. Stoler (English)	16,353	100	2,726	•••		2,726
3.	Elizabeth M. Heine (English)	16,353	• • •	***	100	2,726	2,726
	Sub-Total Division of Engl: and Philosophy	ish, Class	ics,	6,212		6,212	12,424

Colle	ge of <u>Humanities</u> and <u>Social Sciences</u>	Divi	sion of	Foreign	Languages	3	
Item No.	Title/Name (Discipline)	9-Mo. <u>Rate</u>		Term - 7/15 Salary		Term - 8/31 Salary	Total Salary
	0017 Professor and Director						
1.	Ricardo F. Benavides T (Spanish)	20,916	100	3,486	100	3,486	6,972
	0020 Associate Professor						
2.	Frank Pino, Jr. (Spanish)	17,442	100	2,907	•••		2,907
3.	R. Joe Campbell (Spanish-Linguistics)	17,658	• • •		100	2,943	2,943
	Sub-Total Division of Foreign	Languages	8	6,393		6,429	12,822

College of Humanities and Social Sciences Division of Social Sciences

Item No.	Title/Name (Discipline)	9-Mo. <u>Rate</u>		Term 7/15 Salary		Term - 8/31 Salary	Total <u>Salary</u>
	0017 Professor and Director						
1.	Thomas C. Greaves T (Anthropology)	21,294	100	3,549	100	3,549	7,098
	0020 Associate Professor						
2.	Felix D. Almaraz, Jr. (History)	16,893	100	2,816	•••		2,816
	0030 Assistant Professor						
3.	Thomas R. Hester (Anthropology)	14,166	100	2,361	• • •	• • •	2,361
4.	Michael H. Jost (History)	13,302	100	2,217	•••	• • •	2,217
5.	Woodruff D. Smith (History)	15,480		• • •	100	2,580	2,580
	0050 Lecturer						
6.	Leslie D. Zeleny (Sociology)	20,268	•••		50	1,689	1,689
	Sub-Total Division of Social	. Science:	S	10,943		7,818	18,761
	TOTAL COLLEGE OF HUMANITIES SCIENCES	AND SOCIA	AL	23,548		20,459	44,007

College of <u>Multidisciplinary Studies</u>		Division of <u>Education</u>					
Item		9-Mo.		Term - 7/15		Term - 8/31	Total
No.	Title/Name (Discipline)	Rate	% Time	Salary	% Time	Salary	Salary
	0017 Professor and Director						
1.	Robert T. Alciatore T (Education)	21,816	100	3,636	100	3,636	7,272
	0010 Professor						
2.	Thomas J. Cleaver T (Curriculum)	23,067	100	3,844	100	3,845	7,689
3.	Dewey D. Davis T (Higher Education)	21,366	100	3,561	100	3,561	7,122
4.	Milo E. Kearney T (Education)	21,294	33	1,171	33	1,171	2,342
5.	Wayne E. Laughery T (Educational Management)	20,664	100	3,444	100	3,444	6,888
6.	Elwood B. Traylor T (Educational Psychology)	20,664	100	3,444	100	3,444	6,888
7.	Paul H. Westmeyer T (Curriculum)	21,366	100	3,561	100	3,561	7,122
	0020 Associate Professor						
8.	Stephen W. Brown (Educational Management)	17,982	100	2,997	100	2,997	5,994
9.	Cecile G. Burns (Early Childhood)	15,264	100	2,544	100	2,544	5,088
10.	John W. Hollomon (Early Childhood)	16,893	100	2,815	100	2,816	5,631
	0022 Visiting Associate Professor	,					
11.	C. T. Whittier	15,120	• • •	•••	100	2,520	2,520
12.		16,000	50	1,334	• • •	• • •	1,334
13.	<u> </u>	16,000	100	2,667	• • •	• • •	2,667

1975 Summer Session Budget

Colleg	ge of <u>Multidisciplinary Studies</u>	Div	vision of	Education	n		*************
Item No.	Title/Name (Discipline)	9-Mo. <u>Rate</u>		Term - 7/15 Salary		i Term - 8/31 Salary	Total <u>Salary</u>
14.	0030 Assistant Professor Larrie E. Gale (Curriculum)	15,480	50	1,290	50	1,290	2,580
15.	Margaret O. Knapp (Reading)	15,264	100	2,544	100	2,544	5,088
16.	Simon L. Orta (Cultural Foundation)	14,607	100	2,434	100	2,435	4,869
17.	Berry Sutherland (Curriculum)	16,677	100	2,780	100	2,780	5,560
18.	Kenneth W. Wunderlich (Education)	14,607	100	2,434	100	2,435	4,869
19.	Gloria L. Zamora (Early Childhood)	13,626	100	2,271	100	2,271	4,542
20.	Robert Lindberg	12,600	100	2,100	• • •	* * *	2,100
	0050 Lecturer						
21.	James M. Sherrill (Educational Research)	15,000	100	2,500	• • •	* * *	2,500
	Sub-Total Division of Educa	tion		53,371		47,294	100,665

1975 Summer Session Budget

Colleg	ge of <u>Multidisciplinary Studies</u>	Div	vision of	Bicultura	al-Biling	gual Stud	ies
Item No.	Title/Name (Discipline)	9-Mo. Rate		Term - 7/15 Salary		Term - 8/31 Salary	Total Salary
	0017 Professor and Director						
1.	Albar A. Pena T (Bicultural-Bilingual Studies)	22,491	100	3,748	100	3,749	7,497
	0010 Professor						
2.	Rodolfo Jacobson T (Bicultural-Bilingual Studies)	22,563	100	3,761	• • •		3,761
	0020 Associate Professor						
3.	Ernesto M. Bernal, Jr. T (Bicultural-Bilingual Studies)	18,531	100	3,089	•••	• • •	3,089
4.	Curtis W. Hayes T (English as a Second Language)	18,207	100	3,035	• • •	•••	3,035
5.	Frank Pino, Jr. (Spanish)	17,442	•••		50	1,454	1,454
	0030 Assistant Professor						
6.	Mauricio Charpenel (Reading)	14,715	100	2,453	100	2,453	4,906
7.	<pre>Ingeborg R. McCoy (Foreign Language Teaching)</pre>	13,850	100	2,308	• • •	• • •	2,308
	0040 Instructor						
8.	Barbara M. Gonzalez (Bicultural-Bilingual Studies)	13,077	• • •	• • •	50	1,090	1,090
9.	Management of the second of th	14,400			100	2,400	2,400
10.	0055 Faculty Associate						
10.	Maria Barrera (Bicultural-Bilingual Studies)	9,000	100	1,500	• • •		1,500
11.	Gloria Gomez (Bicultural-Bilingual Studies)	7,200	100	1,200	•••		1,200
	Sub-Total Division of Bicul Studies	tural-Bil	ingual	21,094		11,146	32,240

1975 Summer Session Budget

College of Multidisciplinary Studies Division of Environmental Studies lst Term 2nd Term 7/16 - 8/31 % Time Salary Item 9-Mo. 6/1 - 7/15Total Title/Name (Discipline) No. Rate % Time Salary Salary 0017 Professor and Director 1. Chia S. Shih 21,969 90 3,295 90 3,295 6,590 (Environmental Management) IAC (74-75)-011 10 (366)10 (366)(732)0020 Associate Professor 2. J. Leland Hepworth T 19,170 100 3,195 100 3,195 6,390 (Natual Resources) John W. Adams 3. 16,353 100 2,726 100 2,726 5,452 (Natural Resources) 0030 Assistant Professor 4. Richard R. Tangum 16,677 100 2,780 100 2,780 5,560 (Urban Studies) 0040 Instructor 5. Henry G. Cisneros 13,410 100 2,235 100 2,235 4,470 (Human Resources) 0050 Lecturer 6. C. Thomas Koch 10,026 100 1,671 100 1,671 3,342 (Natural Resources) 7. Jose N. Uranga 10,026 100 1,671 1,671 (Environmental Law) 8. J. H. U. Brown W/O/S W/O/S W/O/S . . . (Urban Studies)

13,077

13,077

12,429

87

. . .

97

1,900

. . .

2,000

87

87

97

1,900

1,900

2,000

3,800

1,900

4,000

9.

10.

11.

Alexander Caragonne

(Urban Studies)

(Urban Studies)

(Natural Resources)

Robert Hunter

David Davidson

Colleg	e of <u>Multidisciplinary Studies</u>	Div	vision of	Environm	ental Sti	ıdies	
Item No.	Title/Name (Discipline)	9-Mo. Rate		Term - 7/15 Salary	7/16	l Term - 8/31 Salary	Total <u>Salary</u>
	0050 Lecturer						
12.		12,000	95	1,900	• • •		1,900
	Sub-Total Division of Envir	onmental	Studies	21,702		23,373	45,075
	TOTAL COLLEGE OF MULTIDISCI	PLINARY S	TUDIES	96,167		81,813	177,980

1975 Summer Session Budget

College of <u>Sciences</u> and Mathematics Division of Allied Health & Life Sciences

1st Term 2nd Term $\frac{7/16 - 8/31}{\text{Time}}$ Total Salary Salary Item 9-Mo. 6/1 - 7/15 No. Title/Name (Discipline) % Time Rate Salary 0017 Professor and Director 1. Wayne E. Magee 24,066 100 4,011 100 4,011 8,022 (Virology) 0020 Associate Professor 2,997 Theodore D. McKinney 17,982 2. 100 2,997 (Physiology) Helen V. Oujesky 1,490 3. 17,874 75 2,234 50 3,724 (Microbiology) 0030 Assistant Professor

14,607

14,499

14,166

Sub-Total Division of Allied Health and

75

50

50

Paul H. Rodriguez

M. Neal Guentzel

Martin A. Kramen

(Physiology)

Life Sciences

(Microbiology)

(Genetics)

0050 Lecturer

4.

5.

6.

1,826

1,208

1,181

13,457

50

75

75

1,217

1,812

<u>1,771</u> 2,952

10,301 23,758

3,043

3,020

12,017 20,059

1975 Summer Session Budget

College of Sciences and Mathematics Division of Earth and Physical Sciences lst Term 2nd Term 7/16 - 8/31 % Time Salary Item 9-Mo. 6/1 - 7/15Total Title/Name (Discipline) No. Rate % Time Salary Salary 0017 Professor and Director B. S. Thyagarajan 22,563 100 3,760 100 3,761 7,521 1. (Chemistry) 0010 Professor Charles Howard T 18,747 100 3,125 3,125 2. (Chemistry) 0020 Associate Professor 100 3,125 Richard V. McGehee T 18,747 3,125 3. (Geology) Richard F. Sweet 16,893 100 2,816 2,816 4. . . . (Physics) 0030 Assistant Professor 2,315 3,472 Petr Hochman 13,888 100 5. 50 1,157 (Chemistry)

8,042

Sub-Total Division of Earth and

Physical Sciences

College	of <u>Sciences and Mathemat</u>	ics	Div	ision of	Mathemat and Sy	ics, Com stems De	-	ience,
Item	Title/Name (Disciplin	ne)	9-Mo. <u>Rate</u>		Term - 7/15 Salary		d Term - 8/31 Salary	Total Salary
	0017 Professor and Direct	or						
1.	Stanley G. Wayment (Mathematics)	Т	21,294	100	3,549	100	3,549	7,098
	0020 Associate Professor							
2.	Lucio Tavernini (Mathematics)	Т	18,963	100	3,160	100	3,161	6,321
3.	William B. Gearhart (Mathematics)	T	18,423	50	1,535	50	1,535	3,070
	0030 Assistant Professor							
4.	David G. Tabor (Mathematics)		15,804	100	2,634	100	2,634	5,268
	0040 Instructor							
5.	Thomas H. Woteki (Mathematics)		13,950	100	2,325	100	2,325	4,650
	Sub-Total Division of Mat Science and Systems Des	-	Computer	:	13,203		13,204	26,407
	TOTAL COLLEGE OF SCIENCES	S AND MATH	EMATICS		34,702		35,522	70,224
	GRAND TOTAL 1975 SUMMER S	SESSION BU	DGET		203,642		188,944	392,586

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT DALLAS 5323 Harry Hines Boulevard, Dallas, Texas 75235

Chancellor Charles A. LeMaistre The University of Texas System 601 Colorado Street Austin, Texas 78701

Dear Chancellor LeMaistre:

The docket for the April 28, 1975 meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.

Sincerely,

Charles C. Sprague

President

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT DALLAS

BOARD OF REGENTS MEETING - APRIL 28, 1975



TRAVEL

DALLAS MEDICAL SCHOOL

1. Dr. Guido Verhoeven, Research Fellow, Department of Internal Medicine, to travel to Belgium for the purpose of defending a thesis for the period February 8, 1975 through March 8, 1975; no expenses are requested.

GIFTS

DALLAS HEALTH SCIENCE CENTER

<u>Donor</u> <u>Amount</u>

Estate of H.S. Moss First National Bank in Dallas P.O. Box 6031 Dallas, Texas 75222

1. Purpose and Condition. Support of the Harry S. Moss Heart Center under the direction of Dr. Jere H. Mitchell, Department of Internal Medicine.

\$198,711.00

Southwestern Medical Foundation 1601 Republic National Bank Building Dallas, Texas 75201

Purpose and Condition. Support for the Phase I Building Program.

\$624,042.41

DALLAS MEDICAL SCHOOL

Dallas Community Chest Trust Fund, Inc. 4605 Live Oak Street
Dallas, Texas 75204

1. Purpose and Condition. Support for the research of Dr. Robert Dowben, Department of Biophysics.

\$ 5,000.00

March of Dimes 5415 Maple Avenue Dallas, Texas 75235

2. Purpose and Condition. Funds for the establishment of the Dr. Fred Brooksaler Visiting Professorship.

\$ 7,500.00

Mr. Henry Neuhoff, Jr. P.O. Box 2338 Dallas, Texas 75221

3. Purpose and Condition. Funds to be used for a full-time staff member of Anesthesiology to travel to the Orient to study acupuncture.

\$ 5,600.00

\$ 10,000.00

GIFTS - continued

DALLAS MEDICAL SCHOOL - continued

Donor	Amount
The Purdue Frederick Company 99-101 Saw Mill River Road Yonkers, New York 10701	
4. Purpose and Condition. Support of a burn research fellow for the Burn Research Center, under the direction of Dr. Charles Baxter, Department of Surgery.	\$ 10,000.00
* 5. Purpose and Condition. Funds for the support of burn research by Dr. Charles Baxter, Department of Surgery.	\$ 6,900.00
Southwestern Medical Foundation 1601 Republic National Bank Building Dallas, Texas 75201	
6. Purpose and Condition. Support of con- struction of additional space for the anesthesiology laboratories of Dr. M. T. Jenkins at Parkland Memorial Hospital.	\$ 65,000.00
7. Purpose and Condition. Support and maintenance of the Virginia Lazenby O'Hara Chair in Biochemistry.	\$ 6,301.53
8. Purpose and Condition. Funds for the support and maintenance of the Margaret Milam McDermott Chair of Anesthesiology.	\$ 13,893.97 Q
GIFTS TO THE PHASE I BUILDING PROGRAM ALREADY REPORTED THE MEDICAL FOUNDATION	ROUGH SOUTHWESTERN
Donor	Amount
 American Title Company of Dallas P. O. Box 538 Dallas, Texas 75221 	\$ 5,000.00
 Aston Foundation Republic National Bank of Dallas P. O. Box 5961 Dallas, Texas 75201 	\$ 5,000.00
3. Austin Bridge Company and Austin Paving Company	
P. O. Box 1590 Dallas, Texas 75221	\$ 10,500.00

4. Mr. Theodore P. Beasley P. O. Box 6210 Dallas, Texas 75222

^{*} Original award letter shown for support of item No. 4, page $\mbox{HD-3}$

	Donor	Amount
5.	Blue Cross - Blue Shield of Texas 2201 Main Street Dallas, Texas 75201	\$ 10,000.00
6.	Mr. Roland S. Bond, Sr. Bond Oil Corporation 2600 Republic National Bank Building Dallas, Texas 75201	\$ 25,000.00
7.	Braniff Foundation 302 Exchange Bank Tower Dallas, Texas 75235	\$ 50,000.00
8.	Campbell-Taggart Associated Bakeries P. O. Box 2640 Dallas, Texas 75221	\$ 10,000.00
9.	Cary-Schneider Investment Company and Medical Arts Hospital of Dallas 331 Medical Arts Building Dallas, Texas 75201	\$ 10,000.00
10.	Chared Corporation 2300 Republic Bank Building Dallas, Texas 75201	\$ 5,000.00
11.	Coca-Cola Bottling Company P. O. Box 2008 Dallas, Texas 75221	\$ 6,000.00
12.	Constantin Foundation 2807 Mercantile Bank Building Dallas, Texas 75201	\$ 25,000.00
13.	Cullum Companies, Inc. 3300 W. Mockingbird Lane Dallas, Texas 75235	\$ 12,000.00
14.	Dallas Beer Wholesalers Association 1607 - 211 North Ervay Dallas, Texas 75201	\$ 50,000.00
15.	Dallas Clearing House Association 900 Fidelity Union Building Dallas, Texas 75201	\$ 750,000.00
16.	Dallas Federal Savings & Loan Association 1505 Elm Street Dallas, Texas 75201	\$ 18,000.00
17.	Dallas Foundation 3300 Republic Bank Tower Dallas, Texas 75201	\$ 7,500.00
18.	The Dallas Medical & Surgical Clinic P. O. Box 28 Dallas, Texas 75221	\$ 10,000.00

	Donor	Amount
19.	Dallas Power and Light Company 1506 Commerce Street Dallas, Texas 75201	\$250,000.00
20.	The Dallas Times Herald Herald Square Dallas, Texas 75202	\$ 30,000.00
21.	G. B. Dealey Foundation Young & Houston Sts. Dallas, Texas 75222	\$ 40,000.00
22.	Mr. and Mrs. Joe M. Dealey The Dallas Morning News Communications Center Dallas, Texas 75222	\$ 5,000.00
23.	Mrs. Bessie Dye 1020 Mercantile Bank Building Dallas, Texas 75201	\$ 15,000.00
24.	Leland Fikes Foundation 3200 Republic Bank Tower Dallas, Texas 75201	\$ 75,000.00
25.	First Southwest Company Mercantile Bank Building Dallas, Texas 75201	\$ 6,000.00
26.	First Texas Financial Corp. Oak Cliff Savings & Loan Assn. P. O. Box 64889 Dallas, Texas 75206	\$ 5,000.00
27.	Fisher & Spillman, Architects Southland Center Dallas, Texas 75201	\$ 10,000.00
28.	Frito-Lay, Inc. P. O. Box 35034 Dallas, Texas	\$ 5,000.00
29.	General Portland Cement Company 4400 Republic National Bank Building Dallas, Texas 75201	\$ 6,000.00
30.	E. B. Germany & Sons P. O. Box 12266 Dallas, Texas 75225	\$ 7,500.00
31.	Gifford Foundation P. O. Box 47127 Dallas, Texas 75247	\$ 10,000.00
32.	Gifford-Hill American P. O. Box 47127 Dallas, Texas 75247	\$ 5,000.00

	Donor		Amount
33.	Gifford-Hill & Company, Inc. P. O. Box 47127 Dallas, Texas 75247	\$	30,000.00
34.	Dr. Russell B. Graham 8210 Walnut Hill Lane Dallas, Texas 75231	\$	5,000.00
35.	Mr. and Mrs. Cecil H. Green P. O. Box 5474 Dallas, Texas 75222	\$1	,000,000.00
36.	Mr. Patrick E. Haggerty P. O. Box 5474 Dallas, Texas 75222	\$	5,000.00
37.	Halliburton Company 3211 Southland Center Dallas, Texas 75201	\$	15,000.00
38.	Halliburton Education Foundation, Inc. 3211 Southland Center Dallas, Texas 75201	\$	15,000.00
39.	Mr. Jake L. Hamon P. O. Box 663 Dallas, Texas 75221	\$	75,000.00
40.	Dresser Harbison Foundation P. O. Box 718 Dallas, Texas 75221	\$	7,500.00
41.	Earl Hayes Foundation 200 North Marsalis Dallas, Texas 75203	\$	15,000.00
42.	Hoblitzelle Foundation 2522 Republic Bank Building Dallas, Texas 75201	\$1	,000,000.00
43.	Houston Endowment, Inc. P. O. Box 52338 Houston, Texas 77052	\$	250,000.00
44.	Industrial Properties Corporation Tower East - Twelfth Floor 2700 Stemmons Freeway Dallas, Texas 75207	\$	200,000.00
45.	Mr. and Mrs. J. Erik Jonsson 3300 Republic Bank Tower Dallas, Texas 75201	\$	255,189.00
46.	The Kahn Family Fund 6342 Mercedes Dallas, Texas 75214	\$	5,000.00

	Donor		Amount
47.	Lone Star Gas Company 301 South Harwood Dallas, Texas 75201	\$	200,000.00
48.	Lynch Foundation P. O. Box 3069 Dallas, Texas 75226	\$	10,000.00
49.	Mr. George P. Macatee, III 2502 McKinney Avenue Dallas, Texas 75201	\$	7,500.00
50.	The George L. MacGregor Foundation Suite 2500, 2001 Bryan Tower Dallas, Texas 75201	\$	5,000.00
51.	Mr. and Mrs. Edward Marcus Two Turtle Creek Village, Suite 1605 Dallas, Texas 75219	\$	6,335.00
52.	Mrs. Eugene McDermott 4701 Drexel Dallas, Texas 75205	\$1	,000,000.00
53.	Meadows Foundation, Incorporated Meadows Building - 9th Floor Dallas, Texas 75206	\$	75,000.00
54.	John E. Mitchell Company 3800 Commerce Street Dallas, Texas 75226	\$	5,000.00
55.	Mobil Oil Company P. O. Box 900 Dallas, Texas 75221	\$	18,000.00
56.	Mosher Foundation 2414 Mercantile Bank Building Dallas, Texas 75201	\$	7,500.00
57.	National Chemsearch Company P. O. Box 10087 Dallas, Texas 75207	\$	5,000.00
58.	Neiman-Marcus Company Main and Ervay Streets Dallas, Texas 75201	\$	38,655.00
59.	Mr. W. W. Overton, Jr. Texas Bank & Trust Company One Main Place Dallas, Texas 75250	\$	5,000.00
60.	J. C. Penney Company 5217 Ross Avenue Dallas, Texas 75206	\$	25,650.00

	Donor		Amount
61.	Republic National Life Insurance Co. P. O. Box 6210		
	Dallas, Texas 75222	\$	32,000.00
62.	Sid Richardson Foundation 1120 Fort Worth National Bank Building Fort Worth, Texas 76102	\$	250,000.00
63.	Sanger-Harris Company Pacific and Akard Streets Dallas, Texas 75202	\$	47,100.00
64.	Sears, Roebuck and Company 1409 South Lamar Street Dallas, Texas 75215	\$	75,000.00
65.	Mr. Manning B. Shannon 4672 Southern Avenue Dallas, Texas 75209	\$	5,000.00
66.	Dr. J. Donald Smiley 3619 Crescent Dallas, Texas 75205	\$	5,000.00
67.	The Southland Corporation 2828 North Haskell Dallas, Texas 75204	\$	10,000.00
68.	Southland Life Insurance Company P. O. Box 2220 Dallas, Texas 75221	\$	30,000.00
69.	Southwestern Life Insurance Co. P. O. Box 2699		
	Dallas, Texas 75201	\$	50,000.00
70.	Southwestern Medical Foundation 333 Medical Arts Building Dallas, Texas 75201	\$1	,000,000.00
71.	Mr. John M. Stemmons Industrial Properties Corp. Tower East - Twelfth Floor 2700 Stemmons Freeway		
	Dallas, Texas 75207	\$	25,650.00
72.	Mrs. L. Storey Stemmons 3525 Turtle Creek Dallas, Texas 75219	\$	80,000.00
73.	Blanche Mary Taxis Foundation 1200 Republic National Bank Building Dallas, Texas 75201	\$	7,500.00
74.	Texas Electric Service Co. 7th and Lancaster Fort Worth, Texas 76101	\$	100,000.00

	Donor	Amount
P	exas Employers Insurance Association and Employers Casualty Company O. Box 2759	¢ 35 000 00
D	allas, Texas 75221	\$ 15,000.00
8	exas Industries Foundation 100 Carpenter Freeway Vallas, Texas 75247	\$ 25,000.00
1	Pexas Power and Light Company 1511 Bryan Street 10allas, Texas 75201	\$100,000.00
6	ors. Thomas, Binion, Hosford & Allday 510 North Washington Oallas, Texas 75246	\$ 6,000.00
2	The Thompson Foundation 2828 North Haskell Dallas, Texas 75204	\$ 10,000.00
2	Thompson, Knight, Simmons & Bullion 2200 Republic National Bank Building Dallas, Texas 75201	\$ 10,000.00
E	Citche-Goettinger Company Elm & St. Paul Streets Dallas, Texas 75201	\$ 25,402.00
	The University of Texas Southwestern Medical School	
	5323 Harry Hines Blvd. Dallas, Texas 75235	\$128,639.00
	Henry and Rose Weinberger Fund 5031 DeLoache	
Γ	Dallas, Texas 75222	\$ 20,000.00
I	Zale Corporation P. O. Box 2219 Dallas, Texas 75221	\$ 25,310.00
3	Zale Foundation 3000 Diamond Park P. O. Box 2219	
	Dallas, Texas 75221	\$224,690.00

GRANTS, CONTRACTS AND AGREEMENTS (NON-GOVERNMENTAL)

DALLAS MEDICAL SCHOOL

The Arthritis Foundation North Texas Chapter 330 West Mockingbird Lane, Suite B-134 Dallas, Texas 75235

> 1. Rheumatic Diseases Unit Morris Ziff, M.D., Department of Internal Medicine January 1, 1975 through December 31, 1975 \$31,800.00

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

DALLAS MEDICAL SCHOOL - continued

The Arthritis Foundation 1212 Avenue of the Americas New York, New York 10036

- 2. Clinical Scholarship Eric R. Hurd, M.D., Department of Internal Medicine July 1, 1975 through June 30, 1976 \$14,000.00
 - 3. Postdoctoral Fellowship Peter E. Lipsky, M.D., Department of Internal Medicine July 1, 1975 through June 30, 1976 \$12,500.00
 - 4. Postdoctoral Fellowship Fred D. Finkelman, M.D., Department of Internal Medicine July 1, 1975 through June 30, 1976 \$12,000.00

B. Braun Melsungen AG Postfach 110 and 120 3508 Melsungen

Germany

5. Research Grant "Use of Lipofundin S-15 in the Experimental Animal." A continuation grant. Studies in toxicity and metabolic changes during complete parenteral nutrition. Ekkehard W. Reimold, M.D., Department of Pediatrics \$89,375.00

Hoechst Pharmaceuticals, Inc. Route 202-206 North Somerville, New Jersey 08876

> Research Grant "Appraisal of Occult Fecal Whole Blood Loss with HP-120." A drug study. Ivan E. Danhof, M.D., Ph.D., Department of Physiology \$6,369.00 (\$6,369.00 previously docketed)

Hoffmann-La Roche, Inc. Nutley, New Jersey 07110

> Research Grant "Comparative Study of Ampicillin, Amoxicillin and Placebo for Salmonella Gastroenteritis." A drug study. John D. Nelson, M.D., Department of Pediatrics \$10,000.00 additional award (\$11,008.00 previously docketed)

Lilly Research Laboratories Indianapolis, Indiana 46206

> Research Grant "Therapy of Acute Otitis Media in Children." A drug study. Jorge E. Howard, Sr., M.D., Department of Pediatrics \$32,994.00

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

DALLAS MEDICAL SCHOOL - continued

Merck, Sharp and Dohme Research Laboratories West Point, Pennsylvania 19486

9. Research Grant
"Comparative Efficacy, Safety, and Tolerance of a Range of
Doses of Cefoxitin and of Cephalothin in the Parenteral Therapy
of Infections in Hospitalized Adults Caused by Susceptible
Pathogenic Gram-Positive Cocci, Gram-Negative Cocci, and
Gram-Negative Rods." A drug study.

James P. Luby, M.D., Department of Internal Medicine
\$27,500.00

10. Research Grant

"A Controlled, Double-Blind Study of PERIACTIN and Butabarbital Sodium in the Control of Pruritus Associated with Atopic Dermatitis in Childhood." A drug study.

James H. Herndon, Jr., M.D., Department of Internal Medicine \$10,120.00

Monsanto Company 800 North Lingberg Boulevard St. Louis, Missouri 63166

* 11. Research Grant

"Polymer Absorption from the Gastrointestinal Tract."

John M. Dietschy, M.D., Department of Internal Medicine
\$2,601.00 additional income

* 12. Research Grant

"Polymer Absorption from the Gastrointestinal Tract."

John M. Dietschy, M.D., Department of Internal Medicine \$393.00 additional income

Pfizer Laboratories Division 235 East 42nd Street New York, New York 10017

13. Research Grant

"Research Studies in the Area of Diabetes." Study of glucagon in diabetes.
Roger H. Unger, M.D., Department of Internal Medicine \$5,000.00

Schering Corporation 60 Orange Street Bloomfield, New Jersey 07003

14. Research Grant

"Comparative Pharmacologic Evaluation of Gentamicin and Sisomycin in Infants and Children." A drug study.

George H. McCracken, Jr., M.D., Department of Pediatrics \$9,625.00 additional income

^{*} Original award letter not received

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

DALLAS MEDICAL SCHOOL - continued

Southwestern Medical Foundation 1601 Republic National Bank Building Dallas, Texas 75201

15. Research Grant

"A Model of Human Melanoma." A study of a new animal model - a viral-induced melanoma-fibrosarcoma in the cat. John A. Shadduck, D.V.M., Department of Pathology \$49,078.00

The Upjohn Company
Kalamazoo, Michigan 49001

- 16. Research Grant Support for the clinical evaluation of U-26, 597A, Phase II-III, Protocol 005. Daniel W. Foster, M.D., Department of Internal Medicine \$2,800.00 additional income (\$14,000.00 previously docketed)
- 17. Renewal of a service agreement between Southwestern Medical School, Department of Obstetrics and Gynecology, and St. Paul Hospital, Dallas, Texas for the calendar year 1975 for remuneration in the amount of \$40,000.00.
- 18. An agreement whereby The University of Texas Health Science Center at Dallas, Southwestern Medical School, agrees to provide a Chief of Physical Medicine from its Department of Physical Medicine to Presbyterian Hospital of Dallas for the period January 1, 1975 through August 31, 1975 for remuneration not to exceed \$34,623.00.
- 19. An agreement whereby The University of Texas Health Science Center at Dallas, Southwestern Medical School, agrees to provide a Chief of Service for Neurology from its Department of Neurology to Presbyterian Hospital of Dallas for the period January 1, 1975 through August 31, 1975 for remuneration not to exceed \$33,758.00.

GRANTS, CONTRACTS, AND AGREEMENTS (STATE)

DALLAS HEALTH SCIENCE CENTER

1. Interagency Cooperation Contract IAC (74-75)-1528 whereby The University of Texas Health Science Center at Dallas will provide computer services for The University of Texas at Arlington for the period February 1, 1975 through August 31, 1975 for remuneration not to exceed \$300,000.00.

10 X L

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT DALLAS

FEDERAL CONTRACTS AND GRANTS

BOARD OF REGENTS MEETING - APRIL 28, 1975



DALLAS HEALTH SCIENCE CENTER

Department of Health, Education and Welfare Public Health Service

1. Contract No. NO1-LM-5-4705
 Regional Medical Library Program.
 Donald D. Hendricks, Ph.D., Director
 February 1, 1975 through January 31, 1976
 \$253,817.00
 Dallas County

DALLAS MEDICAL SCHOOL

Department of Health, Education and Welfare Public Health Service

- 1. Research Grant 5 R01 AM16209-02
 "Role of Immune Complexes in Chronic Inflammation."
 A continuation grant.
 Hugo E. Jasin, M.D., Department of Internal Medicine March 1, 1975 through February 29, 1976
 \$14,012.00
 Dallas County
- 2. Research Grant 5 R01 HL15949-02 "Lipoprotein Metabolism in Relation to Atherosclerosis." A revised award. David W. Bilheimer, M.D., Department of Internal Medicine September 1, 1974 through August 31, 1975 \$24,038.00 (a reduction of \$875.00 from the original award of \$24,913.00) Dallas County
- 3. Research Grant 5 P01 AII1851-02

 "The Biology and Biochemistry of the Lymphocyte Surface."

 A continuation grant.

 Jonathan W. Uhr, M.D., Department of Microbiology

 March 1, 1975 through February 29, 1976

 \$273,104.00

 Dallas County
- 4. Research Grant 5 R01 AIl1396-02

 "Enteroinvasive and Enterotoxigenic E. Coli Diarrheas."
 A continuation grant. Study of diarrhea in infants.
 John D. Nelson, M.D., Department of Pediatrics
 April 1, 1975 through March 31, 1976
 \$29,021.00
 Dallas County
- 5. Research Grant 5 R01 AM11313-09

 "Structures and Mechanisms of Citrate Enzymes." A continuation grant.

 Paul A. Srere, Ph.D., Department of Biochemistry January 1, 1975 through December 31, 1975

 \$30,264.00

 Dallas County

FEDERAL GRANTS AND CONTRACTS - continued

DALLAS MEDICAL SCHOOL - continued

Department of Health, Education and Welfare Public Health Service

- 6. Project Identification No. MCT-0002000-09-0

 "Diagnostic and Evaluation Center for M.R. Children."
 A supplemental award.

 Doman K. Keele, M.D., Department of Pediatrics
 July 1, 1974 through June 30, 1975

 \$20,000.00

 Dallas County
- 7. Fellowship Number 1 FO MH57690-01 XI
 Supply Allowance in connection with the postdoctoral
 fellowship for Roy S. Kiser, Jr. sponsored by Asa W.
 DeLoach, M.D., Department of Psychiatry
 February 1, 1975 through January 31, 1976
 \$1,000.00
 Dallas County
- 8. Training Grant 5 T01 AI00337-09
 "Pediatric Infectious Disease and Immunology." A continuation grant.
 John D. Nelson, M.D., Department of Pediatrics July 1, 1975 through June 30, 1976
 \$56,351.00
 Dallas County
- * 9. Research Grant 5 R01 HL14863-03

 "Hypertension in Man Role of Renin Aldosterone."

 A revised award.

 Norman M. Kaplan, M.D., Department of Internal Medicine September 1, 1974 through August 31, 1975

 \$38,199.00 (a reduction of \$2,081.00 from the original award of \$40,280.00)

 Dallas County
 - 10. Research Grant 5 R01 CA14609-03
 "Adhesion of Normal and Malignant Mammalian Cells."
 A continuation grant.
 Frederick Grinnell, Ph.D., Department of Cell Biology
 June 1, 1975 through May 31, 1976
 \$26,533.00
 Dallas County
- 11. Research Grant 5 RO1 CA14708-03

 "Fine Structural Analysis of Androgenic Tumor Cells."

 William B. Neaves, Ph.D., Department of Cell Biology.

 June 1, 1975 through May 31, 1976

 \$26,376.00

 Dallas County
- 12. Contract No. NO1-NU-34014, Modification No. 3, Change Order

 "Course to Prepare Nurses and Specialists in Burn Care Research."

 Charles Baxter, M.D., Department of Surgery

 \$118,492.00 additional funds (\$188,023.00 previously docketed)

 Dallas County

^{*} Original award letter not received

FEDERAL GRANTS AND CONTRACTS - continued

DALLAS MEDICAL SCHOOL - continued

Department of Health, Education and Welfare Public Health Service

13. Contract No. Nol-HD-4-2813, S.A. #1

"Studying the Effect of Age on the Stiffness and Contractile Properties of the Canine Left Ventricle."

Contract modification to extend the period of performance to April 14, 1975.

Gordon H. Templeton, Ph.D., Department of Physiology

No additional funds involved.

Dallas County

Department of the Air Force

14. Contract No. F33600-75-C-0409, whereby The University of Texas Health Science Center at Dallas, Southwestern Medical School agrees to provide Fellowship Training in Hematology for Major Melvin E. Harris for the period July 1, 1975 through June 30, 1976 at no cost to the government.

DALLAS ALLIED HEALTH SCIENCES SCHOOL

N X V

Department of Health, Education and Welfare Social and Rehabilitation Service

1. Training Grant No. 44-P-30064/6-10 Amendment #2
 "Teaching and Traineeships in Rehabilitation Medicine."
 A revised award.
 Phala A. Helm, M.D., Department of Physical Medicine and Rehabilitation
 July 1, 1974 through June 30, 1975
 \$50,575.00 revised award (reduction of \$282.00 from previous award of \$50,857.00)
 Dallas County

2. Training Grant No. 44-P-30213/6-03 Amendment #2
"Undergraduate Education in Rehabilitation Services."

A revised award.

Robert E. Boudreaux, Director, Department of Rehabilitation Science
July 1, 1974 through June 30, 1975
\$21,849.00 revised award (reduction of \$998.00 from previous award of \$22,847.00)
Dallas County

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT DALLAS

AMENDMENTS TO THE 1974-75 OPERATING BUDGET

BOARD OF REGENTS MEETING - APRIL 28, 1975

DALLAS HEALTH SCIENCE CENTER

Office of the Planning Officer

1. Transfer funds in the amount of \$10,128.98 from Unallocated Faculty Salaries to Office of the Planning Officer, Administrative and Professional Salaries and appoint Constantine Stefanu (nontenure), Director, Office of Planning and Associate Professor of Environmental and Community Health, effective January 15, 1975, at an annual salary rate of \$32,000 payable from Office of the Planning Officer budget. (RBC No. 396)

Office of Accounting

2. Transfer funds in the amount of \$6,000 from Unallocated Classified Salaries to Office of Accounting, Wages. These funds are needed to cover additional personnel costs due to an increased workload caused by moving into new facilities. (RBC No. 389)

Medical Computing Resources Center

3. Transfer funds in the amount of \$11,224.64 from Unallocated Classified Salaries to Medical Computing Resources Center Classified Salaries to provide funds for additional personnel. (RBC No. 332)

Library

4. Transfer funds in the amount of \$188.62 from Unallocated Faculty Salaries to Library Administrative and Professional Salaries and change the source of salary of Stanley J. McCord (non-tenure), Faculty Associate, Assistant to the Director, effective July 10, 1975, as follows:

From: An annual salary rate of \$14,603 payable \$13,279 from Library budget and \$1,324 from IAC North Texas State University

To: An annual salary rate of \$14,603 payable from Library budget. (RBC No. 431)

5. Accept the resignation of Maryann Duggan (non-tenure), Faculty Associate, Assistant Professor of Library Science, 25%, effective December 31, 1974. Ms. Duggan is budgeted at an annual salary rate of \$20,194 payable from Southwestern Library Association. (RBC No. 430)

Continuing Education

- 6. Transfer funds in the amount of \$666.64 from Unallocated Classified Salaries to Continuing Education Administrative and Professional Salaries and appoint Dewey W. Johnston (non-tenure), Continuing Education Coordinator, 5%, effective January 1, 1975, at an annual salary rate of \$20,000 payable from Continuing Education budget. (RBC No. 399)
- 7. Transfer funds in the amount of \$666.64 from Unallocated Classified Salaries to Continuing Education Administrative and Professional Salaries and appoint James L. Matthews (non-tenure), Continuing Education Coordinator, 5%, effective January 1, 1975, at an annual salary rate of \$20,000 payable from Continuing Education budget. (RBC No. 398)

DALLAS HEALTH SCIENCE CENTER - continued

Continuing Education - continued

8. Transfer funds in the amount of \$634.38 from Unallocated Classified Salaries to Continuing Education Administrative and Professional Salaries and appoint George B. Vaughan (non-tenure), Continuing Education Coordinator, 5%, effective January 13, 1975, at an annual salary rate of \$20,000 payable from Continuing Education budget. (RBC No. 397)

Medical Art Service Center

9. Adjust the budget of the Medical Art Service Center to increase the income from \$100,000 to \$130,000 and increase the expenditures from \$100,000 to \$128,900 with adjustments in the following categories:

Salaries	from	\$58,524	to	\$76,246
Staff Benefits	from	5,320	to	6,498
Wages	from	1,500	to	1,500
Maintenance and				
Operation	from	10,306	to	15,806
Purchase of Materials				
for Resale	from	22,000	to	26,500
Travel	from	2,350	to	2,350

These adjustments are needed due to the increase in demand for services which requires additional increases in labor costs. (RBC No. 426)

Psychiatry Clinic

10. Transfer funds in the amount of \$6,718 from Psychiatry Clinic, Wages and \$982 from Psychiatry Clinic, Restricted to Psychiatry Clinic, Teaching Assistants. This transfer is to fund the addition of a Teaching Assistant. (RBC No. 402)

DALLAS MEDICAL SCHOOL

Anesthesiology

1. Transfer funds in the amount of \$510 from Unallocated Faculty Salaries to Anesthesiology Teaching Salaries and change the source of salary of Richard E. Morris (non-tenure), Assistant Professor; Acting Director of Anesthesiology and Acting Director of Inhalation Therapy, Childrens Medical Center, effective September 1, 1974, as follows:

From: An annual salary rate of \$25,000 payable \$9,490 from Anesthesiology budget and \$15,510 from Childrens Medical

To: An annual salary rate of \$25,000 payable \$10,000 from Anesthesiology budget and \$15,000 from Childrens Medical Center. (RBC No. 413)

2. Appoint Robert G. Wheatley (non-tenure), Visiting Assistant Professor, effective January 27, 1975, at an annual salary rate of \$20,680 payable from Department Trust Fund. (RBC No. 412)

Environmental and Community Health

3. Change the status of Marion R. Zetzman (non-tenure), effective January 1, 1975, as follows:

From: Assistant Professor and Acting Chairman of Community
Health

To: Assistant Professor and Acting Chairman of Environmental and Community Health and Assistant Professor of Health Care Sciences, with no change in salary.

Dr. Zetzman is budgeted at an annual salary rate of \$24,150 payable from Family Practice Training Program budget. (RBC No. 392)

DALLAS MEDICAL SCHOOL - continued

Environmental and Community Health - continued

4. Change the status of David R. Baker (non-tenure), effective December 1, 1974, as follows:

From: Assistant Professor; 45%

To: Assistant Professor of Environmental and Community Health; Clinical Assistant Professor of Psychiatry, 45%, with no change in salary.

Dr. Baker is budgeted at an annual salary rate of \$29,400 payable from Family Practice Training Program budget. (RBC No. 393)

Internal Medicine

5. Change the source of salary of Burton Combes (tenure), Professor, for the period September 1, 1974 thru March 31, 1975, as follows:

From: An annual salary rate of \$38,000 payable \$33,320 from Internal Medicine budget and \$4,680 from NIH 5 TO1 AM-05490

To: An annual salary rate of \$38,000 payable \$21,320 from Internal Medicine budget, \$4,680 from NIH 5 TO1 AM-05490, and \$12,000 from NIH 2 RO1 AM-13757.

Dr. Combes will revert to sources as shown on RBC 155 effective April 1, 1975. (RBC No. 394)

- 6. Appoint Masashi Imai (non-tenure), Visiting Associate Professor, for the period February 1, 1975 thru March 31, 1975, at an annual salary rate of \$22,200 payable from NIH 5 RO1 AM-14677. (RBC No. 432)
- 7. Accept the resignation of Michael Donsky (non-tenure), Instructor, effective February 28, 1975. Dr. Donsky is budgeted at an annual salary rate of \$23,980 payable from Harry S. Moss Estate. (RBC No. 428)
- 8. Appoint Charles E. Ashmore (non-tenure), Assistant to the Chairman, effective January 13, 1975, at an annual salary rate of \$18,000 payable from Internal Medicine budget. (RBC No. 390)

Microbiology

9. Transfer funds in the amount of \$5,833.31 from Unallocated Faculty Salaries to Microbiology Teaching Salaries and appoint John C. Cambier (non-tenure), Assistant Instructor, effective February 1, 1975, at an annual salary rate of \$10,000 payable from Microbiology budget. (RBC No. 429)

Neurology

10. Change the status of Maung H. Aung (tenure), effective January 1, 1975, as follows:

From: Associate Professor

To: Associate Professor and Vice Chairman of Neurology, with no change in salary.

Dr. Aung is budgeted at an annual salary rate of \$28,000 payable from Neurology budget. (RBC No. 388)

11. Reappoint Richard R. North (non-tenure), Associate Professor of Neurology and Chief of Neurology Service at Presbyterian Hospital, effective January 1, 1975, at an annual salary rate of \$34,000 payable from Presbyterian Hospital. (RBC No. 423)

Pathology

12. Appoint William A. Meissner (non-tenure), Visiting Professor, for the period January 20, 1975 thru March 17, 1975, at an annual salary rate of \$36,000 payable from Department Trust Fund. (RBC No. 407)

DALLAS MEDICAL SCHOOL - continued

Pathology - continued

13. Change the source of salary and increase the annual salary rate of Robert S. Putnam (tenure), Associate Professor of Pathology and Associate Professor of Medical Technology, effective February 1, 1975, as follows:

From: An annual salary rate of \$30,129 payable \$19,023 from Pathology budget, \$5,915 from Medical Technology budget, and \$5,191 from Parkland Memorial Hospital

To: An annual salary rate of \$31,500 payable \$8,400 from Pathology budget, \$5,600 from Medical Technology budget, \$2,500 from Parkland Memorial Hospital, and \$15,000 from Veterans Administration 1B 74V-44 0071. (RBC No. 415)

- 14. Transfer funds in the amount of \$5,232.50 from Unallocated Faculty Salaries to Pathology Teaching Salaries and appoint William W. Sheehan (non-tenure), Associate Professor, effective January 20, 1975, at an annual salary rate of \$20,500 payable \$12,000 from NIH 06 S 000174 and \$8,500 from Pathology budget. (RBC No. 418)
- 15. Increase the annual salary rate of Charles R. Cramer (non-tenure), Assistant Instructor, for the period January 1, 1975 thru June 30, 1975, as follows:

From: An annual salary rate of \$19,066 payable \$12,000 from Pathology budget, \$4,500 from Parkland Memorial Hospital and \$2,566 from Texas Womens University IAC (74-75)

To: An annual salary rate of \$20,386 payable \$12,000 from Pathology budget, \$4,500 from Parkland Memorial Hospital and \$3,886 from Texas Womens University IAC (74-75).

Dr. Cramer will revert to original budgeted annual salary rate effective July 1, 1975. (RBC No. 378)

16. Reappoint Roy Mills (non-tenure), Faculty Associate, effective February 1, 1975, at an annual salary rate of \$17,580 payable from Pathology Fund. (RBC No. 411)

Pediatrics

- 17. Appoint Jose R. Toledo (non-tenure), Assistant Professor, effective January 28, 1975, at an annual salary rate of \$27,500 Payable from Texas Department of Health IAC (74-75) 1049. (RBC No. 419)
- 18. Accept the resignation of Amy Talbot (non-tenure), Clinical Assistant Professor of Pediatrics and Psychology, 48%, effective January 31, 1975. Dr. Talbot is budgeted at an annual salary rate of \$20,200 payable from Callier Hearing and Speech Center. (RBC No. 427)

Physical Medicine and Rehabilitation

19. Change the source of salary of Ralph Johnson (non-tenure), Assistant Professor of Physical Medicine and Rehabilitation and Physical Therapy, effective January 1, 1975, as follows:

From: An annual salary rate of \$30,000 payable \$29,000 from Physical Medicine and Rehabilitation budget and \$1,000 from Physical Therapy budget

To: An annual salary rate of \$30,000 payable from Presbyterian Hospital. (RBC No. 422)

DALLAS MEDICAL SCHOOL - continued

Physical Medicine and Rehabilitation - continued

20. Transfer funds in the amount of \$532 from Unallocated Faculty Salaries to Physical Therapy Teaching Salaries and increase the annual salary rate of Margarita Solis (non-tenure), Assistant Professor of Physical Medicine and Rehabilitation and Physical Therapy, effective February 1, 1975, as follows:

From: An annual salary rate of \$22,554 payable \$22,341 from Physical Medicine and Rehabilitation budget and \$213 from Physical Therapy budget

To: An annual salary rate of \$23,466 payable \$22,341 from Physical Medicine and Rehabilitation budget and \$1,125 from Physical Therapy budget. (RBC No. 424)

21. Appoint Renate M. Reimold (non-tenure), Assistant Professor of Physical Medicine and Rehabilitation and Clinical Instructor in Pediatrics, 50%, at an annual salary rate of \$33,500 payable \$30,150 from NIH NO1 CN 45133 and \$3,350 from SRS 44 P 30064/6, effective February 1, 1975. (RBC No. 421)

Physiology

22. Change the source of salary of Edmond E. Griffin (non-tenure), Assistant Professor, effective January 1, 1975, as follows:

From: An annual salary rate of \$16,000 payable from Physiology budget

To: An annual salary rate of \$16,000 payable \$7,000 from Physiology budget and \$9,000 from NIH 1 Pl7 HL-17669. (RBC No. 408)

Psychiatry

23. Change the source of salary of Sanford R. Kiser (non-tenure), Assistant Professor, effective February 1, 1975, as follows:

From: An annual salary rate of \$21,500 payable \$20,800 from Psychiatry budget and \$700 from NIH 5 TOL MH-06528

To: An annual salary rate of \$21,500 payable \$1,500 from NIH 5 TO1 MH-06528 and \$20,000 paid direct by a Mental Health Special Research Fellowship. (RBC No. 414)

Radiology

24. Appoint Michael D. Tipton (non-tenure), Faculty Associate, 50%, effective January 1, 1975, at an annual salary rate of \$15,600 payable as follows:

For the period January 1, 1975 thru May 19, 1975: from University of Texas System Cancer Control NO1 CN 45150.

For the period May 20, 1975 thru August 31, 1975: from Department Trust Fund. (RBC No. 410)

Surgery

25. Change the source of salary of Robert N. McClelland (tenure), Professor, effective January 1, 1975, as follows:

From: An annual salary rate of \$36,200 payable from Surgery budget

To: An annual salary rate of \$36,200 payable \$32,850 from Surgery budget and \$3,350 from Veterans Administration 1B 74V-44 0071. (RBC No. 401)

DALLAS MEDICAL SCHOOL - continued

Surgery - continued

26. Change the source of salary of Charles D. Coln (non-tenure), Assistant Professor of Surgery and Chairman of Pediatric Surgery, effective January 1, 1975, as follows:

From: An annual salary rate of \$31,000 payable \$14,800 from Surgery budget and \$16,200 from NIH 5 EO3 PE-00174

To: An annual salary rate of \$31,000 payable \$7,300 from Surgery budget, \$16,200 from NIH 06 S 000174, and \$7,500 from Veterans Administration 1B 74V-44 0071. (RBC No. 404)

27. Change the source of salary of William H. Snyder (non-tenure), Assistant Professor, effective January 1, 1975, as follows:

From: An annual salary rate of \$30,000 payable \$20,000 from Surgery budget and \$10,000 from NIH 5 EO3 PE-00174

To: An annual salary rate of \$30,000 payable \$7,000 from Surgery budget, \$10,000 from NIH 06 S 000174 and \$13,000 from Veterans Administration 1B 74V-44 0071. (RBC No. 403)

28. Change the source of salary of Erwin Thal (non-tenure), Assistant Professor, effective January 1, 1975, as follows:

From: An annual salary rate of \$30,000 payable from Surgery budget

To: An annual salary rate of \$30,000 payable \$21,000 from Surgery budget and \$9,000 from Veterans Administration 1B 74V-44 0071. (RBC No. 405)

DALLAS G.S.B.S.

Graduate Program in Biophysics

1. Transfer funds in the amount of \$1,000 from Graduate Program in Biophysics, Teaching Assistants to Graduate Program in Biophysics, Classified Salaries. This amount was inadvertently budgeted in the Teaching Assistants category, but should be in Classified Salaries to pay for a secretarial salary. (RBC No. 406)

DALLAS ALLIED HEALTH SCIENCES SCHOOL

Rehabilitation Science

1. Appoint Jack G. Dial (non-tenure), Instructor, 25%, for the period January 1, 1975 thru June 30, 1975, at an annual salary rate of \$16,000 payable from SRS 44 P 3040816. (RBC No. 391)

Physical Therapy

2. Change the percentage and the source of salary of John R. Shull (non-tenure), Adjunct Assistant Professor of Physical Therapy and Clinical Assistant Professor of Physical Medicine and Rehabilitation, for the period January 16, 1975 thru May 31, 1975, as follows:

From: 10% at an annual salary rate of \$15,600 payable from Physical Therapy budget

To: 60% at an annual salary rate of \$15,600 payable \$13,000 from SRS 44 P 30064/6 and \$2,600 from Physical Therapy budget.

Dr. Shull will revert to percentage and source as shown in the original budget effective June 1, 1975. (RBC No. 400)

DALLAS ALLIED HEALTH SCIENCES SCHOOL - continued

Medical Technology

To:

3. Increase and change the source of salary of Ruth Guy (tenure), Professor and Chairman of Medical Technology; Associate professor of Pathology, effective February 1, 1975, as follows:

From: An annual salary rate of \$25,083 payable \$6,404 from Pathology budget, \$7,472 from Medical Technology budget and \$11,207 from Parkland Memorial Hospital

An annual salary rate of \$25,995 payable \$6,404 from Pathology budget, \$7,472 from Medical Technology budget, \$912 from Parkland Memorial Hospital and \$11,207 from Veterans Administration 1B 74V-44 0071. (RBC No. 417)

Allied Health Education and Instructional Media

4. Reappoint Anita P. Lemley (non-tenure), Instructor, 50%, effective July 1, 1975, at an annual salary rate of \$13,000 payable from Veterans Administration IC 74V-44. (RBC No. 416)

Health Care Sciences

5. Transfer funds in the amount of \$800 from Unallocated Faculty Salaries to Rehabilitation Science Teaching Salaries and appoint Lonnie J. Yarbrough (non-tenure), Instructor, 10%, for the period January 1, 1975 thru April 30, 1975, at an annual salary rate of \$24,000 payable from Rehabilitation Science budget. (RBC No. 409)

THE UNIVERSITY OF TEXAS MEDICAL BRANCH AT GALVESTON March 27, 1975

Chancellor Charles A. LeMaistre The University of Texas System 601 Colorado Street
Austin, Texas 78701

Dear Chancellor LeMaistre:

The docket for the April 28, 1975 meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.

William C. Levin, M.D.
President

President

THE UNIVERSITY OF TEXAS MEDICAL BRANCH AT GALVESTON INSTITUTIONAL DOCKET

BOARD OF REGENTS' MEETING APRIL 28, 1975

APPOINTMENTS AND RESIGNATIONS OF STAFF MEMBERSHIPS ON THE MEDICAL STAFF OF THE UNIVERSITY OF TEXAS MEDICAL BRANCH HOSPITALS AT GALVESTON. On the recommendation of the Executive Committee of the Medical Staff, approval of the following recommendations is respectfully requested:

- l. Appoint Roy Gibson Parrish, M.D., Associate Professor, Department of Anesthesiology to Full Time Attending Membership on the Medical Staff with private patient privileges.
- 2. Appoint Young I Kim, M.D., Instructor, Department of Internal Medicine, to Full Time Associate Membership on the Medical Staff with private patient restrictions.
- 3. Appoint Francis M. Urry, M.D., Instructor, Department of Pathology, to Full Time Associate Membership on the Medical Staff with private patient restrictions.
- 4. Resign Barbara Kolmen, M.D., Clinical Assistant Professor, Department of Pediatrics, from Part Time Attending Membership on the Medical Staff. Dr. Kolmen resigned on December 31, 1974.

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 June 13, 1975 through July 18, 1975 to Glasco, Scotland to present a paper to the Seventh International Symposium on Cerebral Circulation and Metabolism; to London, England to confer about cerebellar influence on circulation; to Dusseldorf, Germany to discuss receptor input from the heart to the brain; and to Milan, Italy to conduct experiments. Dr. Stone's expenses are to be paid from NASA Grant No. NGR 44 088002.

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 approved for the acceptance of the following gift:

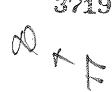
Donor and Address

Purpose and Conditions

Amount

The Sealy & Smith Foundation For The John Sealy Hospital The Sealy & Smith Professional Building 200 University Boulevard Suite 1006 Galveston, Texas 77550 Represents The Sealy & Smith Foundation's contribution to the interest and sinking fund requirements on the bonds issued by The University of Texas for the purpose of constructing an addition to the John Sealy Hospital.

\$1,600,000.00



GRANTS, CONTRACTS AND AGREEMENTS (NON-GOVERNMENTAL):

1. *Hoffman-LaRoche, Inc. 950-E Executive Plaza 4615 Southwest Freeway Houston, Texas 77027

> Research Project - Study of the Acute Effects of Ro 10-6338 versus Furosemide on Cardiac Hemodynamics (Protocol #603A) March 1, 1975 until funds are expended Dr. John F. Williams

2. M. D. Anderson Foundation c/o Bank of the Southwest P. O. Box 2629 Houston, Texas 77001

> Grant to support the Battered Childrens Program \$200,000 April 1, 1975 through March 31, 1977 Dr. Joan Hebeler

3. *Medical Research Foundation of Texas, Inc. c/o The National Bank of Commerce Houston, Texas

Support for institutional Seed Research program \$6,317.92 This grant is to be administered by the Research Committee.

4. The National Foundation March of Dimes 1275 Mamaroneck Avenue White Plains, New York 10605

> Grant No. C-129 Medical Service Grant \$35,000 January 1, 1975 through December 31, 1975 Dr. Charles W. Daeschner

5. The National Foundation March of Dimes 1275 Mamaroneck Avenue White Plains, New York 10605

> Grant No. 6-75-99 Research Project - A New Method for the Early Detection of Respiratory Distress Syndrome of the Newborn \$16,915

April 1, 1975 through March 31, 1977 Dr. Robert E. Barrow

*No letter of transmittal received from the donor.

THE UNIVERSITY OF TEXAS MEDICAL BRANCH AT GALVESTON



FEDERAL CONTRACTS AND GRANTS

BOARD OF REGENTS' MEETING APRIL 28, 1975

1. Department of Health, Education, and Welfare Health Services Administration Bureau of Community Health Services

Training Grant No. MCT-000240-10-0
\$14,000
July 1, 1974 through June 30, 1975
Interdisciplinary Health Services for the Handicapped
Dr. C. W. Daeschner, Jr. (Formerly Dr. ArrNell Boelsche)
This award provides supplemental funds for the current budget period.
Galveston County

2. Department of Health, Education, and Welfare Health Services Administration Bureau of Community Health Services

Research Project No. MCT-000409-12-0
\$11,000
July 1, 1974 through June 30, 1975
The Relation of Genetic Studies to Management of Children with
Mental Retardation
Dr. Charles W. Daeschner
This award provides supplemental funds for the current budget period.
Galveston County

3. Department of Health, Education, and Welfare National Institutes of Health National Eye Institute

Research Grant No. 5 ROL EY 00919-03 No new funds involved May 1, 1974 through April 30, 1976

Pathogenesis of Ocular Toxocariasis. This is a study of the pathogenesis of toxocara canis infection with emphasis on the development and distribution of lesions in the eye.

Dr. Leroy J. Olson
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 Institute of Child Health and Human Development

Research Grant No. 5 ROl HD 03321-09
\$55,052 plus indirect costs
February 1, 1975 through January 31, 1976
Genetic Control of the Structure of Human Proteins. This study
is designed to detect amino acid alterations or sequence rearrangements
in inherited variants of molecules.
Dr. Barbara H. Bowman
This is the ninth grant year of a continuing project.
Galveston County

*Originally signed award letter not received.

FEDERAL CONTRACTS AND GRANTS - continued

5. Department of Health, Education, and Welfare National Institutes of Health National Institute of Environmental Health Sciences

Research Grant No. 5 ROl ES 00944-02 \$28,943 plus indirect costs

March 1, 1975 through February 29, 1976

Air Pollutant - Lipid Membrane Interactions. The overall objective of the presently proposed research work is to determine the specific molecular and biological effects of selected air pollutants on lipid membranes in vital animal tissues.

Dr. Leland L. Smith

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 Neurological Diseases and Stroke

Research Grant No. 5 RO1 NS 09743-05 \$21,513 plus indirect costs (revised) May 1, 1974 through April 30, 1976

Synaptic Connections of Spinal Cord Neurons. The aim of this research is the further elucidation of the function organization of the vertebrate spinal cord. Dr. William D. Willis

This revised award provides for use of unexpended funds and extends the grant period for one year. Galveston County

7. Department of Health, Education, and Welfare National Institutes of Health National Institute of Neurological Diseases and Stroke

Research Grant No. 2 ROL NS 09743-06 \$30,051 plus indirect costs

May 1, 1975 through April 30, 1976

Synaptic Connections of Spinal Cord Neurons. The goal of the proposed research is the further elucidation of the functional organization of the mammalian spinal cord, utilizing electrophysiological and morphological techniques.

Dr. William D. Willis, Jr.

This is the first year award of a five year renewal grant. Galveston County

8. Department of the Air Force Air Force Office of Scientific Research

Modification No. AFOSR-74-2622C to Research Grant No. AFOSR-74-2622 No new funds involved

December 1, 1974 through June 30, 1976

Cardiac Changes Due to Acceleration

Dr. H. L. Stone

This modification changes the scientific title of the project and extends the performance period for seven months without additional funds.

Galveston County

FEDERAL CONTRACTS AND GRANTS - continued

9. Department of the Navy Office of Naval Research

Modification No. 2 to Research Contract No. NOCO14-68-A-C105-0004
No new funds involved
March 1, 1973 through May 31, 1975

A Study of the Effects of Increased Nitrogen Pressures of Nerve
Membranes and Nerve Impulse Transmission. This study is designed
to demonstrate the effects of hyperbaric conditions upon the basic
properties of membranes.
Dr. James E. Blankenship

This modification extends the performance period for three months without additional funds. Work under this contract will be continued under a new contract, No. NOOOl4-75-C-0547. Galveston County

10. Department of the Navy
Office of Naval Research

Contract No. NOOO14-75-C-0162
\$8,000
October 1, 1974 through September 30, 1975
For support of Blood Vessel Conference - Interdisciplinary Data on Vascular Smooth Muscle
Dr. Stewart Wolf
This is a new contract.
Galveston County

11. Department of the Navy
Office of Naval Research

Research Contract No. NOOO14-75-C-0547
\$17,999

March 1, 1975 through February 29, 1976

The Effects of High Nitrogen Tensions of the Properties of Neuronal Membranes and Synaptic Transmission

Dr. James E. Blankenship

This is a new contract award.

Galveston County

12. The United States Government

Research Contract No. XG-4179 (62-8016-75R) \$34,791

March 3, 1975 through February 27, 1976

Interview Sensitization Techniques: Assessing Behavioral Predispositions from Video-taped Interviews. This is a research effort to devise a video-taped interview procedure that will bridge the gap between the laboratory assessment of human behavior (and attitudes) and "real-life" assessments.

Dr. Ernest S. Barratt
This is the sixth year of an ongoing project.
Galveston County

THE UNIVERSITY OF TEXAS MEDICAL BRANCH AT GALVESTON AMENDMENTS TO THE 1974-1975 OPERATING BUDGET

BOARD OF REGENTS' MEETING APRIL 28, 1975

MEDICAL SCHOOL

Office of the Dean of Medicine

I. Change the status of Mrs. Marilyn L. Thompson from Assistant to the Associate AHEC Program Director to Manuscript Editor at the same salary rate of \$13,638 for twelve months, effective December 1, 1974. Change the source of funds from DHEW 06S000170-09 to DHEW Grant 5-S01-RR-05427-14. (RBC 570)

Institute for the Medical Humanities

2. Change the source of funds for Dr. Hugo T. Engelhardt, Jr. (Non-Tenure), Assistant Professor of Philosophy of Medicine at a salary rate of \$20,500 for twelve months, from DHEW Grant 06S-000170-09 to General Budget, effective January 1, 1975. Funds needed are to come from Unallocated Appropriations - Instructional. Dr. Engelhardt also serves as Assistant Professor (part-time), without salary, in the Department of Preventive Medicine and Community Health. (RBC 550)

Anesthesiology

3. Appoint Dr. Roy G. Parrish (Non-Tenure) as Associate Professor at a salary rate of \$30,000 for twelve months, effective January 20, 1975. Funds needed are to come from Unallocated Appropriations - Instructional. (RBC 543)

Dermatology

4. Increase the salary rate of Dr. Charles J. Wilson (Non-Tenure), Clinical Assistant Professor (part-time), from \$564 to \$600 for twelve months, effective February 1, 1975. Additional funds needed are to come from Unallocated Appropriations - Instructional. (RBC 573)

Internal Medicine

- 5. Appoint Dr. Young I. Kim (Non-Tenure) as Instructor at a salary rate of \$18,000 for twelve months, effective January 1, 1975. Funds needed are to come from DHEW Grant 06D-000004-05-0. (RBC 549)
- 6. Change the status of Dr. Delbert L. Chumley (Non-Tenure), Instructor (part-time), from without salary to a salary of \$1,044 for twelve months, effective February 1, 1975. Funds needed are to come from MSRDP Internal Medicine. (RBC 576)

Psychiatry

- 7. Accept the resignation of Mr. James H. Johnson (Non-Tenure), Instructor at a salary rate of \$14,500 for twelve months (\$12,600 from MSRDP Psychiatry and \$1,900 from General Budget), effective January 13, 1975. (RBC 531)
- 8. Appoint Dr. Mary E. Knudson (Non-Tenure) as Assistant Professor at a salary rate of \$14,000 for twelve months, effective January 1, 1975. Funds needed are to come from Shrine Affiliation Agreement. (RBC 552)

Obstetrics and Gynecology

9. Accept the resignation of Mr. Enoch J. Bell, Assistant to the Chairman at a salary rate of \$15,864 for twelve months (\$8,408 from General Budget and \$7,456 from MSRDP - Obstetrics and Gynecology), effective February 12, 1975 (RBC 572)

MEDICAL SCHOOL - continued Pathology

10. Change the source of funds for Dr. Dean S. Folse (Non-Tenure), Research Assistant Professor (part-time) at a salary of \$15,007 for twelve months, from \$7,842 from DHEW Grant 06S-000170-09, \$3,014 from MSRDP - Pathology, and \$4,151 from DHEW Grant 5S01-RR-05427-13 to \$7,842 from DHEW Grant 06S-000170-09, \$3,014 from MSRDP - Pathology, and \$4,151 from General Budget, effective January 1, 1975. General Budget funds needed are to come from Unallocated Appropriations - Instructional. Dr. Folse also serves as Veterinarian (part-time) at a salary of \$7,445 in Animal Care Center and as Research Assistant Professor (part-time), without salary, in Office of the Dean of Graduate School. Total salary for twelve months, \$22,452. (RBC 532)

Pediatrics

- 11. Accept the resignation of Miss Sandra L. Sayers, Associate Project Director Nutrition at a salary rate of \$14,868 for twelve months, effective January 13, 1975. (RBC 525)
- 12. Change the source of funds for Dr. Carol J. Richardson (Non-Tenure), Assistant Professor at a salary rate of \$25,400 for twelve months, from \$12,992 from DHEW Grant O6S-000170-09 and \$12,408 from DHEW Grant O6D-000004-05-0 to General Budget only, effective January 1, 1974. Funds needed are to come from Unallocated Appropriations Instructional. (RBC 528)
- 13. Appoint Miss Linda L. Smith as Associate Project Director Nutrition at a salary rate of \$13,800 for twelve months, effective January 20, 1975. Funds needed are to come from Children and Youth Project. (RBC 542)
- 14. Change the status of Mr. Donald D. Uran from Associate Project Director Administration to Assistant to the Chairman and Associate Project Director Administration at the same salary rate of \$17,820 for twelve months, effective January 1, 1975. Also effective this same date, change source of funds from Children and Youth Project to \$16,929 from Children and Youth Project and \$891 from MSRDP Pediatrics. (RBC 551)

Physiology and Biophysics

- 15. Appoint Dr. Joe D. Coulter (Non-Tenure) as Assistant Professor (part-time), without salary, effective November 1, 1974. Dr. Coulter also serves as Assistant Professor (part-time), without salary, in the Department of Psychiatry and as Member at a salary rate of \$17,500 for twelve months in The Marine Biomedical Institute. (RBC 522)
- 16. Change the source of funds for Dr. Luddo B. Nanninga (Non-Tenure), Research Professor at a salary rate of \$20,860 for twelve months, from \$13,479 from DHEW Grant 1RO1-NS-11452-OlAl and \$7,381 from DHEW Grant 5SO1-RR-05427-13 to \$13,479 from DHEW Grant 1RO1-NS-11453-OlAl and \$7,381 from General Budget, effective January 1, 1975. General Budget funds needed are to come from Unallocated Appropriations Instructional. (RBC 536)
- 17. Appoint Dr. Normand C. Hebert (Non-Tenure) as Adjunct Professor (part-time), without salary, effective September 1, 1974. (RBC 544)
- 18. Appoint Dr. Brian A. Hills (Non-Tenure) as Professor (part-time), without salary, effective January 1, 1975. Dr. Hills also serves as member at a salary rate of \$32,000 in the Marine Biomedical Institute. (RBC 561)

MEDICAL SCHOOL - continued

Preventive Medicine and Community Health

19. Accept the resignation of Miss Sandra L. Sayers as Consultant in Nutrition Education (part-time), without salary, effective January 13, 1975. (RBC 526)

20. Accept the resignation of Dr. Phaibul Chotiprasidhi (Non-Tenure), Clinical Instructor (part-time), without salary, effective December 31, 1974. (RBC 541)

ALLIED HEALTH SCIENCES SCHOOL

School of Allied Health Sciences Office of the Dean of Allied Health Sciences
21. Delete the name of Miss Donna J. Barlow (Non-Tenure), Adjunct Assistant Professor (part-time), without salary. Miss Barlow did not accept her 1974-75 reappointment. (RBC 567)

School of Allied Health Sciences -

Core Curriculum - Basic and Clinical Allied Health

- 22. Correct the title only of Miss Lucia Guzman (Non-Tenure) to read Instructor instead of Coordinator at the same salary rate of \$12,500 for twelve months, effective December 16, 1974. (RBC 533)
- 23. Appoint Mr. Lawrence W. Erickson (Non-Tenure) as Assistant Professor at a salary rate of \$15,750 for twelve months, effective September 1, 1974. Funds needed are to come from 41402030-NO1-MB-24391. (RBC 568)

School of Allied Health Sciences -

Health Care Sciences
24. Accept the resignation of Dr. William L. Price (Non-Tenure), Instructor at a salary rate of \$15,000 for twelve months, effective February 17, 1975.

School of Allied Health Sciences -

Occupational Therapy

- 25. Grant a leave of absence without salary to Miss Mary E. Juneau (Non-Tenure), Assistant Professor (part-time), at a salary of \$7,243 for twelve months, effective January 20, 1975. (RBC 524)
- 26. Accept the resignation of Miss Barbara A. Willis, Adjunct Instructor (part-time), without salary, effective January 1, 1975. (RBC 527)
- 27. Appoint Miss Anne L. Mercier (Non-Tenure) as Instructor (one-fourth time) at a salary rate of \$10,308 for twelve months, effective February 1, 1975. Funds needed are to come from the departmental teaching salaries budget. (RBC 556)
- 28. Reappoint Miss Mary E. Juneau (Non-Tenure) as Assistant Professor (60% time) at a salary rate of \$12,273 for twelve months, effective January 27, 1975. Funds needed are to come from Unallocated Appropriations - Allied Health Sciences. Miss Juneau is returning from a leave of absence. (RBC 559)
- 29. Accept the resignation of Miss Eleanor K. Barns, Adjunct Instructor (part-time), without salary, effective October 1, 1974. (RBC 563)
- 30. Accept the resignation of Mrs. Cary Blalock, Adjunct Instructor (part-time), without salary, effective September 26, 1974. (RBC 564)

ALLIED HEALTH SCIENCES SCHOOL - continued School of Allied Health Sciences -

Physical Therapy

- 31. Appoint Miss Miriam J. Partridge (Non-Tenure) as Instructor (part-time) at a salary of \$8,000 for twelve months, for the period September 23, 1974 through April 30, 1975. Funds needed are to come from the departmental teaching salaries budget. (RBC 554)
- 32. Accept the resignation of Mrs. Linda L. Stocking, Adjunct Instructor (part-time), without salary, effective September 24, 1974. (RBC 565)

UNIVERSITY HOSPITALS

Office of the Vice President for Hospital Affairs

- 32. Accept the resignation of Mr. Ronald R. Patterson, Assistant Administrator of Hospitals at a salary rate of \$17,500 for twelve months, effective January 31, 1975. (RBC 521)
- 33. Appoint Mr. Glen F. Heifner as Assistant Administrator of Hospitals at a salary rate of \$18,528 for twelve months, effective February 1, 1975. Funds needed are to come from the departmental non-teaching salaries budget. (RBC 571)

Hearing and Speech Clinic
34. Delete the name of Mrs. Patricia J. Larson, Teacher of the Deaf (part-time),
without salary. Mrs. Larson did not accept her 1974-75 reappointment. (RBC 566)

School Service for Pediatric and Psychiatric Patients

- 35. Appoint Mrs. Alice I. Chambers as School Teacher (one-fourth time) at a salary rate of \$13,248 for twelve months, effective September 1, 1974. Funds needed are to come from Texas Education Agency Project 40-0778SS. (RBC 537)
- 36. Appoint Mrs. O'Nita E. Buchwald as School Teacher (one-fourth time) at a salary rate of \$13,248 for twelve months, effective September 1, 1974. Funds needed are to come from Texas Education Agency Project 40-0778SS. (RBC 538)
- 37. Appoint Mrs. Helen A. Test, School Teacher (one-half time) at a salary rate of \$9,936 for twelve months, effective September 1, 1974. Funds needed are to come from Texas Education Agency Project 40-0779SS. (RBC 539)
- 38. Appoint Mrs. Lois G. Couch as School Teacher (part-time), without salary, effective September 1, 1974. (RBC 545)
- 39. Change the status of Mr. Thomas J. Harling, School Teacher, from full-time at a salary rate of \$9,750 for twelve months to part-time, without salary, effective September 1, 1974. (RBC 569)

THE MARINE BIOMEDICAL INSTITUTE
The Marine Biomedical Institute

- 40. Appoint Dr. Joe D. Coulter as Member at a salary rate of \$17,500 for twelve months, effective January 1, 1975. Funds needed are to come from the departmental non-teaching salaries budget. Dr. Coulter also serves as Assistant Professor (part-time), without salary, in the Departments of Psychiatry and Physiology. (RBC 523)
- 41. Appoint Dr. Brian A. Hills as Member at a salary rate of \$32,000 for twelve months, effective January 1, 1975. Funds needed are to come from the departmental non-teaching salaries budget. Dr. Hills also serves as Professor (part-time), without salary, in the Department of Physiology. (RBC 560)

THE MARINE BIOMEDICAL INSTITUTE - continued The Marine Biomedical Institute -

Environmental Sciences

42. Accept the resignation of Dr. Frederick K. Duennebier (Non-Tenure), Research Scientist (Faculty) at a salary rate of \$17,004 for twelve months, effective December 31, 1974. (RBC 562)

43. Accept the resignation of Dr. David R. Lammlein (Non-Tenure), Research Scientist (Faculty) at a salary rate of \$18,540 for twelve months, effective February 28, 1975. (RBC 579)

ORGANIZED RESEARCH

Human Biological Chemistry and Genetics
44. Change the source of funds for Dr. Thomas M. Monahan (Non-Tenure), Lecturer at a salary rate of \$16,400 for twelve months, from \$15,000 from DHEW Grant 06s-000170-09 and \$1,400 from DHEW Grant 2R01-CA-14525-02 to \$15,000 from General Budget and \$1,400 from DHEW Grant 2 RO1-CA-14525-02, effective February 1, 1975. General Budget funds needed are to come from Unallocated Appropriations - Instructional. (RBC 529)

45. Change the source of funds for Dr. James N. Lindsey (Non-Tenure), Lecturer at a salary rate of \$16,000 for twelve months, from \$14,200 from DHEW Grant 06s-000170-09 and \$1,800 from NIH NICHD-72-2704 to \$14,200 from General Budget and \$1,800 from NIH MICHD-72-2704, effective February 1, 1975. General Budget funds needed are to come from Unallocated Appropriations - Instructional. (RBC 530)

TRANSFER OF FUNDS

\$17,647.83 From: Unallocated Appropriations - Hospitals

Unit Management: Classified Salaries \$17,647.83

This transfer will provide funds for the creation For: of six (6) new positions of Unit Clerk I at a salary rate of \$4,620 for twelve months, one (1) to be effective January 8, 1975 and five (5) to be effective January 13, 1975.

(RBC 520)

47. From: Unallocated Appropriations - Hospitals

To: Unit Management: Classified Salaries \$25,655.54

This transfer will provide funds for the creation of six (6) new positions of Clerk I at a salary rate of \$4,464 for twelve months; five (5) to be effective September 16, 1974 and one (1) September 17,

1974.

(RBC 535)

TRANSFER OF	<u>FUNDS</u> - continued Unallocated Appropriations - Hospitals	\$ 5,037.06
To:	Unit Management: Classified Salaries	\$ 5,037.06
For:	This transfer will provide funds for the creation of a new position of Unit Manager I at a salary rate of \$8,724 for twelve months, effective	
(RBC 575)	February 3, 1975.	
49. From:	Unallocated Appropriations - Hospitals	\$ 4,700.00
To:	Out-Patient Clinics: Classified Salaries	\$ 4,700.00
For:	This transfer will provide funds for the creation of a new position of Clerk I at a salary rate of \$5,640 for twelve months, effective November 1,	
(RBC 548)	1974.	
50. From:	Unallocated Appropriations - Hospitals	\$ 5,193.12
To:	Blood Bank: Classified Salaries	\$ 5,193.12
For:	This transfer will provide funds for the creation of a new position of Medical Technologist I at a salary rate of \$8,436 for twelve months, effective January 20, 1975.	
(RBC 547)		
51. From:	Unallocated Appropriations - Hospitals	\$11,651.96
To:	Clinical Laboratory: Classified Salaries	\$11,651.96
For:	This transfer will provide funds for the creation of four (4) new positions of Laboratory Technical Assistant I at a salary rate of \$4,464 for twelve months, three (3) to be effective January 6, 1975 and one (1) effective January 7, 1975.	
(RBC 519)	and one (1) effective sandary (, 191).	
52. From:	Unallocated Appropriations - Hospitals	\$ 8,539.99
To:	Clinical Laboratory: Classified Salaries	\$ 8,539.99
For: (RBC 540)	This transfer will provide funds for the creation of a new position of Medical Technologist I at a salary rate of \$8,436 for twelve months, effective January 1, 1975, and a Laboratory Technical Assistant I at a salary rate of \$4,464 for twelve months, effective January 6, 1975.	
(ILDO)TO)		

	From:	FUNDS - continued Unallocated Appropriations - Hospitals	\$ 2,963.99
	To:	Clinical Laboratory: Classified Salaries	\$ 2,963.99
	For:	This transfer will provide funds for the creation of a new position of Laboratory Technical Assistant at a salary rate of \$4,464 for twelve months,	I
(RBC	558)	effective January 2, 1975.	
54.	From:	Unallocated Appropriations - Hospitals	\$69,000.00
	To:	Clinical Laboratory: Maintenance and Operation	\$69,000.00
	Fo:	This transfer will provide funds for continued operations for the remainder of this fiscal	
(RBC	578)	year.	
55.	From:	Unallocated Appropriations - Hospitals	\$ 5,669.35
	To:	Pediatric Nephrology Laboratory: Classified Salaries	\$ 5,669.35
	For:	This transfer will provide funds for the creation of a new position of Research Technician at a salary rate of \$8,436 for twelve months, effective	
(RBC	553)	December 30, 1974.	
56.	From:	Unallocated Appropriations - Hospitals	\$ 3,094.12
	To:	Pharmacy: Classified Salaries	\$ 3,094.12
	For:	This transfer will provide funds for the creation of a new position of Cashier II at a salary rate of \$4,776 for twelve months, effective January 8,	
(RBC	518)	1975.	
57.	From:	Unallocated Appropriations - Hospitals	\$ 8,435.97
	To:	Pharmacy: Classified Salaries	\$ 8,435.97
	For:	This transfer will provide funds for the creation of three (3) new positions of Pharmacy Technician at a salary rate of \$4,464 for twelve months; one (1) to be effective January 13, 1975, one (1) January 14, 1975, and one (1) January 17, 1975.	
(RBC	53 4)		

TRANSFER OF FUNDS - continued 58. From: Unallocated Appropriations - Hospitals \$ 5,615.98 To: Pharmacy: \$ 5,615.98 Classified Salaries This transfer will provide funds for the creation For: of two (2) positions of Pharmacy Technician at a salary rate of \$4,464 for twelve months, one (1) to be effective January 9, 1975 and one (1) to be effective January 21, 1975. (RBC 546) 59. From: Unallocated Appropriations - Hospitals To: Pharmacy: Classified Salaries 2,711.99 This transfer will provide funds for the creation For: of a new position of Pharmacy Technician at a salary rate of \$4,464 for twelve months, effective January 23, 1975. (RBC 557) 60. From: Unallocated Appropriations - Hospitals 3,213.00 To: Pharmacv: Classified Salaries For: This transfer will provide funds for the creation of a new position of Pharmacist I (one-half time) at a salary rate of \$11,016 for twelve months, effective February 1, 1975. (RBC 574) 61. From: Unallocated Appropriations - Hospitals \$12,565.72 To: Pulmonary Therapy Service: Classified Salaries \$12,565.72 This transfer will provide funds for the creation For: of three (3) new positions: One (1) Assistant Technical Director, Respiratory Therapy (part-time) at a salary of \$12,938 for twelve months, effective January 29, 1975. Two (2) Respiratory Therapy Technician I at a salary rate of \$4,620 for twelve months, effective February 17, 1975. (RBC 577)

TRANSFER OF FUNDS - continued 62. From: Unallocated Appropriations - Hospitals

To: Pulmonary Therapy Service:

Classified Salaries

This transfer will provide funds for the creation For:

of three (3) new positions of Respiratory

Therapy Technician I:

Two (2) at a salary rate of \$4,620 for twelve months, one (1) effective February 13, 1975 and one (1) effective February 25, 1975, and (1) at a salary rate of \$4,464 for twelve months,

effective February 26, 1975.

(RBC 580)

63. From: The Marine Biomedical Institute:

Classified Salaries

To: The Marine Biomedical Institute:

Rental

This transfer will provide funds to cover the

increased rental charges.

(RBC 582)



The University Of Texas Health Science Center At Houston

P. O. Box 20036 1020 Holcombe Boulevard Houston, Texas 77025 (713) 792-4270

Charles A. Berry, M.D., M.P.H. President

April 1, 1975

Chancellor Charles A. LeMaistre The University of Texas System 601 Colorado Street Austin, Texas 78701

Dear Chancellor LeMaistre:

The docket for the April 28, 1975 meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.

Sincerely,

Larles A. Berry, M.D., M.P.H.

President

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON

Docket

Board of Regents' Meeting April 28, 1975

MX

 $\underline{\text{GIFTS}}\colon$ Approval is respectfully requested for the acceptance of the following gifts.

Donor		Purpose and Condition	Amount	
P. Hou Fos Pr	own and Root, Inc. O. Box 3 uston, Texas 77001 ster Parker, resident and Chief kecutive Officer	Unrestricted gift for use by the President in the development of the Houston Health Science Center.	\$10,000.00	
1.* Med da Mr. 533	JSTON MEDICAL SCHOOL dical Research Foun- ation of Texas, Inc Sloane Wingert Bl Beverly Hill #21A uston, Texas 77027	Unrestricted gift for use by the Dean in the develop-ment of the Medical School.	6,317.92	
1.* Med da Mr. 533	dical Research Foun- ation of Texas, Inc. Sloane Wingert Bl Beverly Hill #21A uston, Texas 77027	For use by the Dean in the Dental Branch research program.	6,317.92	

GRANTS, CONTRACTS AND AGREEMENTS (NON-GOVERNMENTAL): Approval is respect- fully requested for the following grant.

HOUSTON MEDICAL SCHOOL

1. Grant-in-aid whereby Boehringer Ingelheim Ltd., Regional Office, P. O. Box 15176, Atlanta, Georgia, 30333, provides \$40,441.50, for the period December 1, 1974 through November 30, 1975, to support a Th 1165a tablet study, under the direction of Warren C. Miller, M.D., Assistant Professor in the Department of Internal Medicine. The purpose of the study is to determine the bronchodilating efficacy of Th 1165a tablets. The grant was made on behalf of Boehringer Ingelheim Ltd. by John C. Stamatiades, Clinical Research Associate, Southern Region.

<u>GRANTS, CONTRACTS AND AGREEMENTS (STATE)</u>: Approval is respectfully requested for the following contract.

SPEECH AND HEARING INSTITUTE

1. Interagency Cooperation Contract IAC (74-75)-1552, between The University of Texas Health Science Center at Houston (Performing Agency) and The Richmond State School of the Texas Department of Mental Health and Mental Retardation (Receiving Agency), whereby The Richmond State School provides \$3,500, for the period February 25, 1975 through June 30, 1975, for the services of an electronic technician and supervisory personnel from the Speech and Hearing Institute for the audiological assessment of its multihandicapped population. The contract was signed on behalf of the Houston Health Science Center by Mr. G. C. Franklin, Vice President for Business Affairs, and was approved by the State Board of Control on February 25, 1975.

*No letter of transmittal was received from the donor.

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON

GRANTS, CONTRACTS AND AGREEMENTS (FEDERAL)
Board of Regents' Meeting April 28, 1975

NA

The following grants and contract modifications have been approved by the Chief Administrative Officer and are hereby submitted for ratification by the Board of Regents.

HOUSTON MEDICAL SCHOOL

1. Research Scientist Development Grant 1 KO2 MH-00047-01, by which the Department of Health, Education and Welfare, National Institute of Mental Health, provides \$28,400, for the period March 1, 1975 through February 29, 1976, to support research entitled, "Social Factors and Disease - Mexican American Health," under the direction of Robert E. Roberts, Ph.D., Associate Professor in the Medical School Department of Psychiatry (Awardee). A primary aim of this research is to acquire and analyze data on the physical and mental health status of defined populations of Mexican Americans, and to compare their health characteristics to those of other ethnic groups in the same communities. The total project period is March 1, 1975 through February 28, 1980. The majority of expenditures from this award will be made in Harris County.

HOUSTON GRADUATE SCHOOL OF BIOMEDICAL SCIENCES

- 1. Grant 5 TOl GM-02237-02, by which the Department of Health, Education and Welfare, National Institute of General Medical Sciences, provides \$50,620, for the period July 1, 1975 through June 30, 1976, for training in "Medical Genetics." Trainees include predoctoral students in biomedical sciences working towards the Ph.D. degree; postdoctoral fellows (post-M.D. and post-Ph.D.) seeking advanced training and/or another advanced degree in medical genetics. The total project period is May 1, 1974 through June 30, 1979, and Margery W. Shaw, M.D., Director of the Medical Genetics Center, is Program Director. The majority of expenditures from this award will be made in Harris County.
- 2. International Travel Grant BMS75-14338, by which the National Science Foundation provides \$1,345, for the period March 12-23, 1975, to defray the travel expenses of Masatoshi Nei, Ph.D., Professor in the Center for Demographic and Population Genetics, when he participates in the International Conference on Population Genetics and Ecology to be held in Rehovot and Haifa, Israel. The majority of expenditures from this award will be made in Harris County.

PUBLIC HEALTH SCHOOL

- 1. Grant T-900330-03-0, by which the Environmental Protection Agency provides \$45,956 for the period January 1, 1975 through August 31, 1975, to continue support of a "Graduate Program in Air Quality Management." The total project period is July 1, 1972 through August 31, 1975, and Stanley M. Pier, Ph.D., Associate Professor in the Department of Environmental Health, is Project Manager. The grant agreement was signed on behalf of the Houston Health Science Center by Dr. E. J. McLaughlin, Vice President for Operations and Planning. The majority of expenditures from this award will be made in Harris County.
- 2. Modification 4 to Contract No. NOI-NS-3-2304, by which the Department of Health, Education and Welfare, National Institute of Neurological Diseases and Stroke, extends the contract for the period February 28, 1975 through February 27, 1976. This contract supports "Epidemiological Studies of Stroke Risk Factors in Panama," under the direction of Stephen Bennett, Dr.P.H., Associate Professor of Epidemiology. The total project period is February 28, 1973 through February 27, 1976. The modification was signed on behalf of the Houston Health Science Center by Charles A. Berry, M.D., M.P.H., President.

PUBLIC HEALTH SCHOOL (Continued)

3. Modification 8 to Contract NO1 HV 12442, by which the Department of Health, Education and Welfare, National Heart and Lung Institute, revises Article V to read "a cost-reimbursement subcontract" in lieu of "a fixed-price contract." This contract supports a project entitled, "Therapy for Hypertension in the General Population," under the direction of C. Morton Hawkins, Ph.D., Associate Professor in the Department of International Health. The modification was signed on behalf of the Houston Health Science Center by Charles A. Berry, M.D., M.P.H., President.

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON

Board of Regents' Meeting April 28, 1975

CLINICAL FACULTY AND OTHER ACADEMIC APPOINTMENTS WITHOUT SALARY AND WITHOUT TENURE

hammen parameter than the second

HOUSTON MEDICAL SCHOOL

Anesthesiology

Clinical Associate
1. Edwin Wallace Roberts, D.D.S.
(effective February 1, 1975)

Family Practice

Clinical Assistant Professor
1. Walter D. Wilkerson, Jr., M.D. (effective February 1, 1975)

Clinical Instructor
1. James H. Chapman, Jr., M.D. (effective February 1, 1975)
2. John V. Peet, M.D. (effective February 1, 1975)

Ophthalmology

Clinical Instructor
1. Maple L. Avery, M.D.
(effective May 15, 1975)

Pathology

Adjunct Assistant Professor
1. John D. Ellis, Jr., J.D.
(effective February 1, 1975)

HOUSTON DENTAL BRANCH

General Pathology

Adjunct Associate Professor

1. Harold C. Sternlicht,
D.D.S., Ph.D.
(effective March 1, 1975)

PUBLIC HEALTH SCHOOL

Environmental Health

Adjunct Associate Professor
1. Stuart A. Bergman, Jr., M.D., Ph.D.
2. John A. Rummel, Ph.D.
3. Carolyn S. Leach, Ph.D.
(effective April 1, 1975)

<u>Pharmacology</u>

Assistant Professor
1. James Nakamura, Ph.D. (effective April 1, 1975)

Internal Medicine

Clinical Associate
1. Oscar L. DeLaRosa, M.D. (effective March 1, 1975)

Surgery - Urology

Assistant Professor
1. Robert Bruce Bracken, M.D. (effective March 15, 1975)

<u>Library Science</u>

Adjunct Instructor
1. Jo Ellen Green, M.L.S.
(effective March 1, 1975)

General Practice

Clinical Assistant Professor 1. Jack H. Levine, D.D.S. (effective February 1, 1975)

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON

Amendments to the 1974-75 Operating Budget Board of Regents' Meeting April 28, 1975

Approval is respectfully requested for the following amendments to the 1974-75 operating budget.

Data Processing

1. Create the position of Supervisor of Computer Operations in the Health Science Center-General Department of Data Processing at an annual salary rate of \$15,372.00, effective September 1, 1974. Funds needed are to come from Health Science Center-General, Unallocated Appropriations-Maintenance and Operation. (RBC-291)

Personnel

- 2. Create the position of Assistant Personnel Director in the Health Science Center-General Department of Personnel at an annual salary rate of \$16,440.00, effective September 25, 1974. Funds needed are to come from Health Science Center-General, Unallocated Appropriations-Maintenance and Operation. (RBC-297)
- 3. Create the position of Personnel Assistant I in the Health Science Center-General Department of Personnel at an annual salary rate of \$10,308.00, effective September 10, 1974. Funds needed are to come from Health Science Center-General, Unallocated Appropriations-Maintenance and Operation. (RBC-298)
- 4. Create the position of Personnel Assistant I in the Health Science Center-General Department of Personnel at an annual salary rate of \$9,648.00, effective October 1, 1974. Funds needed are to come from Health Science Center-General, Unallocated Appropriations-Maintenance and Operation. (RBC-299)
- 5. Create the position of Administrative Clerk in the Health Science Center-General Department of Personnel at an annual salary rate of \$6,036.00, effective November 11, 1974. Funds needed are to come from Health Science Center-General, Unallocated Appropriations-Maintenance and Operation. (RBC-300)

Purchasing

6. Create the position of Assistant Purchasing Agent in the Health Science Center-General Department of Purchasing at an annual salary rate of \$14,376.00, effective October 8, 1974. Funds needed are to come from Health Science Center-General, Unallocated Appropriations-Maintenance and Operation. (RBC-286)

Contracts and Grants Management

- 7. Create the position of Administrative Assistant in the Health Science Center-General Department of Contracts and Grants Management at an annual salary rate of \$8,724.00, effective September 1, 1974. Funds needed are to come from Health Science Center-General, Unallocated Appropriations-Maintenance and Operation. (RBC-288)
- 8. Create the position of Administrative Assistant in the Health Science Center-General Department of Contracts and Grants Management at an annual salary rate of \$9,336.00, effective September 1, 1974. Funds needed are to come from Health Science Center-General, Unallocated Appropriations-Maintenance and Operation. (RBC-289)

Contracts and Grants Management (Continued)

9. Create the position of Accounting Clerk II in the Health Science Center-General Department of Contracts and Grants Management at an annual salary rate of \$6,672.00, effective November 18, 1974. Funds needed are to come from Health Science Center-General, Unallocated Appropriations-Maintenance and Operation. (RBC-290)

General Stores and Receiving

10. Create the position of Stores Clerk II in the Health Science Center-General Department of General Stores and Receiving at an annual salary rate of \$6,456.00, effective September 1, 1974. Funds needed are to come from Health Science Center-General, Unallocated Appropriations-Maintenance and Operation. (RBC-287)

<u>General</u>

11. Transfer \$20,000.00 from "Administrative Charges to Trust Funds" to "Administrative Expense/President's Office." This allocation is requested to cover costs related to a Health Science Center Administrative Planning Conference, development expenses, official functions, and other expenses of the Health Science Center Administrative Offices. (RBC-362)

Special Projects and Equipment

12. Transfer \$150,000.00 from Unexpended Plant Funds-Special Project Allocation Fund to Special Projects and Equipment. This transfer is requested to provide funds for miscellaneous building modifications, refurbishing, and additional physical plant equipment for the balance of the 1974-75 fiscal year. (RBC-301)

HOUSTON MEDICAL SCHOOL

Admissions

1. Appoint Helen Elizabeth Murphy as Registrar in the Medical School Department of Admissions at an annual salary rate of \$13,000.00, effective January 28, 1975. Funds needed are to come from Departmental Administrative and Professional Salaries. (RBC-350)

Office of the Dean

- 2. Transfer \$55,990.00 from NIH/General Research Support Grant-Restricted Funds to NIH/General Research Support Grant-Supplies (\$10,000.00), Other Expenses (\$20,500.00), and Equipment (\$25,490.00). This transfer is to provide funds from which individual projects may be budgeted by the Health Science Center. (RBC-311)
- 3. Transfer \$11,000.00 from Health Professions Capitation Grant-Restricted Funds to Biomedical Communications/Capitation Grant-Equipment, and \$900.00 from Health Professions Capitation Grant-Restricted Funds to General Research Support/Internal Medicine/Infectious Diseases/Capitation Grant-Fringe Benefits, and \$750.00 from Health Professions Capitation Grant-Restricted Funds to Library/Capitation Grant-Fringe Benefits. The transfer to Biomedical Communications is to provide funds for the purchase of four acoustic couplers, four terminals and one printer needed for instructional purposes for undergraduate students. The transfers to General Research Support/Internal Medicine/Infectious Diseases and to Library are to provide funds for fringe benefits for budgeted salaries. (RBC-319)

Office of the Dean (Continued)

- 4. Transfer \$13,353.20 from Health Professions Capitation Grant-Restricted Funds to Education and Research Computer Services/Capitation Grant-Computer Rental, and \$13,100.00 from Health Professions Capitation Grant-Restricted Funds to Support Texas Medical Center Library/Capitation Grant-Other Expenses, and \$850.00 from Health Professions Capitation Grant-Restricted Funds to Family Practice/Capitation Grant-Fringe Benefits. The transfer to Education and Research Computer Services is requested to provide funds for the Medical School share of payments for services to M. D. Anderson under Interagency Cooperation Contract 74-75-1100. The transfer to the Texas Medical Center Library is to provide funds for the balance of payments to the Library. The transfer to Family Practice is to provide funds for fringe benefits for budgeted salaries. (RBC-320)
- 5. Transfer \$1,112.50 from Health Professions Capitation Grant-Restricted Funds to Neurostructure and Function/Capitation Grant-Other Expenses. This transfer provides funding for the final two months of a maintenance contract on laboratory equipment. (RBC-321)
- 6. Transfer \$16,000.00 from Health Professions Capitation Grant-Restricted Funds to Pathology/Capitation Grant-Equipment. This transfer is requested to provide funds for the purchase of equipment requested by the new Program Director, Dr. Donald C. Cannon. (RBC-322)

ANALYTIC SCIENCES

Physiology

- 7. Appoint David A. Wiseman as Teaching Fellow in the Medical School Department of Physiology at an annual salary rate of \$8,000.00, effective December 15, 1974. Funds needed are to come from the American Medical Association-Education Research Foundation Grant. (RBC-340)
- 8. Cancel the appointment of Mary C. King as Teaching and Research Assistant, part-time (50%) in the Medical School Department of Physiology at an annual salary rate of \$6,400.00, effective January 1, 1975. (RBC-354)

CLINICAL SCIENCES

Anesthesiology

- 9. Appoint Marietta C. Panares (non-tenure), Assistant Professor in the Medical School Department of Anesthesiology at an annual salary rate of \$29,000.00, effective January 1, 1975. Funds needed are to come from Departmental Faculty Salaries. (RBC-308)
- 10. Appoint Young K. Yoon (non-tenure) as Assistant Professor in the Medical School Department of Anesthesiology at an annual salary rate of \$30,000.00, effective January 1, 1975. Funds needed are to come from Departmental Faculty Salaries. (RBC-310)
- 11. Change the status and increase the salary of Luis J. Moreno from Assistant Professor (non-tenure) in the Medical School Department of Anesthesiology at an annual salary rate of \$28,000.00, to Associate Professor (tenure) at an annual salary rate of \$34,000.00, effective January 1, 1975. Funds needed are to come from Unallocated Appropriations-Faculty Salaries. (RBC-344)

Pathology

12. Accept the resignation of Samuel Joseph Skinner (non-tenure) as Clinical Assistant Professor (67%) in the Medical School Department of Pathology at an annual salary rate of \$25,500.00, effective December 31, 1974. (RBC-316)

Pathology

- 13. Create the position of Administrative Assistant I in the Medical School Department of Pathology at an annual salary rate of \$9,336.00, effective November 25, 1974. Funds needed are to come from Unallocated Faculty Salaries. (RBC-355)
- 14. Appoint Sushma Mahajan (non-tenure) as Adjunct Assistant Professor in the Medical School Department of Pathology at an annual salary rate of \$30,000.00, effective February 1, 1975 through June 30, 1975. Funds needed are to come from the Medical School MSRDP Clinical Program Fund. (RBC-359)

Pediatrics

15. Change the status of Susan S. Skrovan (non-tenure) from Assistant Dean for Student Affairs part-time (25%) in the Medical School Office of the Associate Dean for Academic Affairs, and Assistant Professor part-time (50%) in the Medical School Department of Pediatrics at an annual salary rate of \$29,500.00, to Assistant Professor full-time in the Department of Pediatrics at the same annual rate, effective January 1, 1975. Additional funds needed are to come from Medical School Unallocated Faculty Salaries. (RBC-353)

Radiology

- 16. Change the status of Patricia Athey (non-tenure) from Instructor in the Medical School Department of Radiology to Assistant Professor at the same annual salary rate of \$20,700.00, effective January 1, 1975. (RBC-313)
- 17. Accept the resignation of Gerald D. Dodd (non-tenure) as Professor and Director part-time (25%) of the Medical School Department of Radiology at an annual salary rate of \$40,000.00, effective December 31, 1975. Unused funds are to be lapsed to Medical School Unallocated Faculty Salaries. Dr. Dodd will be changing from 75% to full-time employment at M. D. Anderson Hospital. (RBC-343)

Reproductive Biology and Reproductive Endocrinology

- 18. Accept the resignation of Kantilal H. Thanki (non-tenure) as Teaching and Research Assistant in the Medical School Department of Reproductive Biology and Reproductive Endocrinology at an annual salary rate of \$6,000.00, effective December 12, 1974. (RBC-314)
- 19. Appoint Cheryle C. Lu as Research Associate in the Medical School Department of Reproductive Biology and Reproductive Endocrinology at an annual salary rate of \$9,000.00, effective January 1, 1975. Funds needed are to come from NIH Grant NO1 PO1 HD-08338-01. (RBC-345)
- 20. Appoint Mary L. Campbell as Technical Writer part-time (50%) in the Medical School Department of Reproductive Biology and Reproductive Endocrinology at an annual salary rate of \$9,972.00, effective January 13, 1975. Funds needed are to come from Ford Foundation #720-0075A. (RBC-346)

COMMUNITY HEALTH SCIENCES

Family Practice

21. Change the source of funds for the position of Secretary III in the Medical School Department of Family Practice at an annual salary rate of \$8,436.00, from HEW Grant PE-08023 to General Budget, effective December 30, 1974. Funds needed are to come from Medical School Unallocated Faculty Salaries. (RBC-333)

Health Services Administration

22. Transfer \$29,300.00 from Medical School Unallocated Equipment (\$25,014) and Unallocated Faculty Salaries (\$4,286) to Health Services Administration-Equipment. This transfer is requested to provide funds for equipment necessary for the instruction of medical students. (RBC-312)

OTHER INSTRUCTIONAL PROGRAMS

Biomedical Communications

23. Appoint Richard W. Smalling as Research Fellow part-time (47.5%) in the Medical School Department of Biomedical Communications at an annual salary rate of \$11,368.00, effective October 1, 1974. Funds needed are to come from the Schwarz Foundation. (RBC-285)

Unallocated Appropriations

24. Lapse \$718,929.30 from Medical School unfilled faculty salary positions as indicated to Medical School Unallocated Appropriations-Faculty Salaries. (RBC-323)

FROM:	Anatomy Biochemistry and Molecular Biology Cell Structure and Function Neurostructure and Function Pharmacology Physiology Anesthesiology Dermatology Internal Medicine-General Internal Medicine-Gastrointestinal Internal Medicine-Hematology Internal Medicine-Hematology Internal Medicine-Pulmonary Neurology Obstetrics and Gynecology Ophthalmology Pathology Pediatrics Psychiatry Radiology Reproductive Biology and Reproductive Endocrinology Surgery-General Surgery-Neurosurgery Surgery-Orthopedics Surgery-Otolaryngology Surgery-Plastic Surgery-Thoracic and Cardiac Surgery-Urology Community Medicine Family Practice Biomedical Communications		28,750.00 .08 .00 20,525.13 6,600.52 18,600.20 78,226.79 8,000.00 30,000.16 48,350.83 86,000.00 .20 .16 28,000.04 28,000.12 7,000.16 .04 39,672.42 52,407.02 28,333.58 6,416.98 20,000.16 .28 62,000.00 27,699.00 .00 27,699.00 .00 28,000.04 15,645.20 33,900.15 11,800.04
ТО:	Unallocated Appropriations- Faculty Salaries	\$ 7	718,929.30

MSRDP - Business Operations

25. Appoint Marion Grytch Williams as Director in the Medical School Department of MSRDP Business Operations at an annual salary rate of \$25,000.00, effective February 1, 1975. Funds needed are to come from the Medical School MSRDP Business Office-Administrative and Professional Salaries. (RBC-360)

HOUSTON DENTAL BRANCH

Office of the Dean

1. Increase the salary of Lynn G. Tucker, Executive Assistant in the Dental Branch Office of the Dean from an annual rate of \$15,368.00, to an annual rate of \$16,368.00, effective February 1, 1975. Additional funds needed are to come from Dental Branch Office of the Dean-Classified Salaries. (RBC-357)

General Practice

- 2. Appoint Arnold P. Neu (non-tenure) as Clinical Assistant Professor part-time (20%) in the Dental Branch Department of General Practice, at an annual salary rate of \$20,000.00, effective February 1, 1975. Funds needed are to come from Dental Branch Unallocated Faculty Salaries. (RBC-356)
- 3. Appoint Jon R. Rollo (non-tenure) as Clinical Instructor part-time (20%) in the Dental Branch Department of General Practice, at an annual salary rate of \$15,000.00, effective February 1, 1975. Funds needed are to come from Dental Branch Unallocated Faculty Salaries. (RBC-358)

Medicine - Endodontics

4. Reappoint Barden E. Patterson (non-tenure) as Clinical Associate Professor part-time (20%) in the Dental Branch Department of Medicine-Endodontics at an annual salary rate of \$18,500.00, effective February 1, 1975. Funds needed are to come from Dental Branch Unallocated Faculty Salaries. (RBC-363)

Medicine - Internal Medicine

- 5. Change the source of funds for the position of Laboratory Technician I in the Dental Branch Department of Medicine-Internal Medicine at an annual salary rate of \$7,380.00 from General Research Support Grant MED-24-74-01 to General Budget, effective January 1, 1975. Funds needed are to come from Dental Branch Unallocated Faculty Salaries. (RBC-334)
- 6. Change the source of funds for Kenichi Kobayashi (non-tenure), Instructor in the Dental Branch Department of Medicine-Internal Medicine at an annual salary rate of \$12,000.00 from General Research Support Grant MED-24-74-01 to General Budget, effective January 1, 1975. Funds needed are to come from Dental Branch Unallocated Faculty Salaries. (RBC-335)

Medicine - Periodontics

7. Reappoint Naokuni Ijuhin as Research Associate in the Dental Branch Department of Medicine-Periodontics at an annual salary rate of \$12,000.00, effective January 1, 1975. Funds needed are to come from Departmental Administrative and Professional Salaries (\$6,390.00) and Dental Branch Unallocated Instructional Salaries (\$1,610.00). (RBC-347)

HOUSTON DENTAL BRANCH (Continued)

Pathology - Dental Pathology

8. Transfer \$2,399.92 from Dental Branch Unallocated Appropriations, Faculty Salaries to Pathology-Dental Pathology to provide funds for the salary of William Burnham Wescott. (RBC-317)

Physiology - Pharmacology

9. Appoint Roy H. Jacob (non-tenure) as Assistant Professor in the Dental Branch Department of Physiology-Pharmacology at an annual salary rate of \$16,750.00, effective January 10, 1975 through April 10, 1975. Funds needed are to come from Dental Branch Unallocated Faculty Salaries. (RBC-341)

Physiology - Physiology

- 10. Reappoint and change the status of Stewart Turner from Laboratory Technician I in the Dental Branch Department of Anatomy-General and Microscopic at an annual salary rate of \$6,456.00, to Assistant Professor (nontenure) in the Dental Branch Department of Physiology-Physiology at an annual salary rate of \$13,000.00, effective February 1, 1975. Funds needed are to come from Dental Branch Unallocated Faculty Salaries. (RBC-336)
- 11. Change the status of Edwin L. Smith (tenure) in the Dental Branch Department of Physiology-Physiology from Professor at an annual salary rate of \$32,100.00, to Adjunct Professor part-time (1/3) in the same department at the same annual rate. Unused funds are to be lapsed to Dental Branch Unallocated Faculty Salaries. (RBC-337)

Practice Relations and Management

12. Appoint Walter C. Wilson (non-tenure) as Clinical Assistant Professor part-time (10%) in the Dental Branch Department of Practice Relations and Management at an annual salary rate of \$24,000.00, effective February 1, 1975. Funds needed are to come from Unallocated Faculty Salaries. (RBC-351)

Preventive Dentistry - Orthodontics

13. Change the status and increase the salary of Elwood L. Mooney (non-tenure) in the Dental Branch Department of Preventive Dentistry-Orthodon-tics from Clinical Assistant Professor part-time (10%) at an annual rate of \$17,000.00, to Clinical Associate Professor part-time (25%) at an annual rate of \$32,000.00, effective February 1, 1975. Additional funds needed are to come from Dental Branch Unallocated Faculty Salaries. (RBC-349)

Preventive Dentistry - Pedodontics

14. Cancel the 1974-75 fiscal year appointment of James L. Bugg, Jr. (tenure) as Professor part-time (50%) at The Richmond State School at an annual salary rate of \$31,000.00, effective September 1, 1974. Dr. Bugg's appointment to the Dental Branch Department of Preventive Dentistry-Pedodontics at 50% was cancelled by RBC-266. (RBC-348)

Restorative Dentistry - Removable Multiple Restorations

15. Appoint Luis Pena (non-tenure) as Instructor part-time (50%) in the Dental Branch Department of Restorative Dentistry-Removable Multiple Restorations at an annual salary rate of \$19,000.00, effective January 1, 1975. Funds needed are to come from Unallocated Faculty Salaries. (RBC-315)

HOUSTON DENTAL BRANCH (Continued)

Unallocated Appropriations

16. Lapse \$396,961.54 from Dental Branch unfilled Faculty Salary positions as indicated to Dental Branch Unallocated Appropriations-Faculty Salaries (\$374,117.54) and to Dental Branch Unallocated Appropriations-Administrative and Professional Salaries (\$22,844.00). (RBC-352)

Anatomy-Dental Anatomy and Histology Anatomy-General and Microscopic General Practice Medicine-Diagnosis Medicine-Endodontics Medicine-Internal Medicine Medicine-Periodontics Medicine-Roentgenology Pathology-Microbiology Physics-Dental Materials Physiology-Biological Chemistry Physiology-Nutrition Physiology-Pharmacology Physiology-Physiology Physiology-Physiology Practice Polations and Management	\$	20,000.28 20,000.24 53,560.40 .20 18,870.96 .12 26,816.50 .12 18,000.16 34,490.32 .20 .04 12,568.73 1,900.24
Practice Relations and Management Preventive Dentistry-Community Dentistry Preventive Dentistry-Orthodontics Preventive Dentistry-Pedodontics Restorative Dentistry- Complete Restorations Restorative Dentistry- Fixed Multiple Restorations Restorative Dentistry- Maxillofacial Prosthesis Restorative Dentistry- Removable Multiple Restorations Restorative Dentistry- Unit Restorations Surgery School of Dental Hygiene Dental Science Institute	www	2,600.00 38,130.04 30,340.84 43,600.36 2,073.48 3,050.24 4,060.01 22,180.12 2,979.40 7,332.80 12,905.42 21,500.32
	\$	396,961.54
Unallocated Appropriations- Faculty Salaries Unallocated Appropriations- Administrative and Professional Salaries	***************************************	22,844.00 396,961.54
	Histology Anatomy-General and Microscopic General Practice Medicine-Diagnosis Medicine-Endodontics Medicine-Periodontics Medicine-Periodontics Medicine-Periodontics Medicine-Roentgenology Pathology-Microbiology Pathology-Microbiology Physics-Dental Materials Physiology-Biological Chemistry Physiology-Pharmacology Physiology-Pharmacology Physiology-Physiology Practice Relations and Management Preventive Dentistry-Community Dentistry Preventive Dentistry-Orthodontics Preventive Dentistry-Pedodontics Restorative Dentistry- Complete Restorations Restorative Dentistry- Fixed Multiple Restorations Restorative Dentistry- Maxillofacial Prosthesis Restorative Dentistry- Removable Multiple Restorations Restorative Dentistry- Unit Restorations Surgery School of Dental Hygiene Dental Science Institute Unallocated Appropriations- Faculty Salaries Unallocated Appropriations- Administrative and	Anatomy-General and Microscopic General Practice Medicine-Diagnosis Medicine-Endodontics Medicine-Internal Medicine Medicine-Reentgenology Pathology-Microbiology Physics-Dental Materials Physiology-Biological Chemistry Physiology-Pharmacology Physiology-Physiology Practice Relations and Management Preventive Dentistry-Community Dentistry Preventive Dentistry-Pedodontics Restorative Dentistry- Complete Restorations Restorative Dentistry- Fixed Multiple Restorations Restorative Dentistry- Maxillofacial Prosthesis Restorative Dentistry- Removable Multiple Restorations Restorative Dentistry- Unit Restorations Surgery School of Dental Hygiene Dental Science Institute Unallocated Appropriations- Faculty Salaries Unallocated Appropriations- Administrative and Professional Salaries

HOUSTON GRADUATE SCHOOL OF BIOMEDICAL SCIENCES

Demographic and Population Genetics

1. Appoint Fanny I. Yen as Fogarty International Scholar in the Graduate School of Biomedical Sciences Demographic and Population Genetics Center at an annual salary rate of \$12,300.00, effective December 9, 1974. Funds needed are to come from Fogarty Fellowship No. F05TW 2199. (RBC-342)

HOUSTON GRADUATE SCHOOL OF BIOMEDICAL SCIENCES (Continued)

Medical Genetics Center

- 2. Change the status of Louise C. Strong (non-tenure) in the Graduate School Medical Genetics Center from Assistant Professor part-time (70%) on Maternity Leave of Absence Without Pay to Assistant Professor part-time (50%) at the same annual salary rate of \$16,000.00, effective January 1, 1975. Funds needed are to come from Departmental Faculty Salaries. (RBC-318)
- 3. Accept the resignation of Catherine Damme as Research Associate in the Graduate School Medical Genetics Center at an annual salary rate of \$11,300, effective February 28, 1975. (RBC-366)

Unallocated Appropriations

4. Lapse \$53,300.96 from Graduate School of Biomedical Sciences unfilled faculty salary positions in General Instruction (\$.20), Medical Genetics Center (\$33,800.56), and Sensory Sciences Center (\$19,500.20) to Unallocated Appropriations-Faculty Salaries. (RBC-325)

HOUSTON ALLIED HEALTH SCIENCES SCHOOL

Unallocated Appropriations

1. Lapse \$7,000.16 from Allied Health Sciences unfilled faculty salary positions in the Department of General Instruction to Unallocated Appropriations-Faculty Salaries. (RBC-324)

PUBLIC HEALTH SCHOOL

Various

1. Transfer \$38,750.52 as indicated to cover classified personnel miscellaneous merit increases, temporary appointments, and reclassifications. (RBC-330)

FROM:	Associate Dean for Student Affairs Central Services Institute of Environmental Health Associate Dean for Research Disease Control Urban Health Health Services Administration	\$ 2,439.00 6,067.63 3,241.89 900.00 4,674.00 5,000.00 16,428.00 38,750.52
TO:	Student Records Library Dean Environmental Health Health Services Administration International Health Population Studies Audio-Visual Services Education and Research Computer Services	\$ 1,467.63 6,100.00 650.00 6,100.00 9,950.00 3,740.00 8,650.00 219.89 1,873.00 38,750.52

PUBLIC HEALTH SCHOOL (Continued)

Associate Dean for Research

2. Increase the salary of Majorie Forster, Assistant to the Dean for Research in the Public Health School Department of Associate Dean for Research, from an annual rate of \$13,500.00 to an annual rate of \$14,500.00, effective January 1, 1975. Funds needed are to come from Departmental Administrative and Professional Salaries. (RBC-304)

Associate Dean For Student Affairs

3. Increase the salary of Elizabeth M. Chadderdon, Assistant to the Dean in the Public Health School Department of Associate Dean for Student Affairs, from an annual rate of \$12,500.00 to an annual rate of \$13,500.00, effective January 1, 1975. Funds needed are to come from Departmental Administrative and Professional Salaries. (RBC-303)

Student Records

- 4. Create the position of Administrative Clerk in the Public Health School Department of Student Records at an annual salary rate of \$6,240.00, effective October 16, 1974. Funds needed are to come from the Public Health School Department of Central Services Classified Salaries. (RBC-326)
- 5. Increase the salary of Lois A. Monroe, Assistant to the Dean in the Public Health School Department of Student Records, from an annual rate of \$13,500.00 to an annual rate of \$14,500.00, effective January 1, 1975. Funds needed are to come from Departmental Administrative and Professional Salaries. (RBC-331)

Disease Control

6. Increase the salary of Pat A. Greenberg, Research Associate in the Public Health School Department of Disease Control, from an annual rate of \$11,400.00 to an annual rate of \$11,800.00, effective January 1, 1975. Funds needed are to come from NIH Grant No. NO1-HL-1-2442. (RBC-338)

Environmental Health

- 7. Accept the resignation of Othel L. Pirtle as Research Associate part-time (50%) in the Public Health School Department of Environmental Health at an annual salary rate of \$9,400.00, effective February 28, 1975. (RBC-339)
- 8. Appoint Marcus Key, M.D. (non-tenure) as Professor of Occupational Medicine in the Public Health School Department of Environmental Health at an annual salary rate of \$38,500.00, effective February 1, 1975. Funds needed are to come from Associate Dean for Research-Administrative and Professional Salaries (\$19,783.36) and from Disease Control-Administrative and Professional Salaries (\$2,674.95). (RBC-361)

Health Services Administration

9. Accept the resignation of Cornelius Askew (non-tenure) as Assistant Professor in the Public Health School Department of Health Services Administration at an annual salary rate of \$19,100.00, effective February 4, 1975. (RBC-305)

Urban Health

10. Accept the resignation of Michael Cardin (non-tenure) as Assistant Professor in the Public Health School Department of Urban Health at an annual salary rate of \$18,500.00, effective February 18, 1975. (RBC-309)

PUBLIC HEALTH SCHOOL (Continued)

Audio-Visual Services

11. Create the position of Audio-Visual Educational Specialist in the Public Health School Department of Audio-Visual Services at an annual salary rate of \$8,724.00, effective September 9, 1974. Funds needed are to come from the Public Health School Institute of Environmental Health-Classified Salaries. (RBC-327)

Education and Research Computer Services

- 12. Create the position of Computer Programmer II in the Public Health School Department of Education and Research Computer Services at an annual salary rate of \$12,576.00, effective September 1, 1974. Funds needed are to come from Public Health School Department of Disease Control-Administrative and Professional Salaries. (RBC-328)
- 13. Create the position of Computer Programmer II in the Public Health School Department of Education and Research Computer Services at an annual salary rate of \$12,576.00, effective September 1, 1974. Funds needed are to come from Public Health School Department of Associate Dean for Student Affairs-Administrative and Professional Salaries. (RBC-329)



The University of Texas

Health Science Center at San Antonio
7703 Floyd Curl Drive
San Antonio, Texas 78284

Office of the President

Phone: (512) 696-6105

April 3, 1975

Chancellor Charles A. LeMaistre The University of Texas System 601 Colorado Street Austin, Texas 78701

Dear Chancellor LeMaistre:

The docket for the April 28, 1975 meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.

Sincerely,

Frank Harrison President

FH:js

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

	eived: Antonio Health Science Cen	ter	DAR
	Donor	Purpose and Condition	Amount
l.	*Medical Research Founda- tion of Texas, Inc. Houston, Texas	The University of Texas Dental School at San Antonio Development of new programs	\$6,317.92
2.	*Medical Research Founda- tion of Texas, Inc. Houston, Texas	The University of Texas Medical School at San Antonio Medical Research Program	\$6,317.92

*No letter of transmittal received from donor

GRANTS, CONTRACTS AND AGREEMENTS (NON-GOVERNMENTAL): Approval is requested for the following:

San Antonio Health Science Center

The Arthritis Foundation 1212 Avenue of the Americas New York, New York 10036

1. Research Grant

Arthritis Clinical Research Center Dr. Robert H. Persellin, Department of Medicine \$20,000.00 July 1, 1975 - June 30, 1976

Litton Publications Litton Industries, Inc. 550 Kinderkamack Road Oradell, New Jersey

2. Agreement

Printing the Text and Test Article in each issue of the Current Prescribing Mr. R. B. Price, Vice President for Business Affairs \$8,000.00 January 1, 1975 - December 31, 1975

The Robert A. Welch Foundation

2010 Bank of the Southwest Building Houston, Texas

Research Grant AQ-419

Chemistry and Metabolism of Polysaccharides and Glycolipids of Acanthamoeba Dr. Robert A. Weisman, Department of Biochemistry \$48,000.00 June 1, 1975 - May 31, 1978

Research Grant AQ-366 Factors Involved in Secretion of Glycoprotein Enzymes Dr. Alan D. Elbein, Department of Biochemistry \$57,000.00 June 1, 1975 - May 31, 1978

GRANTS, CONTRACTS AND AGREEMENTS (NON-COVERNMENTAL): (continued)

National Kidney Foundation 116 East 27th Street New York, New York 10016

5. Fellowship Grant

Role of the Collecting Duct in the Regulation of Sodium Balance
Dr. Richard H. Mauk, Applicant
Dr. Jay Stein, Department of Medicine, Sponsor
\$10,000.00
July 1, 1975 - June 30, 1976

National Foundation March of Dimes 1275 Mamaroneck Avenue White Plains, New York 10605

6. Research Grant

Intrauterine Pressure Waveform Analysis in Human Labor
Dr. Joseph Seitchik, Department of Obstetrics and Gynecology
\$24,988.00
April 1, 1975 - March 31, 1976

National Child Day Care Association 1200 North Capitol Street, Suite 113 Washington, D. C. 20002

7. Contract

Evaluation of Early and Periodic Screening, Diagnosis and Treatment Demonstration

Dr. Harold D. Dickson, Department of Psychiatry \$20,000.00 October 1, 1974 - September 30, 1975

Trinity University 715 Stadium Drive San Antonio, Texas 78284

8. Agreement

Graduate Training Programs in Psychology and Behavioral Sciences
Dr. Alvin Burstein, Department of Psychiatry
\$14,000.00
September 1, 1975 - August 31, 1976

Trinco, Incorporated Trinity University 715 Stadium San Antonio, Texas 78212

9. Agreement for Services - Trinco Job No. 33

<u>To Expand Computer Services for the Library</u>

Robert B. Price, Vice President for Business Affairs

Effective August 1, 1974

The Human Development Associates Berkeley, California

10. Sub-Contract

 $\frac{\text{Evaluation Services for the Contre}}{\frac{\text{Contract}}{\text{Dr. Harold Dickson, Department of Psychiatry}} \frac{\text{Contract}}{\text{Contract}}$

\$8,000.00 March 1, 1975 - September 30, 1975

GRANTS, CONTRACTS AND AGREEMENTS (NON-GOVERNMENTAL): (continued)

Behavioral and Social Systems, Inc. P. O. Box 43 Arnold, Maryland 21012

11. Sub-Contract

<u>Evaluation</u> <u>Services for the National Child Day Care Association</u> Contract

Dr. Harold Dickson, Department of Psychiatry \$11,928.00 January 1, 1975 - September 30, 1975

DAL

 $\overline{\text{GRANTS}}$, $\overline{\text{CONTRACTS}}$ $\overline{\text{AND}}$ $\overline{\text{AGREEMENTS}}$ (OTHER): Approval is requested for the following:

Bexar County Hospital District 4502 Medical Drive San Antonio, Texas 78284

1. Agreement

General Management Services
Dr. Frank Harrison, President's Office \$44,000.00
January 1, 1975 - December 31, 1975

2. Contract #9

Administrative, Management and Supervisory Services

Dr. Frank Harrison, President's Office
\$346,500.00

January 1, 1975 - December 31, 1975

Change in Contract Approved Above:

3. Change the amount of BCHD Contract #9 ending December 31, 1975, from \$346,500.00 to \$565,842.34

GRANTS, CONTRACTS AND AGREEMENTS (STATE): Approval is requested for the following:

The University of Texas at San Antonio 4242 Piedras Drive East, Suite 250

4242 Piedras Drive East, Suite 250
San Antonio, Texas 78285
Change in Contract Previously Approved

1. Interagency Contract No. (74-75)-035 Amendment No. 2
Reimbursement for Services Rendered and Supplies Furnished
Additional Funds of \$10,000.00 - \$30,000.00 for fiscal year
1974-1975 - Total \$60,000.00
September 1, 1973 - August 31, 1975

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO

FEDERAL GRANTS AND CONTRACTS April 28, 1975 Meeting



San Antonio Health Science Center

Department of Health, Education and Welfare

Public Health Service

- 1. Contract NO1 CP 43353, Modification No. 1

 Development of In Vitro Methods for the Detection of CellMediated Immunologic Reactivity to Chemical Carcinogens

 Supplemental agreement to increase the total amount of the contract from \$76,094.00 to \$80,203.00

 New Money: \$4,109.00

 Extension of time to March 15, 1975

 Dr. Daniel Thor, Department of Microbiology
 Bexar County, Texas
- 2. Training Grant 5T12 CA08069-08

 Clinical Cancer Training

 Amendment to extend award through June 30, 1976

 No additional funding
 Dr. J. Bradley Aust, Department of Surgery
 Bexar County, Texas

United States Air Force

3. Research Grant AFOSR-71-2074, Amendment #AFOSR-71-2074F

Control of the Cardiovascular and Central Nervous Systems

Amendment to extend award through March 31, 1976 and to change the amount of the award from \$365,678.00 to \$456,387.00 New Money: \$90,709.00

Dr. Arthur Briggs, Department of Pharmacology

Bexar County, Texas

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO AMENDMENTS TO THE 1974-75 OPERATING BUDGET April 28, 1975 Meeting

REQUESTS FOR BUDGET CHANGE: Approval is requested for the following:

San Antonio Health Science Center

Office of the Purchasing Agent

1. Accept the resignation of Mr. Daniel D. Davis as Purchasing Agent at an annual salary rate of \$15,000, effective at the close of business January 31, 1975. (RBC 296)

Institutional Safety Program

2. Increase the annual salary rate of Mr. Benny R. Clements (non tenure) as Institutional Safety Officer from an annual salary rate of \$14,368 to an annual salary rate of \$15,368, effective February 1, 1975. (RBC 297)

Anesthesiology

3. Accept the resignation of Dr. Maurice Chait (non tenure) as Visiting Assistant Professor, at an annual salary rate of \$27,988, effective at the close of business February 28, 1975. Transfer unused teaching salaries in the amount of \$13,993.98 to Unallocated Resident Instruction. (RBC 294)

Family Practice

4. Accept the resignation of Dr. Gene C. Akin (non tenure) as Assistant Professor at an annual salary rate of \$28,988 effective at the close of business April 15, 1975. Transfer unused teaching salaries in the amount of \$10,870.51 to Unallocated Resident Instruction. (RBC 301)

Medicine

- 5. Accept the resignation of Dr. Ray E. Warren (non tenure) as Assistant Instructor at an annual salary rate of \$12,668 effective at the close of business December 31, 1974. Dr. Warren was paid from the City of San Antonio Grant. (RBC 286)
- 6. Reappoint Dr. Francisco B. Garcia (non tenure) as Instructor, at an annual salary rate of \$16,368, for the period of February 1, 1975 through February 28, 1975. Funds needed for this reappointment in the amount of \$1,364.00 will be transferred from Unallocated Resident Instruction. (RBC 299)

Radiology

7. Appoint Dr. Michael D. Halber (non tenure) as Instructor (without salary) effective December 22, 1974. Dr. Halber will serve as full time staff member in the Department of Radiology at the Veterans Administration Hospital. (RBC 295)

Anatomy

8. Appoint Dr. Terrell R. Hoage (non tenure) as Visiting Professor (without salary) for the period of January 13, 1975 through May 31, 1975. (RBC 300)

Microbiology

9. Increase the annual salary rate of Dr. Virginia L. Thomas (non tenure) as Instructor, from \$15,868 to \$17,368 effective March 1, 1975. Funds needed for this increase in the amount of \$750.00 are to be transferred from Unallocated Resident Instruction. (RBC 306)

Dental Anatomy

10. Accept the resignation of Dr. Julius D. Robertson (tenure) as Acting Chairman at an annual salary rate of \$41,788, effective at the close of business January 31, 1975. Dr. Robertson will continue to serve as Professor (with tenure) (40% time) in Dental Anatomy and as Associate Dean for Administrative Affairs (60% time) in the Office of the Dean of the Dental School, at an annual salary rate of \$41,788. (RBC 303)

Pedodontics

11. Promote Dr. Donald B. Doan (non tenure) from Clinical Instructor (40% time) at an annual salary rate of \$17,600, to Clinical Assistant Professor (40% time) at an annual salary rate of \$17,600, effective February 1, 1975. (RBC 292)

Oral Surgery

12. Appoint Dr. David G. Leibold (non tenure) as Assistant Instructor (20% time) at an annual salary rate of \$16,000 effective January 1, 1975. Dr. Leibold will be paid from a DHEW Grant. (RBC 291)

Bioengineering

13. Accept the resignation of Mr. Joseph P. Burger (non tenure) as Instructor (without salary) effective at the close of business December 31, 1974. Mr. Burger will continue to serve as Director of the Multidiscipline Teaching Laboratories at an annual salary rate of \$17,700. (RBC 287)

Library

- 14. Change the title of Ms. Ava A. Maness (tenure) from Reference Librarian and Assistant Professor of Medical Bibliography to Public Services Librarian and Assistant Professor of Medical Bibliography at an annual salary rate of \$13,400 effective January 8, 1975. (RBC 288)
- 15. Accept the resignation of Ms. Carolyn M. Patrick (non tenure) as Acquisitions Librarian at an annual salary rate of \$13,868 effective at the close of business February 17, 1975. (RBC 298)

TRANSFER OF FUNDS

San Antonio Health Science Center

1.	Amount	of Transfer:	\$38,403.00
	From:	Surgery - Classified Salaries Diagnosis and Roentgenology - Wages Periodontics - Maintenance and	\$ 1,200.00 4,000.00
		Operation	350.00
		Oral Surgery - Wages	260.00
		Unallocated Resident Instruction	32,593.00
	To:	Surgery - Wages	\$ 1,200.00
		Anatomy - Teaching Assistants	5,333.00
		Diagnosis and Roentgenology -	
		Classified Salaries	4,000.00
		Operative Dentistry - Travel	250.00
		Periodontics - Travel	350.00
		Oral Surgery - Travel	260.00
		Bioengineering - Maintenance and	
		Operation	21,010.00
		Multidiscipline Teaching Laboratories -	
		Maintenance and Operation	6,000.00
	For:	Transfer funds to cover unanticipated	
		departmental expenditures due to the	
		increased number of faculty in the Dental	
		School and preparation for increased stude load. (RBC 293)	nt

2.	Amount	of Adjustment:	\$139,854.09
	From:	Animal Care Services - Balance Forward Animal Care Services - Unallocated Bioengineering Services - Balance	\$ 52,381.04 10,500.00
		Forward	10,824.61
		Student Microscope Rental - Balance Forward	20,015.62
		Audio Visual Services - Balance Forward	5,556.12
		Graphic Services - Balance Forward	16,518.42
		Mail Room Services - Balance Forward	8,868.90
		Administrative Computer Services -	
		Balance Forward	8,226.80
		Experimental Surgery Facility - Balance	
		Forward	912.85
		Library Services - Balance Forward	6,049.73
	To:	Animal Care Services - Maintenance and	
		Operation	\$ 10,500.00
		Animal Care Services - Purchase for	
		Resale	52,381.04
		Bioengineering Services - Unallocated	10,824.61
		Student Microscope Rental - Unallocated	20,015.62
		Audio-Visual Services - Unallocated	5,556.12
		Graphic Services - Salaries	5,151.37
		Graphic Services - Wages	1,304.09
		Graphic Services - Maintenance and	
		Operation	10,062.96
		Mail Room Services - Unallocated	8,868.90
		Administrative Computer Services -	
		Unallocated	8,226,80
		Experimental Surgery Facility -	010 0"
		Unallocated	912.85
	For:	Library Services - Unallocated	6,049.73
	FOT!	To budget Balance Forward to the extent not	
		previously approved by the Board of Regents (RBC 302)	

CATALOGUES OF THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO

Dental School Catalogue, Medical School Catalogue,
Graduate School of Biomedical Sciences Catalogue
April 28, 1975 Meeting



Approval is requested for the three catalogues for the academic year 1975-1976. The substantive of changes are described below and the complete revised copy appears on pages HS-11 through HS-373.

There has been a redistribution of the contents of all three catalogues. The first portion of each catalogue consisting of Board of Regents, Officers of Administration, Departmental Chairmen, Academic Calendars, General Information, The University of Texas Health Science Center and Affiliated Facilities is, with the exception of the academic calendars common to all the catalogues. The sections following this common portion are specific for each catalogue but observe a similar organization. With the exception of the inclusion of specific sections concerning an individual catalogue, the general organization following the common portion is Admission, Advanced Standing; Double Degree Program; Requirements and Regulations; Grades, Promotions and Graduation; Curriculum; Student Organizations; Financial Information; and Resident Status. The significant changes are summarized below and presented in order of the catalogues' table of contents.

- 1. A policy statement on the "Release of transcripts and academic records" has been added stating that transcripts and other information from a student's academic record will be released only upon written request from the student or other person authorized by law.
- 2. Student activity fees approved on July 19, 1974 by the Board of Regents are indicated in these catalogues.

Items 3 - 5 pertain to the <u>Dental School Catalogue</u>.

- 3. Previously a grade of IU (Incomplete Unsatisfactory) could be changed to any grade deemed appropriate after satisfactory completion of the required work. This has been changed in the new catalogue so that the removal of an IU grade can result in a grade no higher than C.
- 4. Previously students in the dental school could be considered for academic probation or dismissal of 20% of the total credit hours were unsatisfactory (grades of IU or F). This has been changed in the new catalogue to 10%.
- 5. Each course in the dental curriculum is described whereas previously only the titles were listed.

Items 6 - 8 pertain to the Medical School Catalogue.

- 6. The grading system has been changed from Pass-Fail to Pass-Fail-Honors.
- 7. Each course in the required medical curriculum and each elective course is described. Previously only the titles of the required courses were indicated.
- 8. A footnote has been added to the curriculum section indicating that the three year curriculum is under review and may not be available

Items 9 - 10 pertain to the Graduate School Catalogue.

- 9. The new graduate program in Physiology as approved by the Board of Regents and the Coordinating Board has been added.
- 10. Special students must now have a Bachelor's degree or equivalent to register in the graduate school. Allowances for exceptional circumstances are noted.

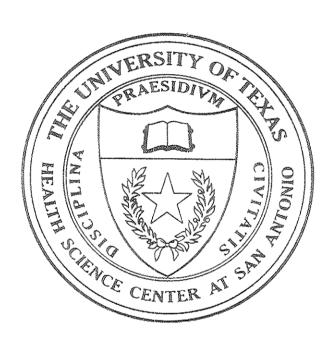
THE UNIVERSITY OF TEXAS

HEALTH SCIENCE CENTER AT SAN ANTONIO

DENTAL SCHOOL

CATALOGUE FOR 1974 - 1975

and ANNOUNCEMENTS FOR 1975 - 1976



(to be printed inside front cover)

Catalogues published by The University of Texas

Health Science Center at San Antonio:

Dental School

Graduate School of Biomedical Sciences

Medical School

HS-11

CONTENTS	
BOARD OF RECENTS	
OFFICERS OF ADMINISTRATION	
DEPARTMENTAL CHAIRMEN	
ACADEMIC CALENDAR 1974 - 1975	
ACADEMIC CALENDAR 1975 - 1976	
GENERAL INFORMATION	1E-1
San Antonio South Texas Medical Center	1E-1 1E-1
THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO	2E-1
Accreditation Policy Release of Transcripts and Academic Records	2E-1 2E-3 2E-3 1E-A1
STUDENT AND FACULTY SUPPORT ACTIVITIES	15-2
The Office of Student Services	1F-2
Director of Student Services Registrar and Admission Coordinator of Curriculum and Academic Programs Financial Aid Student Health Services	1F-2 1F-2 1F-2 1E-2 1E-3
The Office of Educational Resources	2E-4
Director of Educational Resources The Library Art, Photograph, Printing Services Television Services Classroom Services Instructional Development Multidiscipline Laboratories	2E-4 2E-4 2E-4 2E-4 2E-5 2E-5
The Office of Continuing Education	2E-6
SCHOOLS OF THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER	10-4
The Dental School The Graduate School of Biomedical Sciences The Medical School The School of Pharmacy Program	1E-4 1E-4 1E-4 1E-4
AFFILIATED FACILITIES	1E-5
Academic Institutions	1.E-5
The University of Texas at San Antonio The University of Texas School of Nursing at San Antonio	1E-5 1E-5
Hospitals and Clinics	1E-5
The Bexar County Teaching Hospital The Robert B. Green Memorial Hospital The Audie L. Murphy Memorial Veterans Hospital Brooke General Hospital Wilford Hall USAF Medical Center The United States Air Force School of Aerospace Medicine The Santa Rosa Medical Center The Baptist Memorial Hospital System	1E-5 1E-6 1E-6 1E-6 1E-6 1E-7 1E-7

C3-12

CONTENTS (Continued)	
The San Antonio State Chest Hospital The San Antonio Metropolitan Health District The Cancer Therapy and Research Center	1-E-7 1-E-7 1-E-8
Other Affiliated Facilities	1-E-8
The Southwest Foundation for Research and Education The Southwest Research Institute The Ecumenical Center for Religion and Health	1-E-8 1-E-8 1-E-8
(Note: Except for the individual school calendars, the foregoing informa is common to all three catalogues of The Health Science Center.)	tion
THE DENTAL SCHOOL	C1-1
The Dentist's Pledge	C1-I
ADMISSION TO THE DENTAL SCHOOL	C1-2
General Minimum Requirements Dental Admission Test Residency Application Procedure Acceptance Considerations Action Before Matriculation	C1-2 C1-2 C1-3 IC-3 C1-4 C1-5
Required Immunization Health	C1-5 C1-5
ADVANCED STANDING ADMISSION	C1-5
DOUBLE DEGREE PROGRAM	B1-7
REQUIREMENTS AND REGULATIONS	C1-7
Absence, Withdrawal and Re-Admission Class Attendance Student Counselors and Advisors Student Indebtedness	C1-7 C1-8 C1-8 C1-9
GRADES, PROMOTIONS AND GRADUATION	C1-2A
Grading System and Promotions	C1-2A
Passing Failing Incomplete Condition Credit Hours Grade Points Promotion and Graduation Probation and Dismissal	C1-2A C1-2A C1-2A C1-2A C1-3A C1-3A C2-1
CURRICULUM	2-C-2
Philosophy Course Design Curriculum Summary (Chart) Methods of Instruction Course Load Summer Clinics Student Self Pacing Qualifying Examinations Course Descriptions	C2-2 C2-3 2-C-3A C2-5 C2-5 C2-6 C2-6 C2-7 C2-10
LICENSURE REQUIREMENTS	C3-12

NATIONAL BOARD EXAMINATIONS

CONTENTS (Continued)	
STUDENT ORGANIZATIONS	C3-13
Student American Dental Association Dental Fraternities	C3-13 4-C-1
Delta Sigma Delta Psi Omega Xi Psi Phi	C4-1 4-C-1 4-C-1
FINANCIAL INFORMATION	C4-2
Tuition Fees	C4-2 C4-2
Other Expenses	C4-3
Blue Coats and Whaite Coats	C4-3

3761

C4 - 3

C4-4

C4--5

C1-4A

C1-4A C4-6

C4-6

C4-6

C4-6 C4-6

D1-6

Military Programs for Students C4 - 7C4-7 Scholarships C4-8 Loan Funds RESIDENT STATUS D1-1 D1 - 1Minors Residence of Individuals over Eighteen D1-1 D1-2Married Student Military Personnel and Veterans D1-2Employees of Institutions of Higher Education Other Than Students D1-4 Student Employees D1-4 Competitive Scholarships
Citizens of Any Country Other than the United States of America
Reciprocity Clause Applicable to Junior Colleges D1-5 D1-5 D1-5 Student Responsibilities D1-6

DENTAL SCHOOL FACULTY

Penalties

Dental Instruments and Supplies

Living Arrangements

Refund of Tuition and Fees Exemption from Fees

Texas Ex-serviceman

Summary of Expenses

Dental Textbooks and the Bookstore

The Texas Rehabilitation Commission

Children of Certain Disabled Public Employees

High-School Graduates of State Orphanages of Texas

BOARD OF REGENTS

Officers

Allan Shivers, Chairman

Dan C. Williams, Vice-Chairman

Betty Anne Thedford, Secretary

Members

Terms Expire January 1977
Mrs. Lyndon B. JohnsonStonewall
A.G. McNeese, Jr
Joe T. Nelson, M.D
Terms Expire January 1979
James E. Bauerle, D.D.SSan Antonio
Edward Clark
Allan ShiversAustin
Terms Expire January 1981
Thos. H. LawFort Worth
Walter G. Sterling
Dan C. Williams

Standing Committees*

SYSTEM ADMINISTRATION: Williams, Chairman

ACADEMIC AND DEVELOPMENTAL AFFAIRS: Mrs. Johnson, Chairman

BUILDINGS AND GROUNDS: Bauerle, Chairman

LAND AND INVESTMENT: Clark, Chairman

MEDICAL AFFAIRS: Nelson, Chairman

BOARD FOR LEASE OF UNIVERSITY LANDS: State Land Commissioner

Bob Armstrong (ex officio), Chairman; Nelson, Williams

^{*} All members of the Board constitute each committee.

OFFICERS OF ADMINISTRATION

The University of Texas System, Austin

Charles A. LeMaistre, B. A., M.D., Chancellor Everitt Donald Walker, M.B.A., C.P.A., Deputy Chancellor William H. Knisely, Ph.B., B.S., M.S., Ph.D. Assistant to the Chancellor for Health Affairs

The University of Texas Health Science Center at San Antonio

Frank Harrison, B.S., M.S., Ph.D., M.D., President
Robert B. Price, B.B.A., M.B.A., C.P.A., Vice President for Business Affairs
James W. Wagener, B.A., M.A., Ph.D., Assistant to the President
Magda Hinojosa, B.S., M.P.H., Special Assistant to the President
David M. Shapiro, B.S., Ph.D., Director of Student Services
Charles A. Stewart, J., Ph.D., Director of Continuing Education Services
James S. Waldron, B.S., M.S., Ph.D., Director of Educational Resources
Billy J. Barker, B.B.A., Director of Financial Services
Auben W. Brunnemann, B.A., Coordinator of Curriculum and Academic Programs
Joseph P. Burger, M.S., Director, Multidiscipline Teaching Laboratories
Betty M. Compton, B.A., Registrar and Admissions
Charles E. Johnson, Jr., B.S., Student Financial Aid Administrator
David A. Kronick, Ph.D., Librarian
S. Perry Post, M.D., Director, Student Health Services
Bruce M. Smith, B.B.A., C.P.A., Business Manager

Dental School Administration

Philip J. Boyne, D.M.D., M.S., Dean J. Duncan Robertson, B.S., D.M.D., Associate Dean for Administrative Affairs Shailer A. Peterson, B.A., M.A., Ph.D., Coordinator of Academic Affairs and Admissions Edwin M. Collins, D.D.S., Clinic Coordinator

Graduate School Administration

Armand J. Guarino, B.S., Ph.D., Dean Evelyn L. Oginsky, B.A., M.S., Ph.D., Associate Dean

Medical School Administration

Stanley E. Crawford, B.A., M.D., Dean Paul Cutler, B.A., M.D., Associate Dean for Continuing Medical Education Carlos Pestana, M.D., Ph.D., Associate Dean for Student Affairs

DEPARTMENTAL CHAIRMEN of THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER at SAN ANTONIO

Basic Sciences

Anatomy Edward G. Rennels, B.Ed., M.A., Ph.D.

Biochemistry Armand J. Guarino, B.S., Ph.D.

Bioengineering Caspar W. Hiatt, III, B.S., M.P.H., Ph.D.

Laboratory Animal Medicine Robert J. Young, D.V.M., M.P.H., (acting)

Microbiology Alexis Shelokov, A.B., M.D.

Pathology Frank M. Townsend, M.D.

Pharmacology Arthur H. Briggs, B.A., M.D.

Physiology Edward J. Masoro, B.A., Ph.D.

Dental Sciences

Biomaterials Donald C. Hudson, D.D.S.

Community Dentistry Charles T. Smith, B.A., D.D.S., (acting)

Dental Anatomy J. Duncan Robertson, B.S., D.M.D., (acting)

Diagnosis and Roentgenology Charles R. Morris, D.D.S.

Endodontics Glenn R. Walters, B.S., D.D.S., (acting)

General Practice Billy E. Rigsby, D.D.S.

Operative Dentistry James M. Childers, D.M.D.

Orthodontics Dan C. Peavy, B.S., D.D.S., M.S.D., (acting)

Outpatient Clinic Coordinator Edwin M. Collins, B.Sc., D.D.S., M.Sc.

Pedodontics James L. Bugg, B.A., D.M.D., M.S.D.

Periodontics Sam W. Hoskins, Jr., D.D.S., M.S.D.

Prosthodontics Earl E. Feldmann, D.D.S., (acting)

Surgery, Oral Hugh B. Tilson, D.D.S., M.S.

Medical Sciences

Anesthesiology Howard L. Zauder, B.A., M.S., Ph.D., M.D.

Family Practice Herschel L. Douglas, M.D.

Medicine Laurence E. Earley, B.S., M.D.

Obstetrics and Gynecology Joseph Seitchik, B.A., M.A., M.D.

Pediatrics Phillip A. Brunell, B.S., M.S., M.D.

Physical Medicine and Rehabilitation Arthur E. Grant, M.D.

Psychiatry Robert L. Leon, M.D.

Radiology Malcolm D. Jones, A.B., M.D.

Surgery J. Bradley Aust, M.D., M.S., Ph.D.

Faculty Seminar	May 13 - 17, 1974
Graduation Ceremony and Honors Day	June 1, 1974
Summer Clinic for New Seniors	May 20 - June 28, 1974
Faculty Seminar	July 2 - 5, 1974
Independence Day Holiday	July 4, 1974
Summer Clinic for new Juniors	July 8 - August 15, 1975
Convocation and Registration for Freshmen .	August 15, 1974
Registration for Sophomores, Juniors and Seniors	August 16, 1974
First Semester Classes begin for all four classes Lyndon B. Johnson's Birthday Holiday Labor Day Holiday Thanksgiving Holidays Classes resume Last day of First Semester Classes for all students Examination Week	August 19, 1974 August 27, 1974 September 2, 1974 November 27 - 29, 1974 December 2, 1974 December 13, 1974 December 16 - 20, 1974
Christmas Vacation begins	December 23, 1974
Faculty Workshop	January 6 - 10, 1975
Second Semester Classes begin for all four classes Spring Vacation National Board Examinations for Seniors Good Friday Holiday San Jacinto Fiesta Holiday Last Day of Second Semester Classes for all students Examination Week	January 13, 1975 March 19 - 21, 1975 April 7 - 8, 1975 March 28, 1975 April 25, 1975 May 9, 1975 May 12 - 16, 1975
Faculty Seminar	May 19 - 23, 1975
Faculty Promotions Meetings	May 20, 1975
Summer Clinic for New Seniors	May 26 - July 3, 1975
Graduation Ceremony and Honors Day	May 31, 1975
Faculty Seminar	June 30 - July 3, 1975
Independence Day Holiday .	July 4, 1975
Summer Clinic for new Juniors	July 7 - August 13, 1975

*Subject to modification

ACADEMIC CALINDAR 1975 - 1976*

Beginning of Summer Clinic	July 7, 1975
National Board Examinations	July 14-15, 1975
Completion of Summer Clinic	August 13, 1975
Registration and Orientation for Freshmen	August 14-15, 1975
Registration for Sophomores, Juniors and Seniors	August 15, 1975
Classes Begin for All Students	August 18, 1975
Lyndon B. Johnson's Birthday Holiday	August 27, 1975
Labor Day Holiday	September 1, 1975
Thanksgiving Holidays	November 26-28, 1975
Classes Resume	December 1, 1975
National Board Examinations	December 1-2, 1975
Last Day of First Semester Classes for all students	December 13, 1975
Examination Week	December 15-20, 1975
Second Semester Classes begin for all classes	January 12, 1976
Spring Vacation	March 22-24, 1976
National Board Examinations	March 29-30, 1976
Good Friday Holiday	April 16, 1976
Jan Jacinto Fiesta Holiday (afternoon only)	April 23, 1976
Last Day of Second Semester Classes for all students	May 7, 1976
Honors Day	May 7, 1976
Examination Week	May 10-14, 1976
Graduation Ceremony	May 29, 1976

^{*} Subject to Modification

TENTATIVE ACADEMIC CALENDAR 1976 - 1977

Beginning of Summer Clinic	July 5, 1976
National Board Examinations	July 12-13, 1976
Completion of Summer Clinic	August II, 1976
Registration and Orientation for Freshmen	August 12-13, 1976
Registration for Sophomores, Juniors, and Seniors	August 13, 1976
Classes Begin for All students	August 16, 1976
Lyndon B. Johnson's Birthday Holiday	August 27, 1976
Labor Day Holiday	September 6, 1976
Thanksgiving Holidays	November 24-25, 1976
Classes Resume	November 29, 1976
Last Day of First Semester Classes for all students	December 10, 1976
Examination Week	December 13-17, 1976

GENERAL INFORMATION

San Antonio

San Antonio is the fifteenth largest city in the United States with a population of 770,000 and is one of the nation's most interesting and colorful cities. Its twin cultural heritage - Spanish and American - is reflected from the early missions and the historic Alamo to modern skyscrapers.

Located in South Central Texas in a subtropical climate, it enjoys normal mean temperature ranges from 52 degrees in January to 84 degrees in July. As a center of higher education, two universities and four colleges are located in San Antonio as well as The University of Texas Health Science Center and School of Nursing. In addition, a new University of Texas academic institution was authorized in 1969 by the 61st Texas Legislature, and is now under construction in the foothills of Texas' "hill country" north of the Health Science Center.

South Texas Medical Center

The South Texas Medical Center is an area of some 680 acres in Northwest San Antonio established by the San Antonio Medical Foundation to attract institutions and facilities which would offer the highest standards of achievement for health, education, research, patient care and health care services.

In 1961, The Foundation donated 100 acres to The University of Texas

System, the present location of The University of Texas Health Science

Center at San Antonio and The University of Texas System School of Nursing
on the San Antonio Campus. In addition to these two institutions, the

Southwest Medical Center includes - Bexar County Teaching Hospital, Audie

L. Murphy Memorial Veterans Hospital, Cerebral Palsy Treatment Center,

Community Guidance Center of Bexar County, Bexar County Unit of the

American Cancer Society, Texas Cradle Society, San Antonio Community Hospital,

Cancer Therapy and Research Center, Ecumenical Center for Religion and Health,

Villa Rosa Psychiatry and Rehabilitation Center, Lutheran General

Hospital (under construction), and Southwest Methodist Hospital. The

South Texas Medical Center has grown to include 19 institutions with

7,400 employees and a combined annual budget of more than \$87,000,000.

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO

History

The University of Texas Health Science Center at San Antonio originated as a Medical School which was authorized by the 56th Texas Legislature in 1959. Its construction was started in 1966, and completed in July 1968.

Faculty recruitment for the Medical School began in 1965. Enrollment began in 1966, but students attended classes at The University of Texas Medical Schools in Dallas and Galveston until the San Antonio facility could be completed. In 1969 the first full class of 104 students matriculated in the new facility, and the first graduating class of 33 students received Doctor of Medicine degrees in 1970.

The initial Medical School building contained 432,816 square feet on four levels and included classrooms, multidisciplinary teaching laboratories, a 634-seat auditorium, a library, faculty offices and research laboratories, and administrative offices as well as areas necessary to service the building.

In 1969 the 61st Texas Legislature authorized the beginning of The University of Texas Dental School at San Antonio. By using temporary facilities in the Medical School, the Dental School opened in September of 1970 with 16 first-year dental students, and graduated its first class in June of 1974.

Construction of a separate building for the Dental School on the same 100 acres was begun early in 1973 and is scheduled for completion by late 1975. This building will also be a four-level structure of 453,769 square feet and it will be compatible in architecture with buildings of the Medical School. The two schools will be connected at each level to permit maximum sharing of teaching and research facilities. The completed dental facility will provide accommodations to admit 152 dental students each year into the four-year Doctor of Dental Surgery program, 48 dental hygiene students to enter the two-year dental hygiene program, 48 dental assistant

students to enter the one-year dental assistant program, and 24 dental laboratory technicians to enter the two-year dental laboratory technician program. It is planned that graduate programs in all dental specialities will be offered. Emphasis will also be placed on research in appropriate training areas as well as in programs of continuing dental education.

During the early years of the Medical School, the basic science faculty also initiated the development of graduate programs leading to the Master of Arts and the Doctor of Philosophy degrees. In 1970, graduate programs for these degrees were approved by the Coordinating Board, Texas College and University System, for anatomy, biochemistry, biophysics, microbiology and pharmacology. Enrollment began that year with 15 students and by 1975-76 will be in excess of 100 students. In 1972, The University of Texas Graduate School of Biomedical Sciences at San Antonio was established and assumed responsibility for the administration of these programs.

In October, 1974, the Master of Arts and Doctor of Philosophy degrees in physiology were approved for implementation by the Coordinating Board, Texas College and University System.

A combined program can be individually arranged with the Medical and Dental Schools which may allow a medical or dental student to obtain an M.A. or a Ph.D. degree in addition to an M.D. or a D.D.S. degree concurrently.

The University of Texas Board of Regents in 1972 recognized the potential for conjoint development of these health professions in this geographical setting, and to better coordinate those biomedical units for efficiency and effectiveness in academic programs, as well as management and fiscal operation, authorized the establishment of The University of Texas Health Science Center at San Antonio, to be composed of the Dental School, the Graduate School of Biomedical Sciences, the Medical School, and a School of Allied Health Sciences.

In October of 1973, the Coordinating Board, Texas College and University System, approved a program for a Doctor of Pharmacy Program (Pharm.D.) to be administered jointly by The University of Texas Health Science Center at San Antonio and the College of Pharmacy at The University of Texas at Austin. In addition to this program, the Health Science Center also serves as a clinical resource for several of the students in the baccalaureate program of the College of Pharmacy in Austin.

In 1969, the Texas Legislature authorized the implementation of The University of Texas School of Nursing at San Antonio. This institution is administratively associated with the System-wide School of Nursing of The University of Texas, but shares the campus of the Health Science Center.

Construction of a separate building for the School of Nursing was begun near the new Dental School early in 1973. It was completed and occupied in 1974. The building consists of 78,756 square feet on two levels and will accommodate 400 undergraduate and 75 graduate nursing students.

One of the purposes for the reorganization of the institution as a Health Science Center was to provide an educational environment in which students of the various health professions could pursue their formal course work in close professional association. As the future Physician, Dentist, Nurse, Pharmacist, Research Scientist, and various Allied Health Personnel pursue their studies toward their career objectives in this setting, it is expected that they will develop from the beginning a mutual respect for the functional relationship of each other in their common objective—health maintenance.

Accreditation

The University of Texas Health Science Center at San Antonio has been awarded full regional accreditation through the Southern Association of Colleges and Schools.

The dental education program has received full accreditation by the Council on Dental Education of the American Dental Association.

The medical education program has received full accreditation by the Liaison Committee on Medical Education of the Association of American Medical Colleges and the American Medical Association.

Policy

With respect to the admission and education of students, the employment and promotions of teaching and nonteaching personnel, and student and faculty activities conducted on premises owned or occupied by The University neither The University of Texas nor any of its component institutions shall discriminate either in favor of or against any person on account of race, creed, sex, or color.

Release of Transcripts and Academic Records

Transcripts and other information from a student's academic records will be 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. An exception may be made in response to a subpoena or a court order.

STUDENT AND FACULTY SUPPORT ACTIVITIES

The Office of Student Services

The Director of Student Services is generally charged with representing students' needs and providing support service for student development.

This office encompasses the Registrar and Admissions, Coordinator of Curriculum and Academic Programs, Student Financial Aid, the Student Health Center, and Counseling Services. Students are encouraged to seek assistance from the Director and his staff in matters dealing with curricular and extracurricular concern.

The Registrar, in addition to being custodian of all student academic records and responsible for the registration and enrollment of students in the various academic courses, is also the administrator for all student admissions, withdrawals and graduation. Actions of the various admissions committees as well as those of the student promotions committees are implemented through this office in consonance with policies and directives of The University of Texas System and those of The Health Science Center and its Schools.

The Coordinator of Curriculum and Academic Programs develops and publishes catalogues, calendars, and day-to-day academic schedules in concurrence with approved policies determined by various faculty committees and individual School Administration. Coordination between the several academic programs is effected to insure availability of faculty and appropriate laboratory and classroom facilities.

Financial assistance is offered to qualified students through scholarships and loans available for the individual schools. These are supervised by the Scholarship and Loan Committee and provided through the Financial Aid Administrator. Assistance is made only on the basis of demonstrated need. While financial help cannot be guaranteed, every effort will be made to provide the maximum assistance possible to meet demonstrated financial requirements. At the time accepted students indicate they will matriculate, they may request an application for financial aid. All applications should be sent to the Office of Financial Aid. Scholarships, loans and other types of available financial assistance are listed in the financial information section on page

Student Health Services are available at the Student Health Center located in the Bexar County Hospital, and are provided by faculty members of the Department of Family Practice. These services are supported by the Student Activity Fee.

New students are given an initial health assessment and thereafter may use the Health Center for acute illnesses or injuries as well as periodic examinations, family planning information and supplies, problem counseling, follow-up advice on chronic diseases, and the usual care offered in the offices of family physicians. All necessary laboratory, X-ray, and similar tests are provided without charge for students. The student activity fee does not cover health services for student dependents.

The Office of Educational Resources

The Director of Educational Resources coordinates and implements the various services which support the educational functions of The Health Science Center and extends these services to include the support of research activities, administrative requirements and public information.

The Library serves not only as the primary resource and repository of information for the learning, research and health care functions of the Center, but also as a laboratory where students acquire skills of information processing. An active orientation program is an important function of the library staff. The Library collection covers the broad range of all health related sciences — dentistry, medicine, nursing, basic sciences, environmental health, behavioral sciences, and veterinary sciences in over 81,000 volumes as well as subscriptions to over 2,000 periodicals. It serves as one of the eleven resource libraries in the five states of the South Central Regional Medical Library, and has access through a teletypewriter and computer terminals to data bases and literature resources nation wide, including direct access to the National Library of Medicine.

The Library's Learning Resource Center provides individual and small group study carrels for non-book media and study facilities for student use.

Some of these are equipped with television monitors and programs are available from The Health Science Center Demand Access Television System.

Art, photography and printing services provide design and production of teaching materials, graphic presentation of research results, and preparation of materials for publication. Complete service for the production of motion pictures in support of teaching, research, and documentation is available.

Television services provide more than 90 hours per week of demand-access programs requested by students or faculty members and are available in any of nearly 100 individual stations. The video library contains over 400 separate instructional programs on video tapes.

Audiovisual equipment and technical assistance are provided by Classroom Services.

Upon request, The Office of Educational Resources provides assistance in instructional development to include the design, development, and implementation of instructional programs; consultation with faculty and students in identifying instructional needs and problems; aid in the specification of goals and objectives; provision of resources to develop pilot instructional programs and materials; development of instructional programs and materials; development of instructional programs, and instruction materials.

Facilities and services for all types of laboratory instruction required by various disciplines of the health sciences are provided by the Multidiscipline Laboratories. Each laboratory in the Medical School building has a capacity for either 16, 24, or 32 students, and is designed and equipped to provide office and work space for students, for stimulating independent investigation, for promoting correlation between disciplines, for promoting closer interaction between faculty and students, and for saving space and equipment through more efficient use. These services will be greatly expanded upon acquisition of the new Dental School building.

The Office of Continuing Education Services

The learning process of a professional cannot end with the attainment of a professional degree, but must be extended continuously to keep abreast of new developments in special areas of interest. Such learning is difficult for the unassisted individual because of the enormous body of scientific information. It is the function of the Director of Continuing Education Services to coordinate and support programs designed by the faculty of the Health Science Center to further and facilitate post-graduate professional learning.

A biweekly series of Therapeutic Seminars is presented at The Health Science Center for physicians in the locality and are set up as teleconferences to allow direct participation by physicians over a five-state area.

Approximately 25 post-graduate courses are offered each year. These vary in length from one weekend to afternoon classes extending as long as 10 weeks so that the physician has opportunity for formal training commensurate with individual time available, interests, and requirements.

Preceptorships are also provided. These programs permit a physician to participate in the development and evaluation of an educational experience designed on an individual basis.

A program of continuing dental education is being planned and will be announced as developed.

SCHOOLS OF THE UNIVERSITY OF TEXAS HEALTH SCHENCE CENTER

Separate catalogues are published for each of the schools of The

University of Texas Health Science Center at San Antonio. Catalogues

and applications may be obtained as follows:

The University of Texas Dental School at San Antonio

The University of Texas Medical School at San Antonio

Catalogues may be obtained by writing to the Office of Student Services,

The University of Texas Health Science Center at San Antonio, 7703

Floyd Curl Drive, San Antonio, Texas 78284.

Applications may be obtained by writing to The University of Texas Medical and Dental Application Center, 800 Brazos, Suite 801, Austin, Texas 78701.

The University of Texas Graduate School of Biomedical Sciences at San Antonio.

Catalogues and applications may be obtained by writing to the Office of the Graduate School of Biomedical Sciences at San Antonio, The University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, Texas 78284.

The University of Texas School of Pharmacy, The Doctor of Pharmacy
Program at San Antonio

This program is briefly described in the Pharmacology section of the catalogue of The University of Texas Graduate School of Biomedical Sciences at San Antonio. A detailed description as well as an application may be obtained by writing to the College of Pharmacy, The University of Texas at Austin, Austin, Texas 78712.

There are many institutions in San Antonio that provide an excellent resource for programs of The Health Science Center. Many members of the staffs of these organizations hold joint appointments in the Dental, Graduate, or Medical Schools and participate in educational and research programs.

These institutions consitute an important resource for the training of students as well as the provision of needed laboratory space for the conduct of research.

A listing of these institutions follows:

Academic institutions

The University of Texas at San Antonio, a major university having both undergraduate and graduate programs, is in the process of being constructed on a 600-acre campus 5 miles north of the Health Science Center. Although facilities are not yet completed, plans for cooperative teaching and research between the two institutions have been initiated.

The University of Texas School of Nursing at San Antonio shares the campus with The University of Texas Health Science Center at San Antonio. It was authorized by the Texas Legislature in 1969 and began admitting students in 1970. Present enrollment includes 300 undergraduate and 59 graduate students.

Hospitals and Clinics

The Bexar County Teaching Hospital, operated by the Bexar County Hospital District, adjoins the Health Science Center and is connected at several levels. It was planned integrally with the Medical School and is a 12-story, 429-bed facility providing all general hospital services. The hospital has approved post-graduate training programs in anesthesiology, surgery, internal medicine, obstetrics-gynecology, ophthalmology,

orthopedic surgery, otorhinolaryngology, neurosurgery, thoracic surgery, oral surgery, pathology, pediatrics, physical medicine and rehabilitation, psychiatry, radiology, urology, and family practice.

The Robert B. Green Memorial Hospital is also operated by the Bexar County Hospital District. It is also located in urban San Antonio and houses the ambulatory care clinics, a family care clinic, 57 obstetrical beds and 90 newborn bassinets. Its outpatient department includes 55 different clinics which treat more than 129,000 patients each year.

Ground was broken in the South Texas Medical Center on November 20, 1970, for the new Audie L. Murphy Memorial Veteran Hospital. It was completed and became operational in October, 1973 with a planned bed capacity of 760 for medical, surgical and psychiatric patients. It will serve 40 counties of Southwest Texas. The facility provides 40,000 square feet of space for research.

Brooke General Hospital is a major component of Brooke Army Medical Center. It has a bed capacity of 800 and offers definitive medical and surgical care for Army, and other authorized personnel. It also provides outpatient care. Internship and residency training programs are available. The United States Army Institute of Surgical Research has gained international renown for its outstanding research and excellence in the treatment of serious burn cases.

Wilford Hall USAF Medical Center is a component of the Aerospace Medical Division of the Air Force Systems Command. It operates a 1000-bed general hospital that admits approximately 25,000 patients annually and its clinics see nearly 750,000 outpatients each year.

The United States Air Force School of Aerospace Medicine is located at Brooks Air Force Base, Texas. It was originally organized in 1917 and has been continously active since that time in research and development

in medical aspects of acrespane flight, in clinical practices of special interest to acrospace, and in post-graduate education in acrospace medicine and allied subjects.

The Santa Rosa Medical Center has a total of 1,050 beds in five units: the General Hospital, Children's Hospital, Otto Koehler Radiation Therapy and Research Unit and the Outpatient Clinic are in downtown San Antonio, while the Villa Rosa Psychiatry and Rehabilitation Center is in the South Texas Medical Center. The Santa Rosa system is moving toward specialized patient care, emphasizing pediatrics, orthopedics, nuclear medicine, neurosurgery and thoracic surgery. Residency training is available in seven specialties on a cooperative basis with the Bexar County Hospital District and The University.

The Baptist Memorial Hospital System operates three hospitals which offer general hospital service with a total capacity of 1,068 beds. Training in orthopedics and ophthalmology is available as a cooperative part of Bexar County Hospital University Residency Programs.

The University of Texas Health Science Center is also affiliated with the <u>San Antonio State Chest Hospital</u>. This is a 406-bed hospital with primary responsibility for the treatment of tuberculosis, employeema and other lung disease cases.

San Antonio Metropolitan Health District, The University of Texas Health Science Center Dental School at San Antonio maintains a working agreement with the San Antonio Metropolitan Health District. The District operates a dental health program which is designed to effect improvements in the dental health of the community by providing clinical facilities for chairside health education, application of preventive treatment procedures, and corrective treatment for indigent children through twelve years of age. These clinical facilities are utilized by the Dental School in its educational program.

The Cancer Therapy and Research Center is located in the South Texas

Medical Center. It provides services for the care of cancer patients

including Linear Accelerators and Electron Beam Therapy as well as the

standard Cobalt Therapy. The Center is developing programs for training

radiation therapy residents with The University.

Other Affiliated Facilities

An affiliation agreement is maintained between The University of Texas

Health Science Center and the Southwest Foundation for Research and

Education. This agreement allows the two institutions to share facilities

and faculties. The Southwest Foundation is a biomedical research

institution which has laboratories in San Antonio and a branch in Kenya,

Africa. Its annual research budget is \$3,000,000. Its staff works

primarily in the fields of cancer, heart, endocrine, and infectious disease

with emphasis upon virology and parasitology. The Foundation has 155,000

square feet of offices and laboratories. A large indoor and outdoor

animal facility houses a primate colony and other animals to support the

biomedical research effort.

An agreement between The Health Science Center and the Southwest Research Institute, Institute allows cooperation in research. The Southwest Research Institute, a nonprofit applied research organization has its headquarters in San Antonio and also has laboratories in Houston and Corpus Christi and an office in Washington, D.C. The staff conducts research and development projects which include a broad spectrum of the biological and physical sciences. Its annual research budget is over \$25,000,000.

The Ecumenical Center for Religion and Health located at the South Texas

Medical Center helps physicians, ministers and related professionals work

together to meet human needs. Activities of the Center are under the direction

of a Board of Trustees representing the major religions of the community.

Training courses and workshops for professionals are held in areas of personal

problem solving and counseling.

THE DENTAL SCHOOL

The Dentist's Pledge*

I, realizing the privileges and opportunities that have been given to me in my study of the arts of dentistry and appreciating the significance of the Dental Degree which has been conferred upon me, do hereby willingly pledge:

That I will diligently uphold the dignity, honor and objectives of the Dental profession and, to the best of my ability, will contribute to its prestige, proficiency and progress;

! That I solemnly accept my responsibility to the patient, to give him the best of my knowledge and skill, and to maintain an impeccable relationship with him that will warrant his trust and confidence;

That I will faithfully observe the Principles of Ethics set forth by the profession;

That I will lend my influence and support to dental education, to organized Dentistry and to all segments of the profession which contribute to the fulfillment of its purpose.

* Developed by the Council on Dental Education at the request of the Board of Trustees of the American Dental Association in 1952.

ADMISSION TO THE DENTAL SCHOOL

General

Students who are planning to enter dental school are advised to choose a program of study leading to the baccalaureate degree and to strive for an average grade of B or better in all their course work.

A grade of C or better must be earned in each of the required courses.

All required courses for admission should be completed during the spring semester prior to entering the Dental School.

A book entitled, Admission Requirements of United States and Canadian Dental Schools, published by the Division of Educational Measurements of the American Dental Association, contains useful information for all applicants.

The address of the Division of Educational Measurements of the American Dental Association is:

211 East Chicago Avenue

Chicago, Illinois 60611

(Phone: (312) 944-6730)

Minimum Requirements

Admission to The University of Texas Dental School at San Antonio requires a minimum of sixty semester hours of college work from an accredited college, including the following courses:

- (1) English: One year of college English.
- (2) Biology: Two years, as required for college science majors; one year must include formal laboratory work.
- (3) Physics: One year, as required for college science majors; including the corresponding laboratory experience.
- (4) Chemistry: One year of general chemistry and one year of organic chemistry, as required for college science majors, including the corresponding laboratory experience.

Although not required, either courses in conversational Spanish or conversational ability in colloquial Spanish is an advantage in San Antonio. Similarly, candidates liberally educated in advanced literature, anthropology,

political science, government, behavioral and social sciences, art, and religion often are able to increase their qualification to become well-educated professional persons.

If students enter dental school without a baccalaureate degree but plan to earn one later, they must satisfy all the graduation requirements of the institution granting the degree.

Dental Admission Test

In addition to the scholastic requirements for admission, all candidates are required to take the Dental Admission Test (DAT). It is administered at several testing centers throughout Texas by the Council on Dental Education of the American Dental Association. Candidates are advised to take the test after they have completed most or all of the required predental college work in biology and chemistry. The test is given three times a year, in the Fall (September or October), in January, and in April. It is advisable to take the test not later than the Fall of the year preceding the anticipated enrollment year. Test results more than two years old are not acceptable. An application to take the Dental Admission Test and a brochure describing the testing program may be obtained from the Office of the Registrar of the Dental School or from the American Dental Association or from the Predental Advisor.

Applicants are strongly advised to prepare themselves for taking the DAT by reviewing General Chemistry, Organic Chemistry, and the Biological sciences. There are books available demonstrating the types of test questions used in the DAT and an applicant would be well advised to obtain a copy and review it.

Residency

The medical and dental school of The University of Texas System are authorized to accept as members of their first year classes a limited number of nonresident students whose qualifications would place them among the top third of the entering class. (see page _____).

Application Procedure

Applications for the first year classes of all University of Texas System Medical and Dental Schools are processed by the Medical and Dental Application Center, The University of Texas System. Application materials may be obtained by writing to: The University of Texas System Medical and Dental Application Center, 800 Brazos, Suite 801, Austin, Texas 78701.

The following requirements are stipulated for official consideration of an application for admission to the Dental School:

Applications will be accepted only between June 1 and October 31 of the year preceding expected matriculation.

Applications must be made on the current year's official forms of The University of Texas System Medical and Dental Schools.

The Application Center for The University of Texas System medical and dental schools must receive:

- (a) All Application forms completed and signed where appropriate.
- (b) Official transcripts of course work and grades directly from all post secondary academic institutions attended.
- (c) An evaluation of the applicant from the Pre-Professional Advisor or Advisory Committee.
- (d) DAT scores.

 When the applicants apply to take the DAT test, they must instruct the Division of Educational Measurements to send

the test results to The University of Texas System, Medical

- and Dental Application Center.
- (e) A non-refundable filing fee (this fee is based on the number of schools to which an applicant is applying).
- (f) One identification photograph for the Application Center and one for each school to which application is made.

The University of Texas System Medical and Dental Application Center is operated for administrative purposes involving the application process. All actions on admission to the dental school are the prerogative of the admissions committee of the individual school. Questions concerning the degree of completion of an application should be directed to the Application Center.

The telephone number is: (512) 477-6125.

All questions concerning the status of a completed application should be directed to Registrar of the Dental School. The telephone number is:

(512) 696-6421.

Acceptance Considerations

The Admissions Committee of The University of Texas Dental School at San Antonio will operate independently in the future from the Committee at Houston; however, there will continue to be a close liaison between both Schools and both Committees.

The application and admissions procedure will remain essentially the same for the 1976 entering class.

Most pre-professional schools have Committees who are given the responsibility for preparing an appraisal of predental applicants and sending these evaluations to the Dental School Admissions Committee. When in doubt about seeking persons to write these letters of recommendation, consult with the Registrar of the Dental School.

Action Before Matriculation

Required Immunization

Health

Certification of immunization for tetanus and diphtheria within the last five years and for poliomyelitis is required of all entering students before registration. Immunization for small pox is strongly recommended. A certificate form to be completed by a licensed physician will be furnished to applicants granted admission. A military or a Public Health Service immunization record is acceptable.

A complete medical examination will be given by members of the faculty to each student after his initial registration.

ADVANCED STANDING ADMISSION

Students who seek admission to the Dental School with advanced standing must submit the Advanced Standing Application Form and all supporting records required of beginning students to the Registrar of the Dental School.

DOUBLE DEGREE PROGRAM

The Double Degree Program was designed to allow a medical or dental student to obtain an M.A. or a Ph.D. degree in addition to an M.D. or a D.D.S. at The University of Texas Health Science Center at San Antonio. The scientist who is well trained in the basic health science in which he or she obtains a graduate degree usually has not encountered the opportunity to apply this specialized knowledge to clinical medicine or dentistry. The physician and dentist on the other hand often become aware of clinical problems which might easily have their solution in a basic science discipline. In short, there may be a communications gap between these types of scientists. It is advantageous to have a number of individuals who have depth of knowledge in both basic science and clinical medicine or dentistry in order to bridge this gap. The development of a mechanism at The University of Texas Health Science Center at San Antonio for students to be trained in two areas is an effort to provide the biomedical community with such individuals. The program is based on the premise that any student desirous of obtaining both an M.D. or a D.D.S. and a graduate M.A. or Ph.D. degree while a student at The University of Texas Health Science Center at San Antonio would plan to meet the full requirements defined for both degrees. Accreditation of the Medical School and its programs is achieved through the Liaison Committee of the American Medical Association and the Association of American Medical Colleges. Any medical student in such a combined degree program must meet all requirements established by the Medical School which have been approved by this Liaison Committee. Accreditation of the Dental School and its programs is achieved by meeting all of the requirements of the Council on Dental Education of the American Dental Association. Any dental student in such a combined degree program must meet all requirements established by the Dental School which have been approved by the Council on Dental Education of the American Dental Association. Approval of the Graduate Programs is obtained through the Coordinating Board, Texas College and University System. All students in a double degree program must for either the M.A. or Ph.D. degree meet the full requirements for these programs as

approved by the Coordinating Board.

Each student must satisfy the entrance requirements of both the Medical School or Dental School and the Graduate School of Biomedical Sciences, and approval for admission shall be accomplished separately. Admission to the Medical School or Dental School in no way guarantees admission to the Graduate School, nor does admission to the Graduate School guarantee admission to the Medical or Dental Schools. Students need not register their intent of securing both an M.D. or D.D.S. and an M.A. or Ph.D. at the time of admission to either medical, dental or graduate programs. At any time, a student in the Medical or Dental School may make the decision to pursue a course of study for a graduate degree and may apply for admission to one of the graduate programs. The same principle applies to the student who originally enters the Graduate School. A student may withdraw from either school without in any way jeopardizing the pursuit of a degree in the other.

The total time added to the typical medical or dental school curriculum is generally a year for the M.A. degree or three years for the Ph.D. degree. Utilization of summer work and elective periods in the medical or dental curriculum contributes to economy in total time span. The specific details as to the logistics of pursuing a graduate program while registered in the Medical or Dental Schools will depend on the specific graduate program undertaken, and in every instance should be worked out between the student and the appropriate Committee on Graduate Studies with final approval by the Graduate Executive Committee.

For additional information, consult the Associate Dean for Student

Affairs of the Medical School, the Associate Dean of the Dental School or

the Associate Dean of the Graduate School of Biomedical Sciences.

REQUIREMENTS AND REGULATIONS

Absence, Withdrawal and Re-Admission

Short leaves of absence may be granted in case of illness or personal emergency with the understanding that the student arranges with the faculty for making up all work which is missed. Absence for any cause shall, however, be reported to the office of the Associate Dean for Academic Affairs. Failure to do so may result in dismissal.

In addition, students who fail to register and pay tuition and fees within the specified dates will be considered to have terminated their connection with the Dental School unless permission to register and pay tuition at a later date has been expressly granted by the Registrar.

Students wishing to withdraw from the Dental School in good standing for physical or other personal reasons either during the academic year or after promotion to the next year must submit a written request to the Dean stating their reasons for withdrawal, the period of time involved, and their intentions concerning resumption of dental studies. If the Dean approves the request for withdrawal, the student may be granted permission to delay registration for one calendar year or to re-enter Dental School at the beginning of the next regular session. In each case the student must submit a written request for re-admission and furnish evidence satisfactory to the Dean that the physical condition or other reason necessitating withdrawal has been corrected and that the student is ready to resume dental studies. A request for re-admission must be filed at least one month before the proposed date of re-entry into Dental School.

Students withdrawing from Dental School with academic deficiencies will receive the grade of "withdrawn failing" (WF). In all cases not specifically covered above, re-admission to Dental School will be subject to the recommendation of the Admissions Committee.

All matriculants must clearly understand that the faculty of the Dental School has the authority to dismiss any student from the School, or to refuse re-admission at any time before graduation if circumstances of a legal, moral, health, social, or academic nature justify such action.

The University of Texas Dental School does not undertake to prescribe in detail either its requirements or its prohibitions. Mutual regard and cooperation is expected between faculty and students. Faculty efforts are directed toward a standard of moral and ethical conduct expected of the professional person. To sever the student's connection with The University of Texas Dental School, it is understood that a gross violation of moral and ethical standards is not necessary.

Class Attendance

The instruction in all courses will begin as scheduled. No student may obtain credit for the year's work who has not completed his enrollment within one week after the last stated day for registration for each semester unless special arrangements have been made with the Registrar.

Attendance is required at all scheduled classes, laboratories and clinic periods. Reasons for absences due to illness, delayed registration, or approved causes shall be considered on an individual basis by the administration and the faculty.

Student Counselors and Advisors

Members of the faculty shall be assigned as advisors to the dental students. These faculty members will be available for counseling and students are urged to become well acquainted with their advisors. While it is expected that certain counseling periods will be set aside for the faculty advisor and the student to meet, there will also be many informal

and unscheduled times when student and faculty advisor should seek out one another. While the faculty members are assigned to assist students, the students must be mindful of their own responsibility for seeking help when it is needed and are also responsible for keeping their advisors informed of problems they are encountering.

Faculty members appreciate an opportunity to work with students and realize that they cannot help students unless given an opportunity to do so.

A faculty member measures his own success by the achievement of his students. Student Indebtedness

Neither The University of Texas System nor any component institution is responsible for debts contracted by individual students or by student organizations. On the other hand, all students and student organizations are expected to conduct themselves honorably in all commercial transactions. Neither The University of Texas System nor any component institution will assume the role of a collection agency except for monies owed to The University of Texas System or one of its component institutions, nor will The University of Texas System nor any of its component institutions adjudicate disputes between students and creditors over the existence or the amounts of debts.

In the event of nonpayment to The University of Texas System or one of its component institutions, one or more of the following actions may be taken: (a) a bar against readmission for the student, (b) withholding of the student's grades and official transcript, (c) withholding of a degree to which the student otherwise would be entitled.

GRADES, PROMOTIONS, AND GRADUATION

Grading System and Promotions

Passing - Letter grades of A,B,C, and D shall be assigned to all courses and clinics and are considered passing. A "+" and "-" may be used in conjunction with letter grades at the discretion of the instructor. Grades in all courses are the responsibility of the instructor and the department.

Failing - F designates failing work. Students must have a passing grade in all required courses. When a student does satisfactory work in a course for which an F Grade was received, the passing grade is entered on the transcript along with the F grade.

Satisfactory (S) and Unsatisfactory (U) grades are given at a grading period to indicate progress in a course that extends beyond that grading period. The "S" and "U" may also be given in those courses being taught by visiting lecturers and those which do not lend themselves to A,B,C, grades.

Incomplete - A grade of IS (Incomplete Satisfactory) may be assigned to students who for some acceptable reason have not completed all the required work in a course. A grade of IU (Incomplete Unsatisfactory) may be assigned to students in those cases where there is no acceptable reason for failure to complete the required work in time allocated. Students may not receive a grade higher than a C if an "IU" grade was originally assigned. When students with an IS complete their required work satisfactorily they will receive the passing grade earned. All incomplete grades will automatically be changed to F one year after the incomplete was given if the student has not finished the required work.

Condition - There may be occasions when a student has received passing grades in all subjects but has performed at only a minimal competency level. Therefore, the Promotions Committee may decide that the student is not ready for full promotion to the next class and will "conditionally" promote the student. Normally a conditional promotion will be permitted for one semester only.

Credit Hours - One semester hour of credit will be assigned for every 14-17 clock hours of lecture or 40-50 clock hours of laboratory or clinic work.

3794

Grade Points - Grades will carry the following grade points:

Promotions and graduation - In order to be considered for promotion, a student must have satisfactorily removed all IU and F grades.

In order to be considered for graduation, a student must have satisfactorily removed all IS, IU and F grades.

In addition, he or she must have earned a cumulative grade point average of 2.00 or more. Freshmen having a cumulative grade point average below 2.00 will be considered individually by the faculty for promotion, probation or dismissal.

Probation and Dismissal - The following students will be considered for academic probation or dismissal:

- A. Those having a semester grade point below 1.70 for that semester.
- B. Those having IU or F in topics having a credit hour total equal to 10% or more of their total credit hours for that semester.
- C. Those having a cumulative grade point average below 2.00 after completing two semesters.

Any student who has been on probation and who has not shown marked improvement, shall be considered for academic dismissal.

CURRICULUM

Philosophy

The Dental Curriculum really begins before a student enters dental school. The courses that are taken, the skills that are mastered, and the attitudes that are developed in high school and in college have a tremendous influence on the future professional man or woman. The experiences and education acquired prior to admission to dental school prepare the student for the course of study to be pursued while attending dental school.

Similarly, a student's home life, study habits, and true interests developed in working with people, will influence and affect success as a dental student and practitioner.

The courses designated as requirements prior to admission have been chosen because in the opinion of educators success in these courses will not only help to predict the student's future scholastic success but also will provide a background of information needed for dental school.

In recent years, the Council on Dental Education has liberalized the admissions requirements and has suggested that each school be responsible for making this determination. However, most schools continue to adhere basically to the same list of courses required for admission.

The dental curriculum must build upon students' pre-professional experience, and equip them to become highly competent, practicing dentists. The dental curriculum must also provide students with motivation to continue to improve their skills and competence after graduation.

The dental curriculum must also serve as an introduction to future study that many graduates will undertake in one of the eight dental specialties. The curriculum must also be suitable as preparation for further graduate study and dental research, and for those entering the field of community dentistry in all of its various phases. The prinicipal goal and objective of this curriculum is to prepare graduates for the practice of dentistry.

Every modern and viable dental curriculum is continually modified so as to improve its effectiveness and to include the advancements made in the science of dentistry.

The total four-year course of study in 1974-75 requires nearly 5,000 clock hours of actual assigned course work about equally divided among the four years, with most of the clinical experience coming in the last two years. In 1975-76 the curriculum will be revised and the number of clock hours will be reduced.

Course Design

The accompanying chart lists the courses, subjects, and types of experiences which become a part of the overall curriculum for each dental student. The chart also shows the years in which these subjects and topics are included in the experience of the student. The following legends have been used to describe the use of various instructional methods and modes:

- 1. Lecture
- 2. Laboratory
- 3. Demonstration
- 4. Clinical, hospital and/or field experience
- 5. Integrated within other courses
- 6. Seminars, Conferences, and Review Sessions.
- 7. Student self-study and/or use of teaching machines
- 8. Electives

Curriculum Summary

Course Title	Year in the Program				Total
	ist	2nd	3rd	4th	Curriculum Hours
Anatomy, Gross Anatomy, Microscopic Anesthesia, General & Sedation Anesthesia, Local	1-2-3 1-2-3 	1-2-4-5		1-2-3-4	156 112 25 16
Biochemistry Biomaterials Biostatistics Clinical Dentistry	1-2-3 1-2-3 —————	**************************************	1 4	4	96 124 12
Community Aspects of Dent. Community Dent Outreach Dental Anat. & Occlusion Dental Aux. Utilization	1-2-3	1-2-3-4	1-4-6-7 4 4	4	12 120 6
Dental Care for the Special Patient Dental History Diagnosis, Oral Electives	1-7	1-3	1-4	1-4 1-4-6-8 8	12 8 64
Embryology, Human Endodontics Ethics & Jurisprudence General Practice	1	1-2-3	1-4	1-4-6 1-6-7 4	16 88 12 800
Human Schavior and Dental Health Medicine and Surgery, Gen. Microbiology Neuroscience	1-2-3-6 1-2-3	Angel Males Males	1-6 1-3 	1-3	24 48 88 84
Nutrition Occlusion Operative Dentistry Oral Histology & Embryology	1-2-3	1-2-3	1-4	4 table state day	16 16 160 28
Oral Surgery Orientation Orthodontics Pathology, General	1 1 1-2-3	1-2-3-4 1-2 1-2-3	1	1-3-4-8	48 16 84 156
Pathology, Oral Pedodontics Periodontics Pharmacology	1	1-2-3 1-2 1-3 1-3	1-4 1-4 1-3	1-4 1-4 1-3-6	112 52 72 78
Physical Diagnosis Physiology Practice Management Praventive Dentistry	1-2-3 1-2-3	1-3-4	1-4	1-4	28 96 30 38
Public Health Prophylaxis Clinic Prosthodontics Complete Dentures	1-3-4	1-4-6 1-3-4 1-2-3	1-4	 4-5-6	16 128
Fixed Partial Dentures Removable Partial Dentures		1-2-3 1-2-3	1-2-4 1-4	4-5-8 4-5-6	164 160
Radiography, Dental	-	1-2-3	1-4	4-6-8	32

Methods of Instruction

The methods of instruction include a great variety of teaching techniques and utilize many kinds of instructional media. Most instructors use lectures for a part of their instruction but also employ various instructional methods in their teaching. Some instructors record their lectures on tape or TV cassettes while others make use of combinations of slides sets and audio tapes for the students to use in review.

Many of the preclinical subjects require laboratory work and most laboratories are either three or four hours in length. Many instructors schedule conferences and seminars as a supplement to their lecture periods and to their laboratories.

Nearly half of the entire dental curriculum is spent in the clinic where the student works on patients under the close supervision of instructors. All work in the clinic is in an atmosphere which simulates actual dental office practice. This includes rendering comprehensive dental care to patients treated in the dental school clinic.

Students will also be taught how to utilize the services of auxiliary dental personnel as well as dental practice management. The primary objective of the dental school is to prepare its graduates so they can enter the general practice of dentistry.

Course Load

College students have become familiar with the fact that about 120 semester hours of credit have been earned in four academic years. This has meant taking a load of from 15 to 16 credit hours per semester which in turn may have meant about 19 clock hours per week including laboratory and lecture hours.

New dental students must quickly realize that their load of scheduled classes in dental school will be 60% to 100% greater than in pre-professional school. Faculty-student contact time will be between 30 and 38 hours per week. Basically, the total week from 8:00 A.M. until 5:00 P.M. (Monday through Friday) is used for assigned class periods. Because of the heavy class load students are strongly advised not to accept employment during the first year.

The Multidisiciplinary laboratories for Freshmen and Sophomores are open for extended periods. The library as well as the study cubicles in the library are open daily and evenings. The heavy assignment load will require students to spend a great deal of time studying to prepare for their classes either at home, in the library or in the laboratories. Only a limited number of hours are available each week so the student must master the art of learning quickly and using time wisely and efficiently.

Summer Clinics

In the four-year dental education program, there is no schedule of classes in the Summer between the Freshman and the Sophomore years. In each of the other two Summers, there is a six-week Summer Clinic. One six-week session for promoted Sophomores and for promoted Juniors directly precedes the beginning of the academic year. Summer Clinics are scheduled about five hours a day for five days each of these six weeks.

Student Self Pacing

Some students are able to complete work more rapidly than others.

Additionally others require more time in order to meet the requirements and to complete the necessary assignments and to attain the desired competence. For that reason, it is the objective of the Dental School to have its faculty prepare a great quantity of self-study material on audio tapes, collections of slides, study material on color cassettes, and a host of other media so that students may review material at their own rate. Some courses may be studied independently of the classroom and the laboratory. A student who completes assignments rapidly is able to devote more time to other clinical work and also to enroll in elective courses.

Qualifying Examinations

A student may be exempted from participation in one or more first-year curricular subjects if he or she is able to demonstrate proficiency on pre-course qualifying examinations. These examinations are offered at the discretion of the concerned departmental chairmen soon after registration. In lieu of the ordinarily required subject (s), an exempted student may pursue independent study of his choice provided that it is approved by his faculty advisor and is taken within this institution. Accepted applicants are notified by mail as early as possible what qualifying examinations will be available to them and the general scope of each examination.

Course Descriptions

Anatomy, Gross

5.00 credit hours

Freshman

Laboratory study of the structure of the human body with emphasis on the head and neck. Four students are assigned to a cadaver for dissection. and each pair of students is issued a disarticulated half skeleton for study. Important aspects of human morphology are emphasized by lectures, radiological demonstrations, and films.

Anatomy, Microscopic

3.75 credit hours

Freshman

Lectures, conferences, demonstrations and laboratory work studying the microscopic structure of the tissues and organs of the human body.

Lectures will emphasize the correlation of structure and function while laboratory work will be devoted to the recognition of normal human tissue.

Anesthesia, General; and Sedation

1.00 credit hours

Senior

A didactic course teaching various methods of pain and anxiety control, such as the use of oral, parenteral and inhalation sedation. General anesthesia is covered in detail.

Anesthesia, Local

1.00 credit hours

Sophomore

A comprehensive course dealing with all aspects of local anesthesia as they relate to dental practice. The student is given the opportunity to practice clinical local anesthesia under careful supervision. Also covered is the management of various dental office emergencies.

Biochemistry

5.00 credit hours

Freshman

This course consists primarily of lectures and conferences designed as a survey course for dental students. The course deals with the chemistry and metabolism of carbohydrates, amino acids, lipids, proteins and necleic acids, and special topics relating to the biochemistry of the oral cavity.

<u>Biomaterials</u>

4.00 credit hours

Freshman

Lectures and laboratory exercises covering all materials used in dentistry — gypsum products, waxes, resins, metals and cenents. Covers sources of raw materials, methods of manufacture, physical and chemical properties of each material. Laboratory periods afford opportunity to manipulate and apply each material in simulated clinical use.

Biostatistics 1.00 credit hours Junior

The study of quantitative statistical methods commonly used in the evaluation of dental research data intended to aid the student in reading the literature, designing studies, and understanding the role of scientific investigations. Advanced preparation in mathematics is not required. The course is taught by lecture, discussion and problem solving.

Community Aspects of Pentistry 1.00 credit hours Junior

Through a variety of teaching methods, including simulation and role-playing, the principles of public health are applied in promoting oral health for a hypothetical community. Concludes considerations in prevention, treatment, and rehabilitation for the total community. A junior course includes the planning, development, and implementation of a program in health education in real-life situation.

Community Dentistry - Outreach 2.00 credit hours Senior

A number of clinical experiences providing dental care to selected disadvantaged populations via rotation through a number of community care programs. This experience is designed to create awareness of the profession's obligation to provide care to all elements in the population.

Dental Anatomy and Occlusion 4.00 credit hours Freshman

The student will be presented with the anatomy and nomenclature

related to external morphology, internal morphology, occlusion, and

anthropology of the human dentition. In the laboratory exercises the

student will reconstruct, in wax, the functional external morphology of

various anterior and posterior teeth. The course consists of lectures,

demonstrations, and laboratory exercises.

Dental Auxiliary Utilization

O.75 credit hours Freshman, Sophomore, Junior and Senior
The students are presented with didactic and clinical training in the
philosophy and methodology of proper utilization of a full-time chairside
dental assistant. Using sit-down, four-handed dentistry concepts,
students gain experience in working simplification; thereby, reducing the
fatigue factors associated with the practice of dentistry and
simultaneously increasing their productivity and efficiency. Taught in
each year.

Dental Care for the Special Patient

0.75 credit hours

Senior

Lecture and clinical experience in a nursing home are utilized to inform the student concerning the dental needs of the special patient and to propose a method of meeting these needs.

Dental History

0.50 credit hours

Freshman

A self-instructional course in the freshman year dealing with the evolution of dentistry from a craft to a profession. A chronologic review highlighting the important developments in the progress of dentistry from antiquity to the present. Particular emphasis is placed upon a consideration of those social forces and pressures that affected the evolution of the profession.

Diagnosis, Oral

2,00 credit hours

Sophomore

A course emphasizing the importance of an accurate diagnosis and patient evaluation upon which to base a rational sequential treatment plan.

Lectures and demonstrations on the normal appearance and presentation of abnormalities and disease as they relate to various areas of the oral cavity with special emphasis on the soft tissues. Methodology in diagnosis relative to case history, general and oral clinical examination, supplementary examinations and aids, treatment planning

and its practical application on assigned patients.

Embryology, Human

1.00 credit hours

Freshman

A lecture series on human development covering the early development of the embryo and its implantation as well as the formation of the main organ systems of the body. Abnormal aspects are also considered.

Endodontics

2.00 credit hours

Sophomore

This lecture and laboratory course is designed to provide the student with the necessary knowledge and skills to deliver a basic endodontic service within the framework of a general practice in dentistry. The scope of endodontics and a rationale for treatment of pulpal and periapical pathosis is discussed. The student performs basic endodontic technical procedures on extracted human teeth in the dental laboratory.

Endodontics

0.75 credit hours

Junior

This lecture course introduces a variety of clinical endodontic situations which require management in the routine clinical practice of dentistry. It emphasizes diagnosis and treatment planning and management of endodontic problems.

Endodontics

0.00 credit hours

Senior

This lecture portion of this course is designed to aid the student in incorporating routine endodontics into a general practice. A seminar portion of the course utilizes selected cases of patients which the students have treated in the clinic to discuss the cause and correction of endodontic failures.

Endodontics, Clinical Practice

1.00 credit hours Junior and Senior

Experience in the procedures of endodontics is gained by treating both single and multirooted teeth during both junior and senior clinical years.

Ethics and Jurisprudence

1.00 credit hours

Senior

A programmed self-instructional course dealing with conduct and behavior, both moral and legal, expected of the professional man. Offered in the senior year, this course seeks to prepare the student to recognize when he needs legal advice.

General Practice

25.00 credit hours

Senior

Provides the clinical experiences for students during their senior year which demands comprehensive patient care involving each discipline of dentistry. The services are delivered under the supervision of the Department of General Practice in a private practice environment with the various specialties available for consultation. Various clinical departments conduct seminars during the senior year. These seminars are used to discuss selected cases of patients which students have treated in the clinic. These cases are discussed from both a clinical and technical standpoint so that the students develop a broader and more comprehensive background in clinical dentistry.

Human Behavior and Dental Health

2.00 credit hours

Junior

The course covers the psychosocial development of human behavior across the life cycle with specific reference to behavior related to dental health. This material, given over 16 hours in the first part of the course is followed by 12 hours of clinical seminars which apply the behavioral principles to actual cases under care of the student. The principal focus throughout the course is on the dentist-patient relationship and patient management.

Intravenous Sedation

0.75 credit hours

Senior

}

This course is designed to teach the student a specific technique for intravenous sedation. Indications and contraindications for intravenous sedation are discussed. The pharmacologic aspects of the drugs used are considered in detail. At the completion of the course, the student is given the opportunity to use intravenous sedation clinically under supervision.

Medicine, General; and Surgery, Course I

2.00 credit hours

Junior

A 34-hour course of lectures, demonstrations and video-tape recordings in the fundamentals of diagnosis and treatment in general medicine and surgery, including most of the medical and surgical specialities.

Medicine, General; and Surgery, Course II

2.00 credit hours

Senior

A 34-hour continuation of lectures, demonstrations and video-tape recordings in the fundamentals of diagnosis and treatment in general medicine and surgery, including most of the medical and surgical specialities.

Microbiology

4.00 credit hours

Freshman

The introductory microbiology course provides the foundation in immunology, bacteriology, virology, mycology and parasitology for all subsequent teaching of microbial pathology and oral infectious diseases. Relevant aspects of preventive medicine and public health are included. Lectures and laboratories.

Neuroscience

3.50 credit hours

A study of the anatomy and physiology of the nervous system; primarily the central nervous system. Special emphasis on cranial nerves and related structures. Course includes lectures, demonstrations, clinical presentations pertaining to dentistry and laboratory.

Nutrition

1.00 credit hours

Freshman

The elements of nutrition are presented in a lecture series. Special attention is given to those aspect of nutrition that relate to dental health and the prevention of dental disease.

Occlusion

1.00 credit hours

Sophomore

Introduction to the occlusion of the natural teeth. Consideration is given to growth and development and variations therein that affect the arrangement of the teeth. Detailed consideration is given the temporomandibular joint, its interrelationships with the occluding teeth, as well as the neuromuscular mechanisms involved. Occlusal discrepancies which trigger

the temporomandibular joint syndrome are examined closely. Includes adjustment of the natural dentition by selective grinding, including principles and techniques.

Operative Dentistry, Pre-Clinical Teaching Laboratory

4.00 credit hours

Sophomore

Didactic presentations offer the nomenclature and theoretical concepts currently in vogue for cavity preparation for, and manipulation of, various restorative materials. The laboratory phase provides the student with experience in making the various cavity preparations, and insertion of the prescribed restorative materials, under simulated clinical conditions.

Operative Dentistry, Clinical Practice

3.00 credit hours

Junior_

Seminar for third year students. This series of lectures is designed to

continue didactic presentations in areas not included in the second year technique laboratory. In addition it offers a forum for discussion of individual clinical problems and their solution that would be of interest to the class as a whole. A general enlargement of the student's spectrum of basic knowledge is accomplished.

Oral Histology and Embryology

1.50 credit hours Freshman

Lectures, demonstrations and laboratory work into special details of the microscopic anatomy of the structures found within the oral cavity and closely related areas of the head and neck. This course is designed for dental students as a special supplement to the course in uicroscopic anatomy, and correlation of future clinical application of the principles studied will be made wherever possible.

Oral Surgery, Introduction

2.00 credit hours Sophomore and Junior

Principles of surgery, history taking, physical examination and diseases of the mouth are emphasized. Didactic instruction in the techniques and operative procedures that are performed in and about the oral cavity are presented by lectures, slides, models and demonstrations.

Oral Surgery, Rotation at Robert B. Green Hospital

1.00 credit hours Junior

This rotation provides clinical experience for third year students in performing minor oral surgery on patients in the Outpatient Clinic of the Robert B. Green Hospital.

Oral Surgery, Advanced

1.00 credit hours

Junior

This course deals with the various techniques of reduction and fixation of complicated fractures of the mandible, maxilla, zygomatic arch and related facial bones. It includes methods of surgical correction of malformations and deformities of the jaws, such as mandibular prognathism, micronathia and related disorders. Treatment of diseases

and injuries to the temperomandibular joint is discussed.

Oral Surgery, Hospital Rotation

2.00 credit hours

Senior

Provides the senior dental student with an opportunity to experience the scope and responsibility associated with the care of in-patients and out-patients in the hospital environment.

Orientation

1.00 credit hours

Freshnan

A course designed to provide the new, entering Freshman student with the policies, regulations and philosophies of the Dental School, and of the Health Science Center. The course with visiting lecturers provides information on the history of the School, the plans for the School's development, the opportunities for advanced study, and preliminary information on the courses that will be included in later years of the curriculum. Students are introduced to the use of audio-visual aids that will be used in self-paced programs; an introduction to the student counseling system and the utilization of students on school committees.

Orthodontic Technique Laboratory

0.75 credit hours

Sophomore

A lecture and laboratory course teaching the student how to secure and interpret diagnostic records. Emphasis is placed on classification of occlusion, symmetrical and mixed dentition analysis. The student will also develop a proficiency in fabricating fixed and removable space maintainers and regainers.

Orthodontics

1.00 credit hours Sophomore and Junior

A more advanced continuation of orthodontics as covered in lecture series form. These objectives are to apply to the study of orthodontics the knowledge derived from the basic sciences together with that from the field of orthodontics itself. Among the basic science subjects that will be stressed are growth and development, physiology, anatomy, and biomechanical principals. At the completion of the course the student

understands the possibilities of comprehensive orthodontic treatment and uses these principles as an adjunct to treatment procedures in all phases of dental practice.

Orthodontics, Undergraduate Clinical

O.50 credit hours Junior and Senior

The student gains clinical judgement in determining etiology,

classification and diagnosis of malocclusion. Areas of competency

include obtaining diagnostic records and recognizing and treating

unfavorable malocclusions and habits with space maintenance, and the

basic appliances for the treatment of the more simple forms of

malocclusions.

Pathology, General I 1.50 credit hours Freshman

This is an introductory course in the principles and fundamental processes of pathology. Those pathologic processes which relate to diseases and disorders to be studied in detail in subsequent pathology courses are presented by lectures, illustrations, gross and histologic tissue preparations. Laboratory sessions emphasize microscopic examinations and recognition of the cellular tissue alterations which are pertinent.

Pathology, General II 5.00 credit hours Sophomore

A continuation of general pathology, this course presents specific diseases and disorders by systems and categories of disease. Clinical laboratory correlations and rationales are emphasized with the clinical anatomic and laboratory findings of the classical and representative diseases and disorders which are significant in patient populations seeking dental care.

Pathology, Oral I 1.50 credit hours Sophomore

An introduction to the principles or applications of fundamental specialty pathology of the oral regions, this course presents through lectures, laboratory work and by illustrations the basic pathologic processes

manifest primarily or secondarily in the oral region.

Pathology, Oral II 1.50 credit hours Junior

As a more advanced course in oral pathology, clinical applications and clinicopathologic correlations of the more common and significant diseases of the oral regions are presented in lecture, by illustration and by clinical diagnostic assistance.

Pathology, Advanced Oral 1.50 credit hours Senior

This course emphasizes refinement of diagnostic criteria and more difficult and less commonly encountered primary and secondary diseases of the oral regions. Clinical or simulated clinical cases are presented and discussed.

Pedodontics I 0.50 credit hours Freshman

A lecture course designed to introduce the first year student to Pedodontics. Included are the main phases of growth and development including normal development of the face and dentition, genetics and heredity, histologic and chronologic development of the dentition, systemic disturbances, normal morphology of the primary teeth, and anomalies of the human dentition.

Pedodontics II 0.50 credit hours Sophomore

A lecture course designed to acquaint the student with procedures to be done in Clinical Pedodontics. The course also corresponds to and complements the course in Pre-Clinical Pedodontics. It includes history taking, diagnosis, treatment planning, child behavior and management, patient education in oral hygiene, operative dentistry and pulpal therapy.

Pedodontics, Pre-Clinical 1.00 credit hours Sophomore

A laboratory course designed to develop the student's proficiency in the skills utilized in restoration of carious or fractured primary and young permanent teeth. Those procedures carried out in this course are

- 1. Class I Cavity Preparation
- 2. Class II Cavity Preparation
- 3. Class II Matrix Adaptation, Wedging, and Restoration with Δ malgam
- 4. Class III Cavity Preparation
- 5. Stainless Steel Crown Preparation and Adaptation
- 6. Polycarbonate Crown Preparation and Adaptation.

Pedodontics III

0.75 credit hours

Junior

A continuation of the Pedodontic lecture course dealing with procedures to be done in Clinical Pedodontics. This series deals mainly with Preventive and Interceptive Orthodontics. There are also lectures providing reinforcement in areas of diagnosis and preventive dentistry.

Pedodontics, Clinical

1.00 credit hours

Junior

The student gains clinical judgement and proficiency in clinical skills related to comprehensive dentistry for children. Areas of competency include prevention; examination, diagnosis and treatment planning; anesthesia; operative dentistry; pulpal therapy; oral injuries; oral surgery; preventive and interceptive orthodontics; behavior management; maintenance care and periodontics.

Pedodontics IV

0.75 credit hours

Senior

A more advanced continuation of Pedodontics as covered in lecture series form. This course covers subjects such as pharmacology for the child patient, oral injuries, dental care for the handicapped child, sealants in dentistry, surgical procedures for the child patient and gingival disease in the child.

Periodontics

1.00 credit hours

Junior_

The didactic portion is the presentation of detailed, illustrated, step-by-step methods for each periodontal therapeutic procedure currently in use. This is an expansion upon the foundation provided in the sophomore year. Written practice cases are utilized to give the student

experience in treatment planning and selection of therapeutic methods. Expendable stone models are used to allow the student practice in the correction of osseous defects. Emphasis is placed upon total treatment planning to include any phase of dentistry required to treat a particular patient.

In clinic, the student performs scaling, root planing and gingival cruetment procedures under direct supervision. He serves as assistant to the instructor in the management of periodontal surgical cases of complexity. The student progresses to performing simple surgical procedures with the instructor as the assistant. Continuing emphasis is placed upon the student's role as monitor of the patient's personal dental care efforts.

Periodontics Seminar 1.00 credit hours Semior

During the first semester a series of seminars are conducted. There is no formal presentation made, the format being that of an open round-table discussion of any aspect of periodontics the students desire. In all situations the relation of periodontics to other disciplines of dentistry and their mutual dependency is stressed.

This experience is devoted to clinical pursuits, managing increasingly complex cases, at the discretion of the instructor. Students are not restricted as to the amount of treatment accomplished, being governed only by their available time.

Pharmacology 4.90 credit hours Sophonore

A course involving the general principles of action of drugs used for the diagnosis, treatment and alleviation of symptoms of medical and dental diseases including pharmacodynamics of major drug groups, toxicology and contemporary prescription writing.

Physical Diagnosis 1.00 credit hours Sophomore

A course in the fundamentals of history-taking and physical examination

which stresses the normal and touches on the abnormal. Lecture,
demonstrations and video-tape recordings are used in addition to actual

clinical diagnostic work-ups involving patients in Bexar County Hospital.

Physiology 5.00 credit hours Freshman

Lecture, laboratory and conference instruction in the basic concepts underlying normal body function. Emphasis is placed on a systemic exposition of the mechanism of cell and organ function as well as the relationship of the different organs to each other.

A series of lectures during the junior and senior years dealing with the business aspects of conducting a practice. Includes consideration of location, establishment and administration of a practice, bookkeeping methods, management and utilization of personnel, estate planning and development of an office manual.

Public Health 1.00 credit hours Sophomore

A series of lectures during the sophomore year dealing with the control

of disease in a society. Includes descriptive epidemiology, the social etiology of illness, the scope and span of public health, the financing and delivery of health care. Students participate in accumulating data on the prevalence of dental caries in a school population.

Students perform simple prophylaxes for each other under direct supervision. This provides a brief introduction to the oral environment as well as rudimentary instrumentation techniques. It also introduces the student to the procedures involved in operatory management.

Prophylaxis Clinic 0.25 credit hours Sophomore

Advanced clinical prophylaxis. Each student performs prophylaxes for three non-student patients under direct supervision. Detailed instructions in personal dental care are presented to the patient by the

student. These efforts at instruction and motivation of the patient

receive the same emphasis as the instrumentation procedures. During this clinic time, the student is introduced to proper clinic dispensary procedures for instructor approval, preparation of various forms, the presenting of supply requisitions and procurement of dispensary instruments and supplies. Proper preparation of the operatory for patient care is stressed. The student has the opportunity to evaluate the patient's history.

Prosthodontics

4.00 credit hours

Sophomore

Complete Dentures

This course is an introductory course into the diagnostic, construction and maintenance phases of complete denture construction. It includes lectures on examination and diagnosis impressions, maxillo-mandibular relations, esthetics, occlusion and the insertion, adjustment and maintenance of complete dentures. During the laboratory periods the student performs the laboratory work involved in the construction of a set of complete dentures.

Complete Dentures

0.50 credit hours

Junior

This is a clinical course in which the student applies the principles of complete denture construction that were taught during the pre-clinical complete denture course. The student is required to construct a minimum of two upper and lower complete dentures.

Removable Partial Dentures 4.00 credit hours Sophomore

This is a pre-clinical course that stresses the association of biologic and mechanical principles in planning and constructing removable partial dentures. Included are diagnosis, treatment planning, survey and design and the construction of a technique removable partial denture. Emphasis is also placed on relationship with the dental laboratories.

Removable Prosthodontics 3.00 credit hours

Junior_

This course is designed to acquaint the student with a variety of

HS-69

approaches that may be used in treating the edentulous or partially edentulous patient. Lectures are given on such subjects as immediate dentures, overlay and single complete dentures, soft denture liners, implants, occlusal guards, cleft palate and maxillofacial prosthesis, and a variety of direct attachments for removable prosthesis.

Senior Seminar in Removable Prosthodontics

0.00 credit hours

Senior

This course consists of a series of seminars involving the faculty of the prosthodontics department and the senior students. Study questions are used as a basis to review and discuss the principles involved in complete and removable partial denture construction, from both a clinical and technical standpoint, so that the student develops a broader and more comprehensive background of the field of removable prosthodontics.

Removable Partial Dentures 2.00 credit hours

Junior

This course continues emphasis on diagnosis, treatment planning, design principles, mouth preparation and dental laboratory coordination. The student correlates biological and mechanical information in clinical care of patients requiring removable partial dentures.

Removable Partial Dentures 3.00 credit hours

Senior

This is a clinical course in which students receive continued instruction in a greater variety of removable partial denture patients.

A seminar is held as part of the course in which more complex methods of treatment are discussed.

Crown and Fixed Partial Dentures

4.00 credit hours

Sophomore

This course consists of lecture and laboratory phases.

Lecture Phase: Will acquaint the student in current philosophy, information and techniques involving

- 1. History of crown and fixed partial prosthodontics.
- 2. Diagnosis and treatment planning.

- 3. Procedures involved in making different types of crown preparations such as the complete and partial veneer crown preparations.
- 4. Instruction in instrumentation, and manipulation of materials used in impression and fabrication procedures for crowns and fixed partial dentures.

Laboratory Phase: Is designed to enable the student to

- Make different types of crown preparations on extracted human teeth and ivorine dentoform teeth.
- Make impressions using irreversible colloid and rubber base impression materials.
- 3. Make master casts and mount cases on the Hanau Articulator, Model 130-28.
- 4. Fabricate crowns and fixed partial dentures on extracted teeth and on ivorine dentoform teeth.

Crown and Fixed Partial Dentures

3.00 credit hours

Junior

This course is designed to be an adjunct to and complement the pre-clinical courses. In this course the student will correlate previous instruction in the clinical care of patients in need of crowns and/or fixed partial dentures. The clinical course will consist of

- 1. Diagnosis and treatment planning.
- Making complete and partial veneer crown preparations and modifications.
- 3. Management of supportive tissues.
- 4. Providing adequate pain control for restorative procedures.
- 5. Fabrication and insertion of provisional as well as cast restorations.
- 6. Instructions to patient in care and maintenance of restorations.

Crown and Fixed Partial Dentures

0.00 credit hours

Senior

This course consists of a series of group discussion seminars involving

faculty and senior students. The purpose of the seminar is to review biomechanical principles, current techniques, recent advances and trends in restorative dentistry. Time is alloted for guest lecturers to present selected clinical cases. In addition problem areas encountered in crown and fixed partial denture procedures are discussed.

Radiography, Dental 2.00 credit hours Sophomore
The physics of Roentgen ray production, component parts of the x-ray
machine and the chemistry of film processing as well as necessities of
a good darkroom with techniques for hand processing and automatic
processing are taught. Techniques for obtaining quality diagnostic film
are taught by lecture and clinical application. Radiographic
interpretation emphasizing landmarks, artifacts and diagnosis of
anomalies, caries and periodontal disease, lesions of dental origin and
lesions of systemic origin.

LICENSURE REQUIREMENTS

Graduation from an accredited dental school does not automatically grant a graduate the license to practice. Each state has its own state licensing board, and normally each of these boards requires that an applicant for licensure be a graduate from an accredited dental school in the United States or Canada. All of the 53 licensing jurisdictions of the United States, except Delaware, accept the results of the National Board Examinations conducted by the Council of the National Board of Dental Examiners, an agency of the American Dental Association. These examination results are accepted in lieu of a local written examination; and 27 of these jurisdictions require the National Board results and offer no local examination. The Texas State Board of Dental Examiners requires the National Board results.

The Texas State Board of Dental Examiners presently gives
examinations three times a year in order to accommodate dentists seeking
licensure from out-of-state, and from the three dental schools in this
State. The graduates of this Dental School are expected to take the
examination in May, soon after graduation.

The Texas State Board of Dental Examiners recently joined with twelve other states in adopting a new set of admissions standards for those who have dental degrees from recognized foreign dental schools. Foreign dental graduates who wish to take the state licensing examination should contact THE TEXAS STATE BOARD OF DENTAL EXAMINERS in Austin for details.

NATIONAL BOARD EXAMINATIONS

The National Board Examinations are developed and administered by the American Dental Association's Council of National Board of Dental Examiners. There are two parts to this Examination. The first part tests knowledge of basic sciences and the preclinical dental sciences normally included in the first two years of the dental curriculum. This examination is required of all students after completion of the Sophomore year. The second part of the examination is taken by Senior students just prior to their graduation. This allows sufficient time so

the test results are available to the Dental Examiners in those states in which the graduate has made application for licensure.

STUDENT ORGANIZATIONS

Student American Dental Association

At the meeting of the House of Delegates of the American Dental Association on October 29 - November 2, 1972, the Bylaws were amended so any undergraduate student seeking student membership in the American Dental Association now must also become a member of the American Student Dental Association. Total dues for joint membership is to be \$10.00. Membership is encouraged.

Membership in these two organizations makes the student eligible for various insurance programs sponsored by the American Dental Association; permits the student to participate in National, State and local dental society meetings; and to participate in the National Program for Student Table Clinics.

A very high percentage of all students choose to become members of this Association. By beginning membership in the Freshman year students are able to participate in all of the Association sponsored programs and benefits.

Dental Fraternities

At the beginning of the 1973-74 academic year, the student-body elected to request representatives from three dental fraternities to colonize on this campus. The three fraternities held "rushing" parties, pledged members to begin the colonization of the fraternities, and organized an Interfraternity Council. The three dental fraternities that are currently colonized at The University of Texas Dental School at San Antonio are:

Delta Sigma Delta

Psi Omega

Xi Psi Phi

During Orientation week (first week of school), announcements will be made about the dental fraternities and their schedule of "rushing".

The dental fraternities do not have fraternity houses and hence there is no housing available through the fraternities at this time.

FINANCIAL INFORMATION

Since matriculation is not complete until tuition and fees are fully paid a student should be prepared to make these payments during scheduled registration for each academic year. Both tuition and fees are subject to change according to the actions of the Texas State Legislature and the Board of Regents.

Tuition

In accordance with action of the 62nd Legislature, tuition for each academic year of twelve months is \$400.00 for residents of Texas and \$1200.00 for nonresidents. Prorated tuition is charged for academic years of less than twelve months. The detailed regulations governing definition of residency as set forth by the Legislature can be found on page _____. Any candidate whose legal residency in Texas is not clearly established may have a University opinion rendered by requesting a copy of The University of Texas Legal Residence Questionnaire from The University of Texas Medical and Dental Application Center. (see Application Procedure)

	ees										
A	schedule	of	fees	ĺs	listed	in	the	chart	on	page	

Other Expenses

Students are required to enroll in the Blue Cross Hospital Services Plan designed for students at The University of Texas Health Science Center at San Antonio or show evidence of enrollment in another hospitalization plan with equal or greater provisions. A student may enroll his spouse and/or children at additional cost. The current annual costs for this plan are \$39.72 for student only; \$100.80 for student and one dependent; \$109.80 for student and two or more dependents. Inpatient hospital charges not reimbursed by hospitalization insurance are the responsibility of the student.

Blue coats and white coats are both required and cost approximately \$13.00 each including the identifying school patch. These garments are traditionally worn throughout the dental school program. The number of coats necessary is a matter of individual student choice.

Dental Instruments and Supplies

A list of the required instruments and supplies which the student will need for the first year will be mailed preceding registration. This list will include the names of the local dental supply houses.

In order to master the knowledge and skills essential to professional practice, the student-dentist must possess certain equipment to be used in the educational program. While these lists will appear lengthy and complicated, they are carefully reviewed by the faculty and the administration every year so as to keep them at a minimum, but also to assure that the proper and best instruments will be available so that students can perform their best work.

There are several dental supply companies in San Antonio which stock the equipment and supplies that are required. Most students purchase the equipment as a complete kit but the items can also be purchased individually. It is important that the particular make, model, and other specifications be purchased in order to guarantee that all students have an equal opportunity to perform the tasks and obtain the experience that will be expected of them.

The question is often asked as to whether a student may buy used instruments. If students wish to purchase and use used instruments they should be sure that the instruments are on the prescribed list and are in good condition. Nearly all of the required instruments will be used by the students after they graduate and establish their own practices. Therefore, only a very limited number of used instruments is available.

Dental Textbooks and the Bookstore

As in the case of dental instruments, every student needs specific textbooks and manuals. Also, as in the case with the dental instruments, students will want to retain these textbooks for use during their educational program and for their own professional-library.

New lists of textbooks are issued each year. Textbooks may be

purchased at the Health Science Center's bookstore.

Textbook lists normally list "required" textbooks and "recommended" textbooks. As the word implies, the instructors expect the students to purchase the "required textbooks". Students should consult the instructor as to the advisability of purchasing the "recommended" books. Although these are usually on reserve in the library, students may find it more convenient to have their own books if they are to be used frequently. It should be emphasized that instructors expect every student to own a copy of the textbooks which have been placed on the "required list." It is not possible for a student to depend upon checking out textbooks from the library or to borrow them from other students.

Second-hand textbooks may be used providing that each textbook is the edition specified on the list. Most students prefer to buy new copies so they can do their own underlining and note taking in the book. The bookstore does not sell used books.

The approximate cost of new textbooks needed for the Freshman year is \$275.00.

Living arrangements are made by the individual student. Although there is no Health Science Center housing for students, the Financial Aid Office maintains a listing of houses and apartments and will assist students whenever possible. Students should arrange for living accommodations well in advance of matriculation. A cafeteria is available in the Bexar County Hospital.

Summary	of	Expenses
S S IIIIII C X Y	V 3.	かん ひしょう ぐう

ITEM	FRESHMEN	SOPHOMORES	JUNIORS	SENIORS
Tuition, Resident	\$300	\$300	\$300	\$300
Tuition, Out-of-State	\$900	\$900	\$900	\$900
Instruments	\$2000	\$1300	\$400	\$ 50
Textbooks	\$285	\$230	\$ 90	\$ 80
Rental Microscope	\$ 60	\$ 60		
Lab, Fee	\$ 32	\$ 32	anny asse vide ann	and had with the
Parking **	\$ 3	\$ 3	\$ 3	\$ 3
Hospitalization ***	\$ 39.72	\$ ⁻ 39.72	\$ 39.72	\$ 39.72
Student Health Fee	\$ 65	\$ 65	\$ 65	\$ 65
Identification Card	\$ 2		OPE SPEE ALLS SAID	****
and Name Plate				
Graduation Fee	V00 144 440	MANU piece study study	and one are to	\$ 25

^{**} Parking Fee is \$3.00 a year for first vehicle and \$1.00 for second vehicle. Motorcycle fee is \$1.50.

*** Item varies with the number of persons in the family.

Note: Tuition and/or fees are subject to change without prior notice.

Refund of Tuition and Fees

Any student officially withdrawing from school during the first week of class will receive a refund of 70 percent of the refundable fees; during the second week the amount will be 60 percent; during the third week, 40 percent; and during the fourth week, 20 percent. No refunds are made upon withdrawal during the fifth week and thereafter and in no case shall the total refund exceed 70 percent of the tuition and fees. Refunds will be prepared within 30 days and mailed to the student's forwarding address left with the Registrar.

Exemption from Fees

Texas Ex-servicemen may, as directed by the State Legislature, be exempted from certain required fees but not deposits when meeting these criteria: (1) has resided in Texas for a period of not less than twelve months before the date of registration; (2) was a "bona fide" legal resident of the state at the time of entering service; (3) served in the armed forces or in certain auxiliary services in World War I, World War II, the Korean conflict, or the Cold War; (4) was honorably discharged therefrom (except those discharged because of being over the age of thirty-eight or because of personal request); (5) is not eligible for education benefits provided for veterans by the United States Covernment. Exemption from payment of certain fees also extends to children of members of the armed forces killed in action or died while in the service of World War II, or the Korean conflict, or the Cold War and to orphans of members of the Texas National Guard and the Texas Air National Guard killed since January 1, 1946 while on active duty. Application for this exemption should be made to the Registrar.

Children of Certain Disabled Public Employees, by an act of the 59th Legislature, i.e., children of certain firemen, peace officers, employees of the Texas Department of Corrections, and game wardens who in the line of duty have suffered injury resulting in death or disability, are exempt from payment of tuition and laboratory fees. For specific information relative to this provision, contact the Commissioner of Higher Education, Sam Houston State Office Building, Austin, Texas.

High-School Graduates of State Orphanages of Texas, by an act of the 51st Legislature, who are citizens of Texas, are exempt from certain required fees but not from deposits. After application for admission has been approved, the candidate should request a scholarship card from the Financial Aid Administrator.

The Texas Rehabilitation Commission offers assistance for tuition and non-refundable fees to students who have certain disabling conditions

provided their vocational objectives have been approved by a TRC Counselor. Examples of such conditions are orthopedic deformities, emotional disorders, diabetes, epilepsy, heart conditions, etc. Other services are also available to assist the handicapped student to become employable. Application for such service should be made at:

Texas Rehabilitation Commission 212-B Stumberg Room 300 San Antonio, Texas 78204.

Military Programs for Students

Several branches of the Military have instituted programs whereby dental students are subsidized during the time spent in dental school under the program. There are several programs depending upon whether one enters it at the time of beginning dental school or enters it after having been in school for a year or more. Students or applicants interested in learning more about such a program should contact the various military services directly.

Scholarships

A limited number of tuition scholarships have been made available by the State Legislature.

The Health Professions Scholarship Grant Program: Funds are awarded to qualified students on the basis of exceptional need. The recipients are selected by the Scholarship and Loan Committee.

The Robert Wood Johnson Foundation Scholarship Program is administered by the school under the guidance of the American Dental Association. Awards are made to qualified students on the basis of need. Recipients are selected by the Scholarship and Loan Committee.

Loan Funds

The University of Texas Dental School at San Antonio is fortunate in having limited loan funds for students requiring aid. Application forms and complete information concerning loans available to dental students can be obtained from the Financial Aid Administrator in the Office of Students Services. The loan funds include the following:

Short Term and Emergency Loans:

The Franklin Lindsay Student Aid Fund

The General Benjamin Dunn Student Emergency Loan Fund

The Kenneth Compton Loan Fund

The Optimist Club of Turtle Creek Student Loan Fund

The San Antonio District Dental Society Loan Fund

The Student Emergency Loan Fund

The Student Short Term Loan Fund

The Woman's Auxiliary to the San Antonio Dental School Emergency
Loan Fund

The Woman's Auxiliary San Antonio District Dental Society Loan Fund Long Term Loans:

The Federally Insured Loan Program (Funds obtained from banks and other lending institutions)

The Health Professions Loan Program

Hinson-Hazelwood College Student Loan Program

The Robert Wood Johnson Foundation Loan Program

The Minnie Stevens Piper Foundation Loan Program

The Woman's Auxiliary to the Texas Dental Association Loan Fund

RESIDENCE STATUS

Pertinent rules and regulations governing residence status pursuant to Title 3, Texas Education Code, effective July 16, 1974 are quoted below. Under these regulations, the term "residence" means "domiciled" and the term "resided in" means "domiciled in". Interested students should consult the Registrar for further information.

Minors

Statute: Section 54.052 (b) An individual, under twenty-one (21) years of age, who is living away from his family, and whose family resides in another state or has not resided in Texas for the 13-month period immediately preceding the date of registration shall be classified as a nonresident student;

Section 54.052 (c) An individual eighteen (18) years of age or under whose family has not resided in Texas for the 12-ronth period immediately preceding the date of registration shall be classified as a nonresident student regardless of whether he has become the legal ward of residents of Texas or has been adopted by residents of Texas while he is attending an educational institution in Texas, or within a 12-ronth period before his attendance, or under circumstances indicating that the guardianship or adoption was for the purpose of obtaining status as a resident student;

Section 54.055 An individual 18 years of age or under whose parents were formerly residents of Texas is entitled to pay the resident tuition fee following the parents' change of legal residence to another state, as long as the individual remains continuously enrolled in a regular session in a state-supported institution of higher education.

Residence of Individuals Over Eighteen

Statute: Section 54.052 (d) An individual eighteen (18) years of age or over who has come from outside Texas and who is gainfully employed in Texas, for a 12-month period irmediately preceding registration

in an educational institution shall be classified as a resident student as long as he continues to maintain a legal residence in Texas; and

Section 54.052 (e) An individual eighteen (18) years of age or over who resides out of the state or who has come from outside.

Texas and who registers in an educational institution before having resided in Texas for a 12-month period shall be classified as a nonresident student.

Section 54.054 A nonresident student classification is presumed to be correct as long as the residence of the individual in the state is primarily for the purpose of attending an educational institution. After residing in Texas for at least twelve (12) months, a nonresident student may be reclassified as a resident student as provided in the rules and regulations adopted by the Coordinating Board, Texas College and University System. Any individual reclassified as a resident student is entitled to pay the tuition fee for a resident of Texas at any subsequent registration as long as he continues to maintain his legal residence in Texas.

Married Students

Statute: Section 54.056 A nonresident who marries and remains married to a resident of Texas, classified as such under this Act at the time of the marriage and at the time the nonresident registers, is entitled to pay the resident tuition fee regardless of the length of time he has lived in Texas, and any student who is a resident of Texas who marries a nonresident is entitled to pay the resident tuition fee as long as he does not adopt the legal residence of the spouse in another state.

Military Personnel and Veterans

Statute: Section 54.058 (a) Military personnel are classified as provided by this section in the following manner:

- (b) An officer, enlisted men or women, selected or draftee of the Army, Army Reserve, Army National Guard, Air National Guard, Texas State Guard, Air Force, Air Force Reserve, Mavy, Mavy Meserve, Marine Corps, Marine Corps Reserve, Coast Guard, or Coast Guard Reserve of the United States, who is assigned to duty in Texas is entitled to register himself, his spouse, and their children in a state institution of higher education by paying the tuition see and other fees or charges required of Texas residents, without regard to the length of time he has been assigned to duty or resided within the state. However, out-of-state Army Eational Guard or Air Rational Guard members attending training with Teras Army or Air Hational Guard members under Hational Guard Bureau regulations may not be exempted from nonresident tuition by virtue of that training status nor may out-of-state Army, Air Force, Havy, Marine Corps, or Coast Guard Reserves training with units in Texas under similar regulations be exempted from nonresident tuition by virtue of such training status. It is the intent of the legislature that only those members of the Army or Air National Guard, Texas State Guard, or other reserve forces mentioned above be exempted from the nonresident tuition fee and other fees and charges only when they become members of Texas units of the military organizations mentioned above.
- (c) As long as they reside continuously in Texas, the spouse and children of a member of the Armed Forces of the United States the has been assigned to duty elsewhere immediately following assignment to duty in Texas are entitled to pay the tuition fees and other fees or charges provided for Texas residents.
- (e) A Texas institution of higher education may charge to the United States Government the nonresident tuition fee for a veteran enrolled under the provisions of a Federal law or regulation authorizing educational or training benefits for veterans;

- (f) The spouse and children of a newher of the Armed Forces of the United States who dies or is killed are entitled to pay the resident tuition fee, if the wife and children become recidents of Texas within 60 days of the date of death; and
- stationed outside Texas and his spouse and children establish residence in Texas, by residing in Texas and by filing with the Texas institution of higher education at which they plan to register a letter of intent to establish residence in Texas, the institution of higher education shall permit the spouse and children to pay the tuition, fees, and other charges provided for Texas residents without regard to length of time that they have resided within the State.

Employees of Institutions of Higher Education Other Than Students

Statute: Section 54.059 A teacher, professor, or other employees of a Texas institution of higher education is entitled to register himself, his spouse, and their children in a state institution of higher education by paying the tuition fee and other fees or charges required for Texas residents without regard to the length of time he has resided in Texas. A teacher, professor, or other employee of a Texas institution of higher education is any person employed at least one-half time on a regular monthly salary Lasic by a state institution of higher education.

Student Employees

Statute: Section 54.051 (o) 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 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 the consecutive senseters 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.

Competitive Scholarships

Statute: Section 54.051 (p) A nonresident student holding a competitive scholarship of at least \$200 for the academic year or summer for which he is enrolled is entitled to pay the fees and charges required of Texas residents without regard to the length of time has resided in Texas, provided that he must compete with other students, including Texas residents, for the scholarship and that the scholarship must be araded by a scholarship committee officially recognized by the administration of the institution of higher education.

Citizens of Any Country Other Than the United States of America

Statute: Section 54.057 An alien who is living in this country under a visa permitting permanent residence or who has filed with the proper Federal immigration authorities a declaration of intention to become a citizen has the same privilege of qualifying for resident status for fee purposes under this Act as has a citizen of the United States. A resident alien residing in a junior college district located immediately adjacent to Teras Lorentary lines shall be charged the resident tuition by that junior college.

Reciprocity Clause Applicable to Junior Colleges

Statute: Section 54.000 The nonrecident tuition for prescribed in this Act 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 immediately adjacent to the state in which the nonresident student resides. The nonrecident student described in this Subsection shall pay an amount empiralent to the amount charged a Texas student registered at a similar vehool in the state in which the nonresident student resides.

Student Responsibilities

The responsibility of registering under the proper residence classification is that of the student, and if there is any question of right to classification as a resident of Texas, it is his or her obligation, 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.

Every student who is classified as a resident student but who becomes a nonresident at any time by virtue of a change of legal residence by his or her own action or by the person controlling his or her domicile is required to notify the proper administrative officials of this institution at once.

Penalties

Statute: Section 54.053 The governing board of each institution required by this Act to charge a nonresident tuition or registration fee is subject to the rules, regulations, and interpretations issued by the Coordinating Board, Texas College and University System, for the administration of the nonresident tuition provisions of this Act.

The rules, regulations, and interpretations promulgated by the Coordinating Board shall be furnished to the presidents or administrative heads of all Texas public senior and junior colleges and universities.

Section 54.061 The governing board of an institution of higher education may assess and collect from each nonresident student who fails to comply with the rules and regulations of the boards concerning nonresident fees a penalty not to exceed \$10 a semester.

DENTAL SCHOOL FACULTY

(To be added; not attached for Docket.)

THE UNIVERSITY OF TEXAS

HEALTH SCIENCE CENTER AT SAN ANTONIO

MEDICAL SCHOOL

CATALOGUE FOR 1974 - 1975

and ANNOUNCEMENTS FOR 1975 - 1976



(to be printed inside front cover)

Catalogues published by The University of Texas

Health Science Center at San Antonio:

Dental School

Graduate School of Biomedical Sciences

HS-91

Medical School

1E-6 1E-6

1E-7 1E-7

CONTENTS	
BOARD OF REGENTS	
OFFICERS OF ADMINISTRATION	
DEPARTMENTAL CHAIRMEN	
ACADEMIC CALENDAR 1974 - 1975	
ACADEMIC CALENDAR 1975 - 1976	
GENERAL INFORMATION	1E-1
San Antonio	1E-1
South Texas Medical Center	1E-1
THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO	2E-1
History	2E-1
Accreditation	2E-3
Policy	2E-3
Release of Transcripts and Academic Records	IE-Al
Academic Organization (chart)	1E-A2
STUDENT AND FACULTY SUPPORT ACTIVITIES	1E-2
The Office of Student Services	1E-2
Director of Student Services	1E-2
Registrar and Admission	1E-2
Coordinator of Curriculum and Academic Programs	1E-2
Financial Aid	1E-2
Student Health Services	1E-3
The Office of Educational Resources	2E-4
Director of Educational Resources	2E-4
The Library	2E-4
Art, Photograph, Printing Services	2E-4
Television Services	2E-4
Classroom Services	2E-4
Instructional Development	2E-5
Multidiscipline Laboratories	2E-5
The Office of Continuing Education	2E-6
SCHOOLS OF THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER	1E-4
The Dental School	1E-4
The Graduate School of Biomedical Sciences	1E-4
The Medical School	1E-4
The School of Pharmacy Program	1E-4
AFFILIATED FACILITIES	1E-5
Academic Institutions	1E-5
The University of Texas at San Antonio	1E-5
The University of Texas School of Nursing at San Antonio	1E-5
Hospitals and Clinics	1E-5
The Bexar County Teaching Hospital	1E-5
The Robert B. Green Memorial Hospital	1E-6
The Audie L. Murphy Memorial Veterans Hospital	1E-6
Brooke General Hospital	1E-6
Wilford Hall USAF Medical Center	1E-6

The United States Air Force School of Aerospace Medicine

The Santa Rosa Medical Center

The Baptist Memorial Hospital System

CONTENTS (Continued)	
The San Antonio State Chest Hospital The San Antonio Metropolitan Health District The Cancer Therapy and Research Center	1E-7 1E-7 1E-8
Other Affiliated Facilities	1E-8
The Southwest Foundation for Research and Education The Southwest Research Institute The Ecumenical Center for Religion and Health	1E-8 1E-8 1E-8
THE MEDICAL SCHOOL	1A-1
The Physician's Oath of Hippocrates	1A-1
ADMISSION TO THE MEDICAL SCHOOL	11-2
General Minimum Requirements The Medical College Admission Test (MCAT) Residency Application Procedure Acceptance Considerations Action Before Matriculation Selective Service Required Immunization	1A-2 1A-2 1A-1A 1A-1A 1A-4 1A-2A
ADVANCED STANDING DOUBLE DEGREE PROGRAM REQUIREMENTS AND REGULATIONS	1A-3A 1B-7 1A-8
Absence, Withdrawal and Readmission Faculty Advisors Student Debts	1A-8 1A-9 1A-9
GRADES, PROMOTIONS, AND GRADUATION	11-10
CURRICULUM	2A-3
Philosophy and Course Design Qualifying Examinations Curriculum Summary (chart)	2A-3 2A-4 2A-A
COURSE DESCRIPTIONS	3A-1
Required Courses Elective and Selective Courses	3A-1 5A-1
First and Second Year Elective Courses Fourth Year Selective Courses	5A-1 7A-1
STUDENT ORGANIZATIONS	12A-1
The Student American Medical Association The Student National Medical Association The Alpha Omega Alpha Society Other Organizations	12A-1 12A-1 12A-2 12A-3
POST GRADUATE MEDICAL EDUCATION OF GRADUATES	10A1-11
5-Year Profile on Graduates	10Al-ll
Institutions outside Texas where one or more graduates have	10A1-12

CONTENTS (Continued)

NANCIAL INFORMATION	13A-1
Prepayments Tuition Fees	13A-1 13A-1 13A-1
Laboratory Fee Microscope Rental Fee Student Activity Fee Identification Fee Parking Fee Graduation Fee	13A-1 13A-1 13A-1 13A-2 13A-2
Other Expenses	13A-2
White Coats Books and Equipment Living Arrangements	13A-2 13A-2 13A-3
Summary of Expenses Refund of Tuition and Fees Exemption from Fees	13A-3 13A-3 13A-4
Texas Ex-servicemen Children of Certain Disabled Public Employees High-School Graduates of State Orphanages of Texas The Texas Rehabilitation Commission Assistance	13A-4 13A-4 13A-5
Military Programs for Students Scholarships Loan Funds	13A-5 13A-5 13A-7
ESIDENT STATUS	lD-l
Minurs Residence of Individuals over Eighteen Married Students Military Personnel and Veterans Employees of Institutions of Higher Education Other than Student Student Employees Competitive Scholarships Citizens of Any Country Other Than the United States of America Reciprocity Clause Applicable to Junior Colleges Student Responsibilities	1D-1 1D-2 1D-2 1D-2 1D-4 1D-4 1D-5 1D-5 1D-5
Penalties	1D-6

MEDICAL SCHOOL FACULTY

BOARD OF REGENTS

Officers

Allan Shivers, Chairman

Dan C. Williams, Vice-Chairman

Betty Anne Thedford, Secretary

Members

Terms Expire January 1977
Mrs. Lyndon B. JohnsonStonewall
A.G. McNeese, JrHouston
Joe T. Nelson, M.D
Terms Expire January 1979
James E. Bauerle, D.D.SSan Antonio
Edward ClarkAustin
Allan ShiversAustin
Terms Expire January 1981
Thos. H. LawFort Worth
Walter G. SterlingWouston
Dan C. WilliamsDallas

Standing Committees*

SYSTEM ADMINISTRATION: Williams, Chairman

ACADEMIC AND DEVELOPMENTAL AFFAIRS: Mrs. Johnson, Chairman

BUILDINGS AND GROUNDS: Bauerle, Chairman

LAND AND INVESTMENT: Clark, Chairman

MEDICAL AFFAIRS: Nelson, Chairman

BOARD FOR LEASE OF UNIVERSITY LANDS: State Land Commissioner Bob Armstrong (ex officio), Chairman; Nelson, Williams

^{*}All members of the Board constitute each committee.

OFFICERS OF ADMINISTRATION

The University of Texas System, Austin

Charles A. LeMaistre, B. A., M.D., Chancellor Everitt Donald Walker, M.B.A., C.P.A., Deputy Chancellor William H. Knisely, Ph.B., B.S., M.S., Ph.D. Assistant to the Chancellor for Health Affairs

The University of Texas Health Science Center at San Antonio

Frank Harrison, B.S., M.S., Ph.D., M.D., President
Robert B. Price, B.B.A., M.B.A., C.P.A., Vice President for Business Affairs
James W. Wagener, B.A., M.A., Ph.D., Assistant to the President
Magda Hinojosa, B.S., M.P.H., Special Assistant to the President
David M. Shapiro, B.S., Ph.D., Director of Student Services
Charles A. Stewart, J., Ph.D., Director of Continuing Education Services
James S. Waldron, B.S., M.S., Ph.D., Director of Educational Resources
Billy J. Barker, B.B.A., Director of Financial Services
Auben W. Brunnemann, B.A., Coordinator of Curriculum and Academic Programs
Joseph P. Burger, M.S., Director, Multidiscipline Teaching Laboratories
Betty M. Compton, B.A., Registrar and Admissions
Charles E. Johnson, Jr., B.S., Student Financial Aid Administrator
David A. Kronick, Ph.D., Librarian
S. Perry Post, M.D., Director, Student Health Services
Bruce M. Smith, B.B.A., C.P.A., Business Manager

Dental School Administration

Philip J. Boyne, D.M.D., M.S., Dean J. Duncan Robertson, B.S., D.M.D., Associate Dean for Administrative Affairs Shailer A. Peterson, B.A., M.A., Ph.D., Coordinator of Academic Affairs and Admissions Edwin M. Collins, D.D.S., Clinic Coordinator

Graduate School Administration

Armand J. Guarino, B.S., Ph.D., Dean Evelyn L. Oginsky, B.A., M.S., Ph.D., Associate Dean

Medical School Administration

Stanley E. Crawford, B.A., M.D., Dean Paul Cutler, B.A., M.D., Associate Dean for Continuing Medical Education Carlos Pestana, M.D., Ph.D., Associate Dean for Student Affairs

DEPARTMENTAL CHAIRMEN of THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER at SAN ANTONIO

Basic Sciences

Anatomy Edward G. Rennels, B.Ed., M.A., Ph.D.

Bicchemistry Armand J. Guarino, B.S., Ph.D.

Bioengineering Caspar W. Hiatt, III, B.S., M.P.H., Ph.D.

Laboratory Animal Medicine Robert J. Young, D.V.M., M.P.H., (acting)

M.crobiology Alexis Shelokov, A.B., M.D.

Pathology Frank M. Townsend, M.D.

Pharmacology Arthur H. Briggs, B.A., M.D.

Physiology Edward J. Masoro, B.A., Ph.D.

Dental Sciences

Biomaterials Donald C. Hudson, D.D.S.

Community Dentistry Charles T. Smith, B.A., D.D.S., (acting)

Dental Anatomy J. Duncan Robertson, B.S., D.M.D., (acting)

Diagnosis and Roentgenology Charles R. Morris, D.D.S.

Endodontics Glenn R. Walters, B.S., D.D.S., (acting)

General Practice Billy E. Rigsby, D.D.S.

Operative Dentistry James M. Childers, D.M.D.

Outpatient Clinic Coordinator Edwin M. Collins, B.Sc., D.D.S., M.Sc.

Dan C. Peavy, B.S., D.D.S., M.S.D., (acting)

James L. Bugg, B.A., D.M.D., M.S.D.

Pedodontics

Periodontics Sam W. Hoskins, Jr., D.D.S., M.S.D.

Prosthodontics Earl E. Feldmann, D.D.S., (acting)

Surgery, Oral Hugh B. Tilson, D.D.S., M.S.

Medical Sciences

Orthodontics

Anesthesiology Howard L. Zauder, B.A., M.S., Ph.D., M.D.

Family Practice Herschel L. Douglas, M.D.

Medicine Laurence E. Earley, B.S., M.D.

Obstetrics and Gynecology Joseph Seitchik, B.A., M.A., M.D.

Pediatrics Phillip A. Brunell, B.S., M.S., M.D.

Physical Medicine and Rehabilitation Arthur E. Grant, M.D.

Psychiatry Robert L. Leon, M.D.

Radiology Malcolm D. Jones, A.B., M.D.

Surgery J. Bradley Aust, M.D., M.S., Ph.D.

ACADEMIC CALENDAR 19/4 - 1975

First Year	Convocation, Registration Orientation Classes begin Independence Day Holiday Lyndon B. Johnson's Birthday Holiday Labor Day Holiday Three Year Program begins Thanksgiving Holiday begins Classes resume Christmas Vacation begins Classes resume Good Friday Holiday San Jacinto Fiesta Holiday (afternoon only) First Year Vacation begins Second Year of Three Year Program begins Second Year of Four Year Program begins	June 27, 1974 June 28, 1974 July 1, 1974 July 4, 1974 August 27, 1974 November 2, 1974 November 28, 1974 December 2, 1974 December 24, 1974 January 2, 1975 March 28, 1975 April 25, 1975 June 30, 1975 July 14, 1975 September 8, 1975
Second Year of FOUR YEAR PROGRAM	Registration Classes begin Thanksgiving Holidays begin Classes resume Christmas Vacation begins Classes resume Good Friday Holiday San Jacinto Fiesta Holiday (afternoon only) Second Year Vacation begins Third Year classes begin	September 9, 1974 September 9, 1974 November 28, 1974 December 2, 1974 December 24, 1974 January 2, 1975 March 28, 1975 April 25, 1975 June 30, 1975 July 14, 1975
Second Year of THREE YEAR and Third Year of FOUR YEAR PROGRAM	Christmas Vacation from December 23, 1975 2nd Clinical Period from January 6, 1975 3rd Clinical Period from February 24, 1975 4th Clinical Period from April 14, 1975	July 15, 1974 July 15, 1974 August 27, 1974 September 2, 1974 September 4 and 5, 1974 November 2, 1974 through December 21, 1974 through January 4, 1975 through February 22, 1975 through May 31, 1975 through July 19, 1975 July 21, 1975
Third Year of THREE YEAR PROGRAM	6th Clinical Period from July 29, 1974 th 7th Clinical Period from September 16, 19 1st Elective Period from November 4, 1974 Christmas Vacation from December 23, 1975 2nd Elective Period from January 6, 1975 3rd Elective Period from February 24, 1975 Part II, National Board Examinations	June 3, 1974 rough July 20, 1974 rough September 14, 1974 74 through November 2, 1974 4 through December 21, 1974 74 through January 4, 1975 through February 22, 1975 75 through April 12, 1975 April 8 and 9, 1975 Chrough May 31, 1975 May 31, 1975
Fourth Year of FOUR YEAR PROGRAM	1st Elective Period from July 29, 1974 th 2nd Elective Period from September 16, 193rd Elective Period from November 4, 1974 Christmas Vacation from December 23, 1974 th Elective Period from January 6, 1975 5th Elective Period from February 24, 1974 Part II, National Board Examinations	June 3, 1974 rough July 20, 1974 rough September 14, 1974 74 through November 2, 1974 4 through December 21, 1974 4 through January 4, 1975 through February 22, 1975 5 through April 12, 1975 April 8 and 9, 1975 through May 31, 1975 May 31, 1975

NOTE: Other than Christmas as shown, holidays for Clinical Periods and Elective Periods will be as scheduled by the department to which the student is assigned.

January 15, 1975

GENERAL INFORMATION

San Antonio

San Antonio is the fifteenth largest city in the United States with a population of 770,000 and is one of the nation's most interesting and colorful cities. Its twin cultural heritage — Spanish and American — is reflected from the early missions and the historic Alamo to modern skyscrapers.

Located in South Central Texas in a subtropical climate, it enjoys rormal mean temperature ranges from 52 degrees in January to 84 degrees in July. As a center of higher education, two universities and four colleges are located in San Antonio as well as The University of Texas Realth Science Center and School of Nursing. In addition, a new University of Texas academic institution was authorized in 1969 by the 61st Texas Legislature, and is now under construction in the foothills of Texas' "hill country" north of the Health Science Center.

South Texas Medical Center

The South Texas Medical Center is an area of some 680 acres in Northwest San Antonio established by the San Antonio Medical Foundation to attract institutions and facilities which would offer the highest standards of achievement for health, education, research, patient care and health care services.

In 1961, The Foundation donated 100 acres to The University of Texas

System, the present location of The University of Texas Health Science

Center at San Antonio and The University of Texas System School of Nursing
on the San Antonio Campus. In addition to these two institutions, the

Southwest Medical Center includes - Bexar County Teaching Hospital, Audie

L. Murphy Memorial Veterans Hospital, Cerebral Palsy Treatment Center,

Community Guidance Center of Bexar County, Bexar County Unit of the

American Cancer Society, Texas Cradle Society, San Antonio Community Hospital,

Cancer Therapy and Research Center, Ecumenical Center for Religion and Health,

Villa Rosa Psychiatry and Rehabilitation Center, Lutheran General

Hospital (under construction), and Southwest Methodist Hospital. The

South Texas Medical Center has grown to include 19 institutions with

7,400 employees and a combined annual budget of more than \$87,000,000.

TENTATIVE ACADEMIC CALENDAR 1975 - 1976

First Year	Convocation, Registration Orientation Classes begin Independence Day Holiday Lyndon B. Johnson's Birthday Hol Labor Day Holiday Three Year Program begins Thanksgiving Holidays begin Classes resume Christmas Vacation begins Classes resume Good Friday Holiday San Jacinto Fiesta Holiday (afte First Year Vacation begins Second Year of Three Year Program Second Year of Four Year Program	rnoon only) m begins	June 26, 1975 June 27, 1975 June 30, 1975 July 4, 1975 August 27, 1975 September 1, 1975 November 3, 1975 November 27, 1975 December 1, 1975 December 1, 1975 December 24, 1975 January 5, 1976 April 16, 1976 April 23, 1976 June 28, 1976 July 19, 1976 September 6, 1976
Second Year of FOUR YEAR PROGRAM	Registration Classes begin Thanksgiving Holidays begin Classes resume Christmas Vacation begins Classes resume Good Friday Holiday San Jacinto Fiesta Holiday (afte Second Year Vacation begins Third Year of Four Year Program		September 8, 1975 September 8, 1975 November 27, 1975 December 1, 1975 December 24, 1975 January 5, 1976 April 16, 1976 April 23, 1976 June 28, 1976 July 19, 1976
Second Year of THREE YEAR and Third Year of FOUR YEAR PROGRAM	Registration Preclinical Classes begin Lyndon B. Johnson's Birthday Hol Labor Day Holiday Part I, National Board Examination Preclinical Classes completed 1st Clinical Period from Christmas Vacation from 2nd Clinical Period from 3rd Clinical Period from 4th Clinical Period from 5th Clinical Period from Third Year of Three Year Program Fourth Year of Four Year Program	ons November 3, 1975 December 22, 1975 January 5, 1976 t February 23, 1976 April 12, 1976 th May 31, 1976 thro begins	July 14, 1975 July 14, 1975 August 27, 1975 September 1, 1975 September 3 and 4, 1975 November 1, 1975 through December 20, 1975 through January 4, 1976 hrough February 21, 1976 through April 10, 1976 rough May 29, 1976 ugh July 17, 1976 July 19, 1976 July 19, 1976
Third Year of THREE YEAR and FOURTH YEAR of FOUR YEAR PROGRAM	Registration 6th Clinical Period from 7th Clinical Period from Vacation from 1st Elective Period from Christmas Vacation from 2nd Elective Period from 3rd Elective Period from Part II, National Board Examinat 4th Elective Period from	September 8, 1975 October 26, 1975 November 3, 1975 December 22, 1975 January 5, 1976 t February 23, 1976 ions	July 21, 1975 ough September 6, 1975 through October 25, 1975 through November 2, 1975 through December 20, 1975 through January 4, 1976 hrough February 21, 1976 through April 10, 1976 April 6 and 7, 1976 rough May 29, 1976 May 29, 1976

NOTE: Other than Christmas as shown, holidays for Clinical Periods and Elective Periods will be as scheduled by the department to which the student is assigned.

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO

History

The University of Texas Health Science Center at San Antonio originated as a Medical School which was authorized by the 56th Texas Legislature in 1959. Its construction was started in 1966, and completed in July 1968.

Faculty recruitment for the Medical School began in 1965. Enrollment began in 1966, but students attended classes at The University of Texas Medical Schools in Dallas and Galveston until the San Antonio facility could be completed. In 1969 the first full class of 104 students matriculated in the new facility, and the first graduating class of 33 students received Doctor of Medicine degrees in 1970.

The initial Medical School building contained 432,816 square feet on four levels and included classrooms, multidisciplinary teaching laboratories, a 634-seat auditorium, a library, faculty offices and research laboratories, and administrative offices as well as areas necessary to service the building.

In 1969 the 61st Texas Legislature authorized the beginning of The University of Texas Dental School at San Antonio. By using temporary facilities in the Medical School, the Dental School opened in September of 1970 with 16 first-year dental students, and graduated its first class in June of 1974.

Construction of a separate building for the Dental School on the same 100 acres was begun early in 1973 and is scheduled for completion by late 1975. This building will also be a four-level structure of 453,769 square feet and it will be compatible in architecture with buildings of the Medical School. The two schools will be connected at each level to permit maximum sharing of teaching and research facilities. The completed dental facility will provide accommodations to admit 152 dental students each year into the four-year Doctor of Dental Surgery program, 48 dental hygiene students to enter the two-year dental hygiene program, 48 dental assistant

students to enter the one-year dental assistant program, and 24 dental laboratory technicians to enter the two-year dental laboratory technician program. It is planned that graduate programs in all dental spcialities will be offered. Emphasis will also be placed on research in appropriate training areas as well as in programs of continuing dental education.

During the early years of the Medical School, the basic science faculty also initiated the development of graduate programs leading to the Master of Arts and the Doctor of Philosophy degrees. In 1970, graduate programs for these degrees were approved by the Coordinating Board, Texas College and University System, for anatomy, biochemistry, biophysics, microbiology and pharmacology. Enrollment began that year with 15 students and by 1975-76 will be in excess of 100 students. In 1972, The University of Texas Graduate School of Biomedical Sciences at San Antonio was established and assumed responsibility for the administration of these programs.

In October, 1974, the Master of Arts and Doctor of Philosophy degrees in physiology were approved for implementation by the Coordinating Board, Texas College and University System.

A combined program can be individually arranged with the Medical and Dental Schools which may allow a medical or dental student to obtain an M.A. or a Ph.D. degree in addition to an M.D. or a D.D.S. degree concurrently.

The University of Texas Board of Regents in 1972 recognized the potential for conjoint development of these health professions in this geographical setting, and to better coordinate those biomedical units for efficiency and effectiveness in academic programs, as well as management and fiscal operation, authorized the establishment of The University of Texas Health Science Center at San Antonio, to be composed of the Dental School, the Graduate School of Biomedical Sciences, the Medical School, and a School of Allied Health Sciences.

In October of 1973, the Coordinating Board, Texas College and University System, approved a program for a Doctor of Pharmacy Program (Pharm.D.) to be administered jointly by The University of Texas Health Science Center at San Antonio and the College of Pharmacy at The University of Texas at Austin. In addition to this program, the Health Science Center also serves as a clinical resource for several of the students in the baccalaureate program of the College of Pharmacy in Austin.

In 1969, the Texas Legislature authorized the implementation of The University of Texas School of Nursing at San Antonio. This institution is administratively associated with the System-wide School of Nursing of The University of Texas, but shares the campus of the Health Science Center.

Construction of a separate building for the School of Nursing was begun near the new Dental School early in 1973. It was completed and occupied in 1974. The building consists of 78,756 square feet on two levels and will accommodate 400 undergraduate and 75 graduate nursing students.

One of the purposes for the reorganization of the institution as a Health Science Center was to provide an educational environment in which students of the various health professions could pursue their formal course work in close professional association. As the future Physician, Dentist, Nurse, Pharmacist, Research Scientist, and various Allied Health Personnel pursue their studies toward their career objectives in this setting, it is expected that they will develop from the beginning a mutual respect for the functional relationship of each other in their common objective—health maintenance.

Accreditation

The University of Texas Health Science Center at San Antonio has been awarded full regional accreditation through the Southern Association of Colleges and Schools.

The dental education program has received full accreditation by the Council on Dental Education of the American Dental Association.

The medical education program has received full accreditation by the Liaison Committee on Medical Education of the Association of American Medical Colleges and the American Medical Association.

Policy

With respect to the admission and education of students, the employment and promotions of teaching and nonteaching personnel, and student and faculty activities conducted on premises owned or occupied by The University neither The University of Texas nor any of its component institutions shall discriminate either in favor of or against any person on account of race, creed, sex, or color.

Release of Transcripts and Academic Records

Transcripts and other information from a student's academic records will be 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. An exception may be made in response to a subpoena or a court order.

STUDENT AND FACULTY SUPPORT ACTIVITIES

The Office of Student Services

The Director of Student Services is generally charged with representing students' needs and providing support service for student development.

This office encompasses the Registrar and Admissions, Coordinator of Curriculum and Academic Programs, Student Financial Aid, the Student Health Center, and Counseling Services. Students are encouraged to seek assistance from the Director and his staff in matters dealing with curricular and extracurricular concern.

The Registrar, in addition to being custodian of all student academic records and responsible for the registration and enrollment of students in the various academic courses, is also the administrator for all student admissions, withdrawals and graduation. Actions of the various admissions committees as well as those of the student promotions committees are implemented through this office in consonance with policies and directives of The University of Texas System and those of The Health Science Center and its Schools.

The Coordinator of Curriculum and Academic Programs develops and publishes catalogues, calendars, and day-to-day academic schedules in concurrence with approved policies determined by various faculty committees and individual School Administration. Coordination between the several academic programs is effected to insure availability of faculty and appropriate laboratory and classroom facilities.

Financial assistance is offered to qualified students through scholarships and loans available for the individual schools. These are supervised by the Scholarship and Loan Committee and provided through the Financial Aid Administrator. Assistance is made only on the basis of demonstrated need. While financial help cannot be guaranteed, every effort will be made to provide the maximum assistance possible to meet demonstrated financial requirements. At the time accepted students indicate they will matriculate, they may request an application for financial aid. All applications should be sent to the Office of Financial Aid. Scholarships, loans and other types of available financial assistance are listed in the financial information section on page

Student Health Services are available at the Student Health Center located in the Bexar County Hospital, and are provided by faculty members of the Department of Family Practice. These services are supported by the Student Activity Fee.

New students are given an initial health assessment and thereafter may use the Health Center for acute illnesses or injuries as well as periodic examinations, family planning information and supplies, problem counseling, follow-up advice on chronic diseases, and the usual care offered in the offices of family physicians. All necessary laboratory, X-ray, and similar tests are provided without charge for students. The student activity fee does not cover health services for student dependents.

The Office of Educational Resources

The Director of Educational Resources coordinates and implements the various services which support the educational functions of The Health Science Center and extends these services to include the support of research activities, administrative requirements and public information.

The Library serves not only as the primary resource and repository of information for the learning, research and health care functions of the Center, but also as a laboratory where students acquire skills of information processing. An active orientation program is an important function of the library staff. The Library collection covers the broad range of all health related sciences — dentistry, medicine, nursing, basic sciences, environmental health, behavioral sciences, and veterinary sciences in over 81,000 volumes as well as subscriptions to over 2,000 periodicals. It serves as one of the eleven resource libraries in the five states of the South Central Regional Medical Library, and has access through a teletypewriter and computer terminals to data bases and literature resources nation wide, including direct access to the National Library of Medicine.

The Library's Learning Resource Center provides individual and small group study carrels for non-book media and study facilities for student use.

Some of these are equipped with television monitors and programs are available from The Health Science Center Demand Access Television System.

Art, photography and printing services provide design and production of teaching materials, graphic presentation of research results, and preparation of materials for publication. Complete service for the production of motion pictures in support of teaching, research, and documentation is available.

Television services provide more than 90 hours per week of demand-access programs requested by students or faculty members and are available in any of nearly 100 individual stations. The video library contains over 400 separate instructional programs on video tapes.

Audiovisual equipment and technical assistance are provided by Classroom Services.

Upon request, The Office of Educational Resources provides assistance in instructional development to include the design, development, and implementation of instructional programs; consultation with faculty and students in identifying instructional needs and problems; aid in the specification of goals and objectives; provision of resources to develop pilot instructional programs and materials; development of instructional programs and materials; development of instructional mechanisms, and instruction materials.

Facilities and services for all types of laboratory instruction required by various disciplines of the health sciences are provided by the Multidiscipline Laboratories. Each laboratory in the Medical School building has a capacity for either 16, 24, or 32 students, and is designed and equipped to provide office and work space for students, for stimulating independent investigation, for promoting correlation between disciplines, for promoting closer interaction between faculty and students, and for saving space and equipment through more efficient use. These services will be greatly expanded upon acquisition of the new Dental School building.

The Office of Continuing Education Service:

The learning process of a professional cannot end with the attrainment of a professional degree, but must be extended continously to keep abreast of new developments in special areas of interest. Such learning is difficult for the unassisted individual because of the enormous body of scientific information. It is the function of the Director of Continuing Education Services to coordinate and support programs designed by the faculty of the Health Science Center to further and facilitate post-graduate professional learning.

A biweekly series of Therapeutic Seminars is presented at The Health Science Center for physicians in the locality and are set up as teleconferences to allow direct participation by physicians over a five-state area.

Approximately 25 post-graduate courses are offered each year. These vary in length from one weekend to afternoon classes extending as long as 10 weeks so that the physician has opportunity for formal training commensurate with individual time available, interests, and requirements.

Preceptorships are also provided. These programs permit a physician to participate in the development and evaluation of an educational experience designed on an individual basis.

A program of continuing dental education is being planned and will be announced as developed.

SCHOOLS OF THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER

Separate catalogues are published for each of the schools of The

University of Texas Health Science Center at San Antonio. Catalogues

and applications may be obtained as follows:

The University of Texas Dental School at San Antonio

The University of Texas Medical School at San Antonio

Catalogues may be obtained by writing to the Office of Student Services,
The University of Texas Health Science Center at San Antonio, 7703
Floyd Curl Drive, San Antonio, Texas 78284.

Applications may be obtained by writing to The University of Texas Medical and Dental Application Center, 800 Brazos, Suite 801, Austin, Texas 78701.

The University of Texas Graduate School of Biomedical Sciences at San Antonio.

Catalogues and applications may be obtained by writing to the Office of the Graduate School of Biomedical Sciences at San Antonio, The University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, Texas 78284.

The University of Texas School of Pharmacy, The Doctor of Pharmacy
Program at San Antonio

This program is briefly described in the Pharmacology section of the catalogue of The University of Texas Graduate School of Biomedical Sciences at San Antonio. A detailed description as well as an application may be obtained by writing to the College of Pharmacy, The University of Texas at Austin, Austin, Texas 78712.

There are many institutions in San Antonio that provide an excellent resource for programs of The Health Science Center. Many members of the staffs of these organizations hold joint appointments in the Dental, Graduate, or Medical Schools and participate in educational and research programs.

These institutions consitute an important resource for the training of students as well as the provision of needed laboratory space for the conduct of research.

A listing of these institutions follows:

Academic institutions

The University of Texas at San Antonio, a major university having both undergraduate and graduate programs, is in the process of being constructed on a 600-acre campus 5 miles north of the Health Science Center. Although facilities are not yet completed, plans for cooperative teaching and research between the two institutions have been initiated.

The University of Texas School of Nursing at San Antonio shares the campus with The University of Texas Health Science Center at San Antonio. It was authorized by the Texas Legislature in 1969 and began admitting students in 1970. Present enrollment includes 300 undergraduate and 59 graduate students.

Hospitals and Clinics

The Bexar County Teaching Hospital, operated by the Bexar County Hospital District, adjoins the Health Science Center and is connected at several levels. It was planned integrally with the Medical School and is a 12-story, 429-bed facility providing all general hospital services. The hospital has approved post-graduate training programs in anesthesiology, surgery, internal medicine, obstetrics-gynecology, ophthalmology,

orthopedic surgery, otorhinolaryngolony, neurosurgery, thoracic surgery, oral surgery, pathology, pediatrics, physical medicine and rehabilitation, psychiatry, radiology, urology, and family practice.

The Robert B. Green Memorial Hospital is also operated by the Bexar County Mospital District. It is also located in urban San Antonio and houses the ambulatory care clinics, a family care clinic, 57 obstetrical beds and 90 newborn bassinets. Its outpatient department includes 55 different clinics which treat more than 129,000 patients each year.

Ground was broken in the South Texas Medical Center on November 20, 1970; for the new Audie L. Murphy Memorial Veteran Hospital. It was completed and became operational in October, 1973 with a planned bed capacity of 760 for medical, surgical and psychiatric patients. It will serve 40 counties of Southwest Texas. The facility provides 40,000 square feet of space for research.

Brooke General Hospital is a major component of Brooke Army Medical

Center. It has a bed capacity of 800 and offers definitive medical and
surgical care for Army, and other authorized personnel. It also provides
outpatient care. Internship and residency training programs are available.

The United States Army Institute of Surgical Research has gained international
renown for its outstanding research and excellence in the treatment of
serious burn cases.

Wilford Hall USAF Medical Center is a component of the Aerospace Medical Division of the Air Force Systems Command. It operates a 1000-bed general hospital that admits approximately 25,000 patients annually and its clinics see nearly 750,000 outpatients each year.

The United States Air Force School of Aerospace Medicine is located at Brooks Air Force Base, Texas. It was originally organized in 1917 and has been continuously active since that time in research and development.

in medical aspects of acrospace flight, in clinical practices of special interest to acrospace, and in post-graduate education in acrospace medicine and allied subjects.

The Santa Rosa Medical Center has a total of 1,050 beds in five units: the General Hospital, Children's Hospital, Otto Koehler Radiation Therapy and Research Unit and the Outpatient Clinic are in downtown San Antonio, while the Villa Rosa Psychiatry and Rehabilitation Center is in the South Texas Medical Center. The Santa Rosa system is moving toward specialized patient care, emphasizing pediatrics, orthopedics, nuclear medicine, neurosurgery and thoracic surgery. Residency training is available in seven specialties on a cooperative basis with the Bexar County Hospital District and The University.

The Baptist Memorial Hospital System operates three hospitals which offer general hospital service with a total capacity of 1,068 beds. Training in orthopedics and ophthalmology is available as a cooperative part of Bexar County Hospital University Residency Programs.

The University of Texas Health Science Center is also affiliated with the <u>San Antonio State Chest Hospital</u>. This is a 406-bed hospital with primary responsibility for the treatment of tuberculosis, employeema and other lung disease cases.

San Antonio Metropolitan Health District, The University of Texas Health Science Center Dental School at San Antonio maintains a working agreement with the San Antonio Metropolitan Health District. The District operates a dental health program which is designed to effect improvements in the dental health of the community by providing clinical facilities for chairside health education, application of preventive treatment procedures, and corrective treatment for indigent children through twelve years of age. These clinical facilities are utilized by the Dental School in its educational program.

The Cancer Therapy and Research Center is located in the South Texas

Medical Center. It provides services for the care of cancer patients

including Linear Accelerators and Electron Beam Therapy as well as the

standard Cobalt Therapy. The Center is developing programs for training

radiation therapy residents with The University.

Other Affiliated Facilities

An affiliation agreement is maintained between The University of Texas

Health Science Center and the Southwest Foundation for Research and

Education. This agreement allows the two institutions to share facilities

and faculties. The Southwest Foundation is a biomedical research

institution which has laboratories in San Antonio and a branch in Kenya,

Africa. Its annual research budget is \$3,000,000. Its staff works

primarily in the fields of cancer, heart, endocrine, and infectious disease

with emphasis upon virology and parasitology. The Foundation has 155,000

square feet of offices and laboratories. A large indoor and outdoor

animal facility houses a primate colony and other animals to support the

biomedical research effort.

An agreement between The Health Science Center and the Southwest Research Institute, Institute allows cooperation in research. The Southwest Research Institute, a nonprofit applied research organization has its headquarters in San Antonio and also has laboratories in Houston and Corpus Christi and an office in Washington, D.C. The staff conducts research and development projects which include a broad spectrum of the biological and physical sciences. Its annual research budget is over \$25,000,000.

The Ecumenical Center for Religion and Health located at the South Texas

Medical Center helps physicians, ministers and related professionals work

together to meet human needs. Activities of the Center are under the direction

of a Board of Trustees representing the major religions of the community.

Training courses and workshops for professionals are held in areas of personal

problem solving and counseling.

THE MEDICAL SCHOOL

The Physician's Oath of Hippocrates

- I do solemnly swear, by whatever I hold most sacred:
- That I will be loyal to the profession of medicine and just and generous to its members;
- That I will lead my life and practice my profession in uprightness and honor;
- That into whatsoever house I shall enter, it shall be for the good of the sick to the utmost of my power, holding myself far aloof from wrong, from corruption, from the tempting of others to vice;
- That I will exercise my profession solely for the cure of my patients, and will give no drug, perform no operation, for a criminal purpose, even if solicited; far less suggest it.
- That whatsoever I shall see or hear of the lives of men which is not fitting to be spoken, I will keep inviolably secret.

 These things do I swear.
- And now, should I be true to this, my oath, may prosperity and good repute be ever mine; the opposite, should I prove myself forsworn.

ADMISSION TO THE MEDICAL SCHOOL

General

The applicant is referred to Medical School Admission Requirements and to Cuariculum Directory which are published by the Association of American Medical Colleges, One Dupont Circle N.W., Suite 200, Washington, D.C. 20036.

Minimum Requirements

To be eligible for consideration for admission, applicants must have at least ninety semester-hour credits. (Applicants from schools utilizing a pass-fail system must have passed all courses. They will be evaluated on the basis of their over-all competitive merit.) At least a "C" average or its equivalent is necessary in each of these required courses:

English: One year of college English.

Biology: Two years as required for science majors; one year must be completed in residence at a university or college and must include formal laboratory experience.

Mathematics: One-half year of college calculus.

Physics: One year as required for science majors.

Chemistry: Two years; one year of general chemistry and one year of organic chemistry as required for science majors including laboratory experience.

Although not required, either courses in conversational Spanish or conversational ability in colloquial Spanish is an advantage in San Antonio.

The Medical College Admission Test (MCAT)

The Medical College Admission Test is required. It is administered twice each year at various testing centers throughout the country. Applicants must make their own arrangements for testing and should plan to be tested during the Spring, 13 months before anticipated matriculation; or at latest in the Fall, 9 months before anticipated matriculation. An MCAT booklet with an application blank giving information about application deadlines, test grades, testing locations, and sample questions is available either from pre-professional advisors or directly from

MCAT REGISTRATION

The American College Testing Program

P.O. Box 414

Towa City, Icwa 52240

Residency

The medical and dental schools of The University of Texas System are authorized to accept as members of their first year classes a limited number of nonresident students whose qualifications would place them among the top third of the entering class. (see page ______).

Application Procedure

The University of Texas System Medical and Dental Application Center, 800 Brazos, Suite 801, Austin, Texas 78701, processes all applications to each medical school in The University of Texas System. Therefore all application forms and any procedural information should be obtained from and submitted to that Center.

Only completed applications submitted to the Center between July 1 and

November 1 of the year preceing anticipated matriculation will be considered.

An application consists of:

A complete and signed official application form;

Photographs (not snapshots) approximately 2 1/2" x 3 3/4" with name on back of each. One copy is retained by the Center and an additional copy must be included for each school to which application is being made;

A non-refundable filing fee which ranges from \$10.00 for one school to \$25.00 for all medical and dental schools of the System;

Official transcripts submitted directly to the Center from each university or college attended. Additional transcripts must be sent at the end of each successive semester as long as an application is being considered. Transcripts showing additional work after acceptance must also be supplied; An evaluation from the applicant's pre-professional advisor or Advisory Committee. Neither additional letters nor letters of recommendation are desired. When no pre-professional advisor exists, reports from two professors, preferably one representing an applicant's science course and one representing a course in the humanities shall suffice; Medical College Admission Test (MCAT) scores must be sent directly to The University of Texas System Medical and Dental Application Center. Any questions relating to procedure or the completeness of an

application should be directed to The University of Texas System Medical and Dental Application Center in Austin. Questions concerning the status of a completed application, however, should be addressed to

The Registrar

Office of Student Services

The University of Texas

Health Science Center at San Antonio

San Antonio, Texas 78284

Applicants should keep both the Medical and Dental Application Center and the individual schools to which application is being made informed of all address changes as long as their applications are being considered. Any candidate withdrawing his application should promptly notify both the Center and the schools concerned.

Acceptance Considerations

Candidates for admission are evaluated not only regarding their academic background and ability to succeed in medical school, but also for integrity, psychological stability, motivation, judgement, and resourcefulness. In the exceedingly competitive process of application, only the most outstanding candidates from the very large group of well-qualified applicants can be admitted to the limited number of spaces available. The Committee on Admissions evaluates each candidate's application to make an assessment of the individual's academic background, performance on the Medical College Admission Test (MCAT), the recommendation of premedical advisor, the person's achievements in areas other than academic and his or her maturity and motivation. The same criteria for evaluation is applied to all candidates, and no distinctions are made in favor of or against any applicant based on race, sex, or creed. Further evaluation of the most promising candidates is made by means of personal interviews, invitations for which are issued by the Committee on Admissions. An atmosphere of openness and frankness is maintained throughout the admissions process, and applicants are appraised of the exact manner in which the ranking of candidates is done.

In order for all qualified applicants to be provided ample opportunity to be studied thoroughly and reviewed individually, The University of

Texas Medical School at San Antonio will announce and submit its acceptances on January 15, February 15 and March 15. Afterwards acceptances will continue until all positions in the class are filled. Candidates whose applications are rejected by the Committee on Admissions with or without personal interviews shall be notified as soon as possible after the committee's action.

An applicant receiving an acceptance of admission will be requested to file a letter of intent to enroll within two weeks of receipt of acceptance. The professional schools of The University of Texas System reserve the right to withdraw offers of acceptance to individuals who hold places in the entering classes of more than one professional school for longer than three weeks without previous justification by the applicant and consent by the schools involved.

Because several of The Medical Schools in Texas begin their academic year in July, rather than September, The Medical Schools in Texas have agreed not to offer acceptances to candidates already enrolled at another medical school in the state after May 1st.

Action Before Matriculation

Selective Service. Deferment for students is granted only by their individual local Selective Service Boards and cannot be requested by the University. In accordance with Selective Service regulations, each student is required to keep his local board informed at all times as to his location and activities. He is also required to request a deferment annually in writing. Upon request, the Registrar will send the Selective Service form 103 to the individual's local board. Students who have difficulty with their Selective Service status should notify the Director of Student Services immediately.

Required Immunization. Certification of immunization for smallpox, tetanus, diphtheria, and poliomyelitis within the last five years is required of all entering students before registration. A certificate form to be completed by a licensed physician will be furnished to applicants granted admission. A military or Public Health Service immunization record is acceptable.

ADVANCED STANDING

Our very low attrition rate, and the flexible nature of our curriculum, makes availability of spaces for advance Transfer admission unpredictable in any given year. When spaces become available applicants with two or more years satisfactorily completed at another medical school will be considered for advance transfer admission into the third year of our regular four year program. In very exceptional circumstances students may be admitted to the second year of our regular four year program, in which case a special academic program will be tailored to the students special needs. Advance transfer applications are not usually considered from graduate students or dental students except for a special program which is available for selected candidates who have the D.D.S. degree and are enrolled in the oral surgery post graduate training program at this institution. In this case, advance transfer students may be accepted by the Admissions Committee with credit given for basic science courses completed during dental training.

Applications for transfer admission will be considered if requirements for admission to the first year of this school have been fulfilled, including satisfactory MCAT scores, and one or more years in another medical school have been satisfactorily completed. Complete transcripts of pre-medical and medical school performances must be submitted along with a statement of honorable dismissal and evaluation from the dean of the last medical school attended. Applicants dismissed or dropped from the rolls of any medical school, whatever the reason, and not eligible for readmission to that school, need not apply for admission to The University of Texas Medical School at San Antonio. Students applying for transfer admission from a foreign medical school or an osteopathic school must, in addition to the foregoing, have successfully passed Part I of the National Board of Medical Examiners (NBME). The University of Texas Madical School at San Antonio does not participate in the coordinated transfer system (COTRANS) sponsored by the Association of American Medical Colleges. The University of Texas Medical School at San Antonio will, however, sponsor applicants to take the NBME either on the June or September administration dates, if their applications are under serious consideration.

Application forms and inquiries concerning advanced standing admission should be obtained from and addressed to the Registrar at The University

of Texas Medical School at San Antonio, not the Medical and Dental Application Center in Austin.

Final decision regarding admission transfers rests with the Committee on $$\operatorname{\mathtt{Admissions}}$$.

DOUBLE DEGREE PROGRAM

The Double Degree Program was designed to allow a medical or dental student to obtain an M.A. or a Ph.D. degree in addition to an M.D. or a D.D.S. at The University of Texas Health Science Center at San Antonio. The scientist who is well trained in the basic health science in which he or she obtains a graduate degree usually has not encountered the opportunity to apply this specialized knowledge to clinical medicine or dentistry. The physician and dentist on the other hand often become aware of clinical problems which might easily have their solution in a basic science discipline. In short, there may be a communications gap between these types of scientists. It is advantageous to have a number of individuals who have depth of knowledge in both basic science and clinical medicine or dentistry in order to bridge this gap. The development of a mechanism at The University of Texas Health Science Center at San Antonio for students to be trained in two areas is an effort to provide the biomedical community with such individuals. The program is based on the premise that any student desirous of obtaining both an M.D. or a D.D.S. and a graduate M.A. or Ph.D. degree while a student at The University of Texas Health Science Center at San Antonio would plan to meet the full requirements defined for both degrees. Accreditation of the Medical School and its programs is achieved through the Liaison Committee of the American Medical Association and the Association of American Medical Colleges. Any medical student in such a combined degree program must meet all requirements established by the Medical School which have been approved by this Liaison Committee. Accreditation of the Dental School and its programs is achieved by meeting all of the requirem<mark>ents of the Council on Dental Educatio</mark>n of the American Dental Association. Any dental student in such a combined degree program must meet all requirements established by the Dental School which have been approved by the Council on Dental Education of the American Dental Association. Approval of the Graduate Programs is obtained through the Coordinating Board, Texas College and University System. All students in a double degree program must for either the M.A. or Ph.D. degree meet the full requirements for these programs as

approved by the Coordinating Board.

Each student must satisfy the entrance requirements of both the Medical School or Dental School and the Graduate School of Biomedical Sciences, and approval for admission shall be accomplished separately. Admission to the Medical School or Dental School in no way guarantees admission to the Graduate School, nor does admission to the Graduate School guarantee admission to the Medical or Dental Schools. Students need not register their intent of securing both an M.D. or D.D.S. and an M.A. or Ph.D. at the time of admission to either medical, dental or graduate programs. At any time, a student in the Medical or Dental School may make the decision to pursue a course of study for a graduate degree and may apply for admission to one of the graduate programs. The same principle applies to the student who originally enters the Graduate School. A student may withdraw from either school without in any way jeopardizing the pursuit of a degree in the other.

The total time added to the typical medical or dental school curriculum is generally a year for the M.A. degree or three years for the Ph.D. degree. Utilization of summer work and elective periods in the medical or dental curriculum contributes to economy in total time span. The specific details as to the logistics of pursuing a graduate program while registered in the Medical or Dental Schools will depend on the specific graduate program undertaken, and in every instance should be worked out between the student and the appropriate Committee on Graduate Studies with final approval by the Graduate Executive Committee.

For additional information, consult the Associate Dean for Student

Affairs of the Medical School, the Associate Dean of the Dental School or

the Associate Dean of the Graduate School of Biomedical Sciences.

REQUIREMENTS AND REGULATIONS

Absence, Withdrawal and Readmission

Short leaves of absence may be granted in case of illness or personal emergency with the understanding that the student arranges with the faculty for making up all work which is missed. Absence for any cause shall, however, be reported to the registrar.

Students taking leave from the medical school without notice or failing to report to the registrar after leave of absence automatically terminate their enrollment at the medical school.

within the specified dates will be considered to have terminated their connection with the medical school unless permission to register and pay tuition at a later date has been expressly granted by the registrar. If requested by a student, leave of absence for an extended period of time may be granted by the Associate Dean for Student Affairs, if such absence is considered to be in the best interests of the student. To reach this decision, the Associate Dean will often rely not only on the student's expressed wishes, but also on the opinion of his or her faculty advisor, Faculty promotions committees, or other individuals familiar with the circumstances of the case. Generally, extended leave of absence will not be granted to any student prior to the completion of at least one year of medical school, and while the exact length of the leave of absence will vary in each case, it shall under no circumstances exceed one year.

Students withdrawing from medical school with academic deficiences at the time of withdrawal will have withdrawn failing (WF). In all cases not specifically covered above, re-admission to medical school will be subject to action by the Committee on Admissions.

All matriculants must clearly understand that the faculty of the medical school has the authority to dismiss any student from the rolls of the school, or to refuse re-admission at any time before graduation if circumstances of a legal, moral, health, social, or academic nature justify such action. Although any student dismissed from school may formally apply for re-admission, each student will be subject to the

action of the Committee on Admissions.

Faculty Advisors

Initially, a faculty advisor from a basic science department will be assigned to each incoming first-year medical student by the Office of Student Services. At any point thereafter, but not later than the beginning date for formal application for senior-year electives, each student will be expected to select an advisor from the clinical department which represents his or her anticipated career goals. The student way choose to continue as advisee with the preclinical advisor in addition to the clinical advisor.

Student Debts

The University of Texas Medical School at San Antonio is not responsible for debts contracted by individual students or by student organizations. On the other hand the University expects all students and student organizations to conduct themselves honorably in all commercial transactions. The medical school will not assume the role of a collection agency for organizations, firms, and persons to whom students may owe bills, nor will the University adjudicate disputes between students and creditors over the existence or amount of debts. A student, however, is expected to discharge his or her contractual obligations. In the event of conduct on the part of a student clearly demonstrating flagrant disregard of commercial obligations (refusal to pay or meet admitted debts or obligations will be thus construed), action will be taken appropriate to the age of the student. In event of nonpayment to the medical school one or more actions may be taken: (1) barring re-admission of the student, (2) withholding the student's grades and official transcript, and (3) withholding a degree to which the student would otherwise be entitled.

GRADES, PROMOTIONS & GRADUATION

The medical school faculty is responsible for determining a student's fitness to be a doctor of medicine. Committees on promotion for the preclinical and clinical segments of the curriculum assess the achievements and progress of each student, and make recommendations for promotion, graduation, academic warning, probation, dismissal, or implementation of special academic programs. These recommendations are submitted to the Association Dean for Student Affairs for action by himself or by the Dean.

To be eligible for promotion to the clinical segment, a student must complete and pass each course in the preclinical curriculum. The faculty's evaluation of written, oral, and practical examinations provides objective information for determining a student's level of knowledge, skill and competence. Also considered in the evaluation of a student are certain personal qualities that are essential in a physician. Among these are integrity, motiviation, initiative, professional attitude, and ability to perform under stress.

All final grades are reported to the registrar as pass (P), fail (F); or honors (H). The latter can be given to no more than ten percent of the students in any given course. Progress grades in courses extending beyond one term are reported as satisfactory (S) or unsatisfactory (U). A grade of incomplete (I) is given when the student has been authorized to delay completion of a course.

Pass-fail grading is utilized to decrease the potentially harmful competition for grades alone and to create instead attitudes conducive to greater intellectual curiosity and individual scholarship. Therefore

pass-fail implies neither lowered nor impaired standards of academic performance. Numerical grades are kept by the faculty and by the Associate Dean for Student Affairs. They are used for curricular evaluation, and are released on request to promotions committees. scholarship and loans committees, students' advisors, or the student who wishes to have detailed information about his or her own rate of progress. Numerical grades are not published, and they do not become a part of the students' permanent academic record. A student failing one or more courses may be placed on academic probation. Also any student failing to exhibit the above-mentioned personal qualities may be placed on probation. To be removed from probation a student must remove all deficiencies. Failure to do so may result in dismissal from the school. The Promotions Committees may also recommend dismissal of a student if he or she accumulates a large number of academic deficits in any given year. In such circumstances it is not necessary for the student to have been placed on probation prior to dismissal,

Any student placed on probation, or recommended for dismissal, shall have opportunity to appear before the promotions committee or delegated committee member(s), in counsel with his or her faculty advisor, to present any extenuating circumstances relative to academic or personal status. Any student dismissed from the school by the dean upon the recommendation of a promotion committee shall have right of appeal to the Faculty Council. Such appeal must be a written petition filed with the dean within two weeks of notification of dismissal.

Each clinical department maintains a narrative record of each student's performance and nominates no more than ten percent of each class for honors designation. Records supporting these nominations are retained by each department until requested by the associate dean or the dean for use in preparation of evaluative letters for internships, residencies and fellowships, and for use at graduation exercises or for Alpha Omega Alpha selection.

The degree of Doctor of Medicine is awarded by the Board of Regents upon the satisfactory completion of the prescribed curriculum, recommendation of the Faculty

85-127

of Medicine to the Dean, and certification by the Dean to the President.

Candidates must (1) be at least 18 years of age at the time the degree is awarded; (2) present evidence of good moral character; (3) offer evidence of having satisfactorily fulfilled all academic requirements of the medical curriculum; and (4) comply with all necessary legal and financial requirements.

CURRICULUM

The education of a physician is a lifelong process of which medical school is only one of the components. A medical curriculum is designed to provide a core of scientific knowledge and technical skills which will enable the student to go on to the necessary postgraduate training which will ultimately enable a doctor to take care of patients. In addition to specific knowledge, the school offers an environment in which well-qualified students may acquire the habits of study, sound attitudes and sense of responsibility for patients that characterize the true physician.

Inherent in the design of the curriculum is the recognition of the fact that medical students come from very varied backgrounds, and have the ability to progress at different rates. The core material has been arranged in such manner that students may complete the requirements for the M.D. degree in either three or four years, with ample opportunity for individualized studies to suit each student's particular needs and preferences.* Also inherent in the curriculum is the flexibility for change, which is so necessary to remain current in the ever changing field of medicine.

The medical curriculum is divided in preclinical and clinical segments. The preclinical segment includes the traditional basic sciences as well as a modular interdisciplinary study of the normal physiology, pathophysiology, clinical medicine and pharmacology of each of the major organ systems in the body. This segment of the curriculum, which also covers the behavioral sciences, is scheduled in a manner that allows completion in either sixteen or twenty-eight months. In the latter option a long summer vacation is scheduled, and during most of the academic year there is ample time for the pursuit of individually chosen educational activities to complement the required courses. The clinical part of the curriculum consists of one year of assignments to the various major clinical services, followed by seven months of

full-time electives.

As a means of curricular evaluation, examinations of the National Board of Medical Examiners are required to be taken by all students of The University of Texas Medical School at San Antonio. Part I is administered in September immediately preceding the students' first Clinical Period, and Part II is given in April immediately prior to commencement. Students who wish to do so may take these examinations as candidates at a reduced cost to themselves. Students may also obtain retroactive credit for these examinations at the normal cost.

Qualifying Examinations. A student may be exempted from participation in one or more preclinical curricular subjects if he or she is able to demonstrate proficiency on pre-course qualifying examinations. These examinations are offered at the discretion of the concerned departmental chairmen soon after first-year registration. In lieu of the ordinarily required subject(s), an exempted student may pursue independent study of his or her choice provided that it is approved by the faculty advisor and is taken within this institution. Accepted applicants are notified by mail as early as possible what qualifying examinations will be available to them and the general scope of each examination. In July 1974, qualifying examinations were offered in Biomedical Statistics, Callular and Molecular Biology, and Neurosciences.

*The continuation of the three year curriculum is under study and review by the Medical School Faculty Council and may not be available to students admitted for the 1975-76 academic year.

MEDICAL CURRICULUM FOR STUDENTS MATRICULATING IN JUNE, 1974

10.03 4.01 (N.F.4.2)	SEW E 1994 Ship for 1, 1994 IS minds POLL form fined DEBES ANALYGEY CELL DLEAR AND MOLECULA MICHOGOGY CELLULAR PHYSICL GOV LAMBERGEIN, GEV MICHOGOGY MICHOGOGY PRYCHOGOGY PRYCHOGOGY PRYCHOGOGY DIMENSIPAS OF HEALTH CARE TOTAL MOUNT	26.6	AM. 6, 1977, has bed. 0, 1917, 19 weeks 7,37 fever and 19 person of 19	extract of STADOC RIP. SS TADOC RIP	ME LAR LAR PROPERTY CONTROL LA	N. 25, 1465 bit Shir 17, 1704 ab 9 17 metrosce BLOVASCULAN NEW WOOD WITHOUT WITHOUT BUTTONIA 1914 N. HOUSES	Story 14, 1035
Sirving Child Sirving		MIARMACDEOGY (MVo) EMERGENCY CARE	27 may in A 15 dear date in Strain Option Conv Strain Option Conv Strain Conv Strain Conv Plant as ellegt Christi Mericine 10 TAL Arthirs	4 (55) 7 (64) 14 (65) 14 (65) 14 (65) 14 (65) 14 (65) 15 (65)	NESSTANDE FOLIA	Hope Temperatures AL Temperatures Temperatur	### ##################################
NA 20 10 10 10 10 10 10 10 10 10 10 10 10 10	PRTHOSPYSIOLOGY 07 Two: two Distant 22 EMPLRION COMP. 22 EF BIOTRATISTICS 18 BI SUMMERTY 27 CLINICAL MICROSPIE C DOMONING 32	CONTROL OF	2 webstrace out	Twest full that "Bryllisto Clinical Exercises	Pseekyfoit filds througheto chinical Pseekingson	FACOUNTO CLINICAL EXPERENCE	
**************************************	7 August 1922 1929 Theodread Celhicat Laperhence	PRODURED CLIMEAL EXPERIENCE	Jews First Char.	Carrier Control	Paceta FULL THATE ELECTIVE	Jugglafion YiMe	
		REL YLARS IREE YLARS		"Each Heiden et reguered (a comple (genera), Medicine (special), Obstel christied in steen different frumen	trics and Gynerology, Surgery, The	upentacs in Each of the major conics Surple of Specialties, Pedights and P	

COURSE DESCRIPTION

Required Courses

Cell and Molecular Biology 144 hours Department of Biochemistry
The fundamental aspects of biochemistry are presented as they apply
to medicine. The topics considered include pH and dissociation,
protein structure, the properties of enzymes, biological oxidation and
bioenergetics, the expression of genetic information and the mechanism
of protein synthesis, the chemistry and metabolism of carbohydrates,
lipids and nitrogen containing compounds. Emphasis is given to
biochemical mechanisms relevant to medicine.

The course is taught by the Keller Method. Course work is divided into sequential units of content. The student must demonstrate mastery of each unit by passing an essay test before moving on to the next unit. Since the course is self-paced, there are no lectures in the usual sense. Instead a study guide is provided. During scheduled hours faculty and student proctors are available for tutoring, discussion, and test grading. Because of the self-pacing feature of the course those with an extensive knowledge of biochemistry may progress quickly, often finishing early, while those being introduced to biochemistry may move at a pace appropriate to their needs. Tutoring is available on an individual basis whenever needed. Students who finish early may devote themselves either to their other studies or to a greater knowledge in some area related to biochemistry.

Human Embryology 24 hours Department of Anatomy
The goal of this course is to give the student the necessary knowledge
of normal human development to understand the mechanisms of congenital
malformations. The course consists of 24 hours of lectures covering the
early development of the embryo, its implantation in the uterus and the
development of the various systems of the body. Malformations are
discussed by clinical specialists and, as much as possible, clinical
cases are presented as examples.

Gross Anatomy 164 hours Department of Anatomy

The entire human body is surveyed by groups of four students dissecting

The entire human body is surveyed by groups of four students dissecting a cadaver under supervision of the Anatomy staff. Prosections, demonstration specimens, models, diagrams and X-rays supplement and amplify each dissection for clarification. Clinical staff participate in their special interests to correlate the anatomy of the body with practical aspects of significance to the physician. A film of each dissection is shown and copies of these and other learning aids are available to students for study at their convenience. Lectures and conferences are used to develop concepts and direct learning effort in the most expeditious manner.

Microscopic Anatomy 110 hours Department of Anatomy Current concepts in cell biology and human histology are covered by means of a series of lectures and laboratory sessions. Basic information on the structure and function of cells and tissues is presented in the lectures; this is followed by staff-supervised laboratory sessions emphasizing the recognition of cells and the fundamental tissues. Each student is provided with a box of microscopic slides of human tissues. The laboratory sessions are accompanied by microscopic slide demonstrations and/or television tapes of tissues under study. Supplemental study material, such as films, television tapes, and transparent photomicrographs, are available upon request through the Audio-Visual Department and the Learning Resources Center. The general purpose of this course is to acquaint the student with basic cytology and histology of normal human tissues thereby providing a firm foundation of knowledge for the understanding of normal and disease processes.

<u>Cellular Physiology</u> 48 hours Department of Physiology

Students are introduced to the application of physical and chemical principles to biological systems. Emphasis is given to the role of the cell membrane and specializations of the membrane in regulating and coordinating cellular activity. Topics covered include thermodynamics

HS-133

in biological systems, osmotic behavior of cells, development of the membrane potential, mechanisms of solute transport, and nerve and muscle activity. Particular emphasis is given to specializations of the cell membrane and morphology which occur in the organization of epithelial tissue, and smooth and cardiac muscle.

Lectures are integrated with group conferences, problem solving sessions and demonstrations to permit interested students to pursue a greater depth of knowledge in cellular physiology.

Psychosocial Dimensions of Health Care 86 hours Department of Psychiatry The course deals with the role of sociocultural, psychological, and economic factors in the various aspects of health care -- clinical, preventive, and public medicine. The instruction covers human growth and development over the life cycle, with attention to stage-specific and adaptive tasks and problems. The doctor-patient relationship is examined as a fundamental element of the treatment process. Students undertake individual and family interviews to gain skill and knowledge of medically relevant sociocultural and psychological materials. Approximately one-half the time is spent in the classroom covering the basic substantive and conceptual content, including those of public health and preventive medicine. The latter half is devoted to clinical-like assignments at various health agencies, where students are assigned to work with families. In addition to the Department of Psychiatry faculty, which includes psychiatrists, psychologists, sociologists, and anthropologists, members of the departments of family medicine, pediatrics, and physical medicine participate in the course.

Microbiology 102 hours Department of Microbiology

The medical microbiology course is designed to provide a foundation in pathogenic microbiology, and to prepare the medical student for subsequent programs in the pathophysiology, epidemiology, and prevention of infectious diseases, as well as for the introductory course in infectious diseases leading to the clinical clerkship. The scope of the course includes an introduction to the biology of microorganisms; the

concepts of host-parasite interrelationships for pathogenic bacteria, viruses, fungi, rickettsiae, chlamydia, protozoa, and helminths; and the fundamentals of immunology, as related to infectious diseases.

Laboratory sessions are an integral part of the course and provide an understanding of the principles of diagnostic microbiology. The medical student is provided an opportunity to develop proficiency in the basic technical skills required of clinical clerks, house officers, and physicians treating patients with infectious diseases. Additional clinical microbiology topics are integrated into the pathophysiology program which is taught throughout the first and second years.

The course is taught by full-time members of the Department of Microbiology with the assistance of jointly appointed faculty from the departments of Pathology, Padiatrics, and Medicine.

69 hours General Pathology Department of Pathology Principles of disease processes are emphasized during this discrete course. Systemic pathology (the specific diseases of each organ system) is taught by the department as a part of the integrated "organ system" modules which comprise the latter part of the first and most of the second years. Instruction in Pathology includes lectures, videotapes, collections of Kodachromes, audiotape lecture series, audiovisuals (35 mm Kodachrome and audio cassette), microscopic slide projection and individual student laboratory work. Each student has a set of microscopic slides and has access to color slides of gross lesions. Small groups of students are assigned cases to study and prepare for student presentation to their group. Individualized discussion is guided by a faculty advisor for each group. These discussions include Pathologic Anatomy, Pathogenesis, Etiology and appropriate Clinical Pathology pertinent to the case discussion. As a complement to the pathology course, attendance at autopsies and demonstration of recent autopsy and surgical specimens are available to students at all times.

Physical Diagnosis 44 hours Department of Medicine

The fundamentals of history-taking and physical examination are

HS-135

taught, with emphasis on the normal findings in the healthy person.

The course includes lectures, demonstrations, practical exercises and patient examinations under the close supervision of instructors. At the completion of the course, each student should know how to take a history, perform a physical examination, write it up or present it in an orderly, complete, intelligent fashion. All of the clinical departments of the school participate in the teaching.

Principles of Pharmacology I 12 hours

Department of Pharmacology

The major purposes of Principles of Pharmacology I are to both serve as an introduction to the general pharmacological principles which will be important in the study of therapeutics and as an introduction to the problems of the use of drugs in society. This course includes lectures on general pharmacological principles, factors which influence effective use of drugs, biotransformation, the pharmacology of drugs which are abused in society, the treatment of opiate and alcohol dependence and drug identification. The teaching is done by members of the pharmacology department including both Ph.D.s and M.D.s and members of some clinical departments.

Medical Instrumentation 24 hours Department of Bioengineering

Instruction in the basic principles of instrumentation is organized in
the context of the physiological systems in which the instrumentation is
used. Bioelectric potentials are traced from the cellular level.

Instruments commonly used in observing the cardiovascular, respiratory
and nervous systems are described, as well as the instrumentation for
the study of behavior.

Biotelemetry, intensive-care monitoring, and electrical safety are covered as additional topics, and the role of computers in medical instrumentation is dealt with briefly.

Conducted by the Department of Bioengineering with the assistance of guest lecturers from the various medical specialities, this course consists of discrete textbook assignments, lectures and demonstrations.

Ionizing Radiation 12 hours Department of Bioengineering
The object of this short course, is to familiarize the medical student
with the fundamentals of ionizing radiation. This subject is becoming
of great importance to general practitioners, as well as to specialists
in radiology and nuclear medicine, as a result of the widespread use of
nuclear energy. The rapidly developing field of nuclear medicine, and
the extensive use of X-ray generators and particle accelerators for
diagnostic and therapeutic purposes, necessitates that the medical
student should have a firm knowledge of the basics of ionizing radiation:
sources, properties, interactions, biological effects, and the current
safety regulations and maximum permissible doses.

The course will consist of lectures and classroom demonstrations.

Members of the Department of Radiology also participate in correlation lectures covering the areas of radiology, nuclear medicine and biological effects of radiation.

Endocrinology

77 hours

Interdisciplinary

Physiology

20 hours

Pathophysiology

46 hours

Pharmacology

8 hours

Clinical Medicine

3 hours

The normal physiology, pathophysiology, clinical medicine and pharmacology of the endocrine system are covered in a multidisciplinary approach. In addition to the study of each endocrine gland, the course covers anomalies of sexual differentiation and diseases of the breast.

Lectures, laboratory exercises, movies, patient presentations and review sessions are presented or conducted by faculty members from the Departments of Physiology, Biochemistry, Pathology, Medicine, Pediatrics, Surgery and Pharmacology.

Cardiovascular

153 hours

Interdisciplinary

Physiology

24 hours

Pathophysiology

66 hours

Pharmacology

9 hours

HS-137

Clinical Medicine

36 hours

The cardiovascular system is studied by means of presentation of disease entities, such as coronary artery disease, valvular disease, etc., in such a manner that the physiology, pathophysiology, clinical findings, and pharmacology related to each disease entity are presented. The objectives of the course are to present the students with a strong background in physiology of the cardiovascular system and then relate this to the pathology and clinical findings of cardiovascular disease. The course is organized and presented by members of the Departments of Medicine, Pathology, Pharmacology, Physiology, Pediatrics, and Surgery. Sound equipment and actual patients are used extensively to teach the clinical skills necessary to recognize cardiovascular diseases.

Pulmonary 105 hours Interdisciplinary

Physiology

24 hours

Pathophysiology

49 hours

Pharmacology

8 hours

Clinical Medicine 24 hours

The physiology and pathophysiology of the pulmonary system is covered in an integrated manner by means of lectures and laboratory sessions, which are also coordinated with pertinent presentations of pharmacology and with clinical medicine sessions. Topics covered include the infectious, traumatic, degenerative and neoplastic diseases of the upper and lower respiratory tracts, the lungs and the mediastinum. The teaching faculty represent a broad cross-section of scientific disciplines and school's departments, among them the Departments of Medicine, Pathology, Radiology, Physiology, Surgery, Pediatrics, Pharmacology, Microbiology and Anesthesia.

Muscoloskeletal

68 hours

Interdisciplinary

Pathophysiology

54 hours

Clinical Medicine

14 hours

A review of the structure and development of the bones, joints, and connective tissues is followed by a study of the pathophysiology of the ${
m HS-138}$

congenital developmental, metabolic, inflammatory, neoplastic, and traumatic conditions which affect the musculoskeletal system. Emphasis is placed on the pathogenesis of these disorders utilizing current developments in related areas such as immunology, blochemistry, and genetics. Much of the subject matter is presented by the faculty in the form of panel discussions and clinical correlation conferences utilizing patient presentations in addition to the more traditional lecture presentations. Muscle disorders are presented in a symposium, again using the multidisciplinary approach with patient presentations. The physical examination of the musculoskeletal system is also included. The course is presented by members of the Departments of Medicine (Division of Rheumatology), Surgery (Division of Orthopaedics), Pathology, and Physical Medicine & Rehabilitation.

Principles of Pharmacology II 12 hours Department of Pharmacology

An introduction to several aspects of pharmacology is necessary to prepare the student for an understanding of the drugs used in the treatment of various pathophysiological abnormalities. This is a 12 hours course which serves that purpose, and includes topics such as structures and function of autonomic nervous system, synaptic pharmacology, cholinergic drug action, adrenergic drug action, drug metabolism and an introduction to chemotherapy. The course is taught by

members of the Department of Pharmacology.

24 hours Emergency Medical Care Interdisciplinary Medical students are frequently called to treat an emergency by relatives, friends, and neighbors because the student is thought of as "a doctor". In this practical course emphasis is placed on the pre-hospital care of the sick and injured patient; that is, the clearing and maintenance of an adequate airway, control of hemorrhage and shock, fracture splinting, and the emergency care and bandaging of wounds. During approximately one-half of the course, advance-trained Emergency Medical Technicians teach the necessary practical skills. These skills include cardiopulmonary resuscitation, splinting, bandaging, and extrication. A standard textbook on emergency medical care is utilized to insure that all medical and surgical emergencies will be covered. Students are taught by representatives from essentially all of the clinical disciplines of the medical school.

Neurobiology 178 hours Interdisciplinary

Neuroscience 90 hours

Pathophysiology 54 hours

Pharmacology 14 hours

Clinical Medicine 20 hours

Neurobiology introduces the study of the nervous system using a multidisciplinary approach. The course is presented by four task forces, each of which has representation from basic science and clinical departments. In this way, correlations between fundamental principles and their clinical application are demonstrated in an easy and natural way. Neuroscience: This segment of the course considers the anatomy and physiology of the nervous system, introducing clinical discussions and patient demonstrations to highlight basic principles. Beginning with a consideration of fundamental cellular mechanisms, the student is introduced to successive levels of complexity of nervous functions. Basic anatomic concepts are developed in the laboratory, using microscopic and gross specimens. Demonstrations and audio-visual

teaching techniques are widely used. Neurorhysiology and functional anatomy are emphasized in lectures and clinical presentations. It is jointly presented by the departments of Anatomy, Physiology, Pharmacology, and Medicine (Division of Neuroscience) with the assistance of the departments of Surgery and Pediatrics. Neuropathophysiology: The principle emphasis of this portion of the neurobiology course is on the mechanisms and characteristics of disease processes affecting the nervous system. Principally taught by the departments of Pathology, Medicine, (Division of Neurosciences), Surgery and Pediatrics, the subject matter is closely integrated with concurrent topics in Neuroscience. Clinical presentations are an important feature of these studies, as are laboratory exercises utilizing gross and microscopic specimens. A continuing theme in lecture presentations is the response of the nervous system to disease processes. Neuropharmacology: In a series of lectures, the student is introduced to classes of pharmacological agents which act on the nervous system. Presentations are made to coincide with topics under consideration in other segments in the neurobiology course. In this way, the student gains information on the action of drugs on the nervous system, as well as further insight into basic neural processes. This segment is presented by the department of Pharmacology. Principles of neurologic diagnosis: Using student and patient demonstrations, this segment considers fundamental techniques used in the examination of the normal and abnormal human nervous system. Emphasis is placed on applications of basic principles of the structure and function of the nervous system as developed in the other sections of the neurobiology course. This section is jointly taught by the departments of Medicine (Division of

Gastroenterology

124 hours

Interdisciplinary

Physiology

20 hours

Pathophysiology

61 hours

Pharmacology

9 hours

Clinical Medicine 22 hours

Neurosciences), Pediatrics and Surgery (Division of Neurosurgery).

The major areas of the gastrointestinal tract studied include the mouth, esophagus, stomach, small and large intestine as well as the liver, gall bladder and pancraas. The normal physiological functions of each organ or part are presented first. This is immediately followed by the pathophysiology of disease processes and specific diseases. Clinical symptoms, signs and also more specialized diagnostic procedures and the pharmacology of the more common medications are presented by demonstrations, lantern slides and T.V. tapes. As the course proceeds, normal and pathologic physiology are integrated not only in lectures but also by means of clinical conferences, logic sessions and seminars. Thus for example the lectures on the digestion and absorption of food in the normal small intestine are followed by lectures on the various types of malabsorption, slide projections of related x-rays and pathological material. This is followed by a clinical conference using an actual case history of malabsorption.

The teaching force is primarily drawn from faculty members of the Departments of Physiology, Medicine, Surgery, Pathology and Pharmacology. The Departments of Microbiology, Psychiatry and Biochemistry also participate to a lesser extent.

Sophomore Psychiatry 70 hours Department of Psychiatry Acquisition of psychiatric knowledge, skills, and attitudes that are applicable to the general practice of medicine is the primary goal of this course in dynamic and descriptive psychiatry. Classroom work involves a study of basic concepts, the psychopathological entities, psychiatric interviewing, organization of a clinical report, and the

application of psychotherapeutic principles in the care of all patients. In addition to the presentation of clinical material in the classroom, each student has eight periods of small group clinical teaching with two faculty members wherein a variety of patients are studied psychiatrically.

Renal

97 hours

Interdisciplinary

Physiology

20 hours

Pathophysiology

66 hours

Pharmacology

7 hours

Clinical Medicine 4 hours

The objectives of the course include (1) to provide an integrated presentation of kidney and lower urinary tract function in health and disease (renal physiology and pathophysiology), (2) to cover in depth water and electrolyte metabolism in health and disease (renal physiology, pathophysiology and pharmacology), (3) to explore current concepts in the pathogenesis of renal and lower urinary tract disease (pathophysiology), (4) to discuss general concepts of treatment of patients with fluid and electrolyte disorders, and with congenital or acquired renal parenchymal and lower urinary tract disease, including use of dialysis and renal transplantation (pathophysiology), (5) to explore the rationale, consequences, dangers, and the like associated with use of pharmacologic agents which exert their therapeutic effect on the kidney and/or lower urinary tract as well as with use of pharmacologic agents which are employed to treat non-renal or urinary tract problems, but which are excreted via the kidney (renal pharmacology), and (6) to demonstrate evaluation of the history, physical examination, and laboratory findings in patients with renal and lower urinary tract problems (renal clinical medicine). Lectures and laboratory sessions are conducted by faculty from the

Lectures and laboratory sessions are conducted by faculty from the Departments of Biochemistry, Physiology, Pharmacology, Pathology, Microbiology, Internal Medicine, Surgery, Psychiatry, and Pediatrics.

Reproductive Physiology and

90 hours

Interdisciplinary

Pathophysiology

Physiology

10 hours

Pathophysiology

70 hours

Pharmacology

7 hours

Clinical Medicine

3 hours

A six-week course in sexual and reproductive physiology and pathophysiology presents information in lecture and syllabus form which will serve as a preparatory data base for the student's clinical experience. Developmental, endocrine, infectious and neoplastic diseases as well as the relevant physiology and biochemistry comprise two-thirds of the information presented. The remaining one-third is concerned with normal obstetrics and the diseases coexistent with or peculiar to pregnancy.

Instruction is provided by the Departments of Obstetrics and Gynecology, Pathology, Pharmacology, and Urology.

Infectious Diseases

22 hours

Interdisciplinary

This intensive course is designed to bridge the relevant preclinical sciences and the infectious disease aspects of clinical practice. Lectures and small group tutorials consider such topics as mechanisms of fever, host response to infection, modification of host immunity, antibiotics and development of resistance, as well as clinical management of common infectious disease problems. The course is presented by the full-time and visiting faculty of the Departments of Medicine, Microbiology, Pediatrics, Pathology, and Surgery.

Clinical Epidemiology,

60 hours

Interdisciplinary

Preventive Medicine & Public Health

An intensive introduction to the concepts and methods of epidemiology is provided as the basis of preventive medicine.

Fundamental concepts, including incidence, prevalence, attack rates, types of epidemiological studies, and host-agent-environment relationships, are presented initially. This is followed by a series of

discussions of epidemiology and prevention of representative diseases—acute infectious diseases, chronic diseases, accidents, nutritional disorders, and metabolic disturbances. Classic studies from medical literature, such as Snow on Cholera, are presented because of their value in illustrating basic epidemiologic principles. The primary objective is that the student develop skills in the critical interpretation of data regarding disease frequency, conditions causing or contributing to disease incidence, and effectiveness of therapeutic or preventive regimens. In addition, seminars on broad public health topics of contemporary importance are conducted throughout the course by guest lecturers from the school and from other local institutions.

Surgical Pathophysiology 49 hours Department of Surgery

Laboratory

In the surgical laboratory, working on the experimental animal, the student is introduced to sterile technique, the use of instruments, the performance of resuscitation, the performance of minor procedures such as cut downs and tracheostomy, and the preparation and study of a number of models of disease which exemplify some of the principles of surgical disease. Among them are hemorrhagic shock, endotoxin shock, strangulated bowel obstruction, closed loop obstruction, pancreatitis, cholecystitis, duodenal ulcer, tension pneumothorax, open pneumothorax, cardiac tamponade and coronary occlusion. Also included is the appropriate use of monitoring equipment carried out under general anesthesia. The roles of surgeon, anesthesiologist, scrub nurse, and monitoring technician are rotated among the students. Supervision is provided by faculty members from the Department of Surgery.

Medical Biostatistics 25 hours Department of Bioengineering Since medical and allied health professionals are producers as well as users of scientific data, it is appropriate that their training include adequate experience in experimental design, data analysis, and hypothesis testing.

A self-paced course designed for this purpose consists of 25 sequential sections covering both parametric and non-parametric approaches to sampling, central tendency, variability, correlation, regression, analysis of variance, bicassay and probit analysis, Chi-square, and other topics.

Some practice in computation is included, although major emphasis is placed upon post-computation analysis. Audiotape study aids are available.

Growth and Development 22 hours Department of Pediatrics

Instruction is provided in the basic elements of meonatal and infant nutrition, the parameters for assessing growth and development in infancy and early childhood as within normal limits or aberrant are studied and the student is introduced to the newly born infant. In meonates, special emphasis is placed on the physiologic adaptations necessary for independant existence. The etiology and pathogenesis of problems in meonates, some singular to this age group, are presented.

Hematology 58 hours Interdisciplinary The student is introduced to the normal structure and function of the cellular elements of the blood, the blood forming organs, and the hemostatic mechanisms and then to diseases involving these systems. The course time is divided among approximately 14 hours of lecture, 33 hours of laboratory work, 9 hours of small group case problem solving sessions, and a 2-hour exam. The major laboratory effort is the study of blood cell morphology from a collection of blood smears made from patients in our clinics. Each student is loaned a complete slide collection and accompanying syllabus which provides information about the patient's illness and a description of the blood smear. Other laboratory exercises such as those involving immunohematology and blood coagulation are presented as clinical problems with unknown blood samples provided.

In the six 90-minute case problem discussions, six to ten students meet with an instructor to discuss a detailed, written patient problem which

raises questions relevant to current lecture and laboratory material.

The Faculty represents several departments with large input from the

Departments of Medicine, Pediatrics and Pathology.

Introduction to Clinical 90 hours Department of Medicine

Medicine

Throughout the preclinical curriculum, a total of 228 hours are devoted to Clinical Medicine, with the objective of introducing the student to the patient with disease, and serving as a bridge between basic science and the bedside. Given longitudinally throughout the preclinical courses, each clinical medicine segment is correlated and integrated vertically with the multidisciplinary system oriented courses, already described. Each of them stresses the acquisition of data from the patient by history, physical examination and various diagnostic techniques, correlation of signs and symptoms with pathophysiology and exposure to the thought processes involved in arriving at a diagnosis and problem list. Essentially, it teaches and demonstrates the logic of problem-solving in medicine largely with the aid of many "logic sessions". A logic session is the algorithmic presentation of a patient with a detailed analysis of how the various points in the history and examination relate to solving the problem at hand and how further selected diagnostic measures may be of value.

Toward the end of the preclinical curriculum, a free-standing clinical medicine course—here described—is taught. This includes ophthalmology, otolaryngology and dermatology, since these fields have no counterparts in the system-oriented courses, as well as an intensive 48 hour mini-course, during which the student performs complete histories and physical examinations on patients and takes part in a large number of multidisciplinary logic sessions.

Teaching modalities include lectures, demonstrations, audio-visual and computer techniques and direct contact with patients under instructor supervision. Patients with various abnormal physical findings are offered for examination throughout the courses. All of the school's

clinical departments, plus clinical departments of Brooke Army Medical Center and Wilford Hall USAF Medical Center, take part in the teaching.

Integrated Human Function

14 Hours

Interdisciplinary

Medicine

Physiology

Surgery

Discussion of topics involving the concerted action of many body systems in order to present an overall view of the functioning of the normal human body and of the interrelationships between the different body systems: Exercise — cardiopulmonary responses, nature of fuel utilization with regard to intensity, duration, fitness, and nutrition; decreased abilities with age. Responses to Stresses — surgical stresses; thermal stresses; decreased ability to respond to stresses associated with advanced age. Nutrition and Balances — regulation of adipose tissue mass; nitrogen balance; balance of inorganic materials such as calcium and potassium. Energy Transformations — body temperature regulation; meaning and regulation of metabolic rate; the liver as a fuel transformer and adipose tissue as an energy bank; circulating fuels and the regulation of their levels. Administered by the Department of Physiology.

Medicine Clerkship* 14 weeks Department of Medicine

The objectives of this clinical experience are to assist the student in developing patient evaluation skills, productive self-learning techniques, a sound pathophysiological approach to medical disease, and a concern and awareness for the patient's needs.

The student clerk spends 10 weeks assigned to the General Medicine Services of the Bexar County Hospital and the Audie Murphy Veterans Administration Hospital, and 2 weeks each assigned to the Intensive Care Unit and the Neurology Service of the Bexar County Hospital. Bedside clinical teaching is emphasized by asking the student to perform patient evaluations, to contribute to the care of selected Medicine patients,

and to participate in the clinical rounds of the Medicine or Subspeciality services. During this clerkship the student receives extensive instruction from the Internal Medicine Housestaff and the Faculty Attending Staff. In addition, the student is expected to undertake independent patient-oriented reading in the available library resources and to systematically review pertinent information learned during the pre-clinical years. Finally, students attend a series of clinical conferences including Medical Grand Rounds, Medical Mortality Conference, Clinical Subspeciality Conferences, a weekly conference with the department chairman, and organized courses in electrocardiography, fluid and electrolyte balance, and dermatology.

Obstetrics and Gynecology* 7 weeks Department of Obstetrics
Clerkship and Gynecology

A clerkship consisting of 3 1/2 weeks each of gynecology and obstetrics is provided for medical students who have successfully completed the course in reproductive physiology and pathophysiology. The goal of the clerkship is to prepare each student to function as a house officer capable of providing preventive care and treatment, or competent to identify the patient's need for direction into an appropriate care environment. Supervised direct patient experience occurs in the obstetrical and gynecologic wards, operating room, labor and delivery suite, emergency room, and the new patient obstetrical, gynecologic, family planning, and cancer detection clinics. A guide to self-instructional materials and textbooks identifies the student's formal study responsibilities. Twenty-eight seminars provide the opportunity for integration of clinical experience and didactic learning.

<u>Pediatric Clerkship*</u> 7 weeks Department of Pediatrics

The students spend one-half of the time on one of three major inpatient teaching services and the other half on the Newborn Nursery at the Robert B. Green Hospital, the Newborn Nursery at Santa Rosa Children's Hospital or the Pediatric Ambulatory Care Service at the Robert B. Green Hospital.

Working in close cooperation with, and under the supervision of the house staff, students are responsible for taking a history, doing a complete physical examination, establishing a working diagnosis and a differential diagnosis, recommending appropriate laboratory studies, and writing a set of orders. Students are expected to assist with and, as skill is gained, perform such procedures as starting intravenous fluids, lumbar punctures, and the like. They participate in ward rounds, in faculty attending rounds, chief resident teaching rounds, subspeciality conferences, and grand rounds.

The objectives of the clerkship are (1) to provide students with an opportunity to gain skills and insight into the more unique features of history taking and physical examination performance in infants and children, (2) to provide students with an exposure to infants and children with the more common minor illnesses and problems, as well as to infants and children with serious and more unusual acute and chronic illnesses and problems, (3) to impress students with the necessity to consider not only the infant or child patient, but the entire family constellation, its cultural background, socioeconomic status, and the like, (4) to give students the opportunity to participate in the diagnostic workup and treatment of infants and children, and (5) to encourage students to refer to appropriate textbooks and journal articles as they undertake the diagnostic workup and treatment of their assigned patients.

Psychiatry Clerkship* 7 weeks Department of Psychiatry

The psychiatric clinical clerkship serves to familiarize the student with the personality traits, illnesses, and emotional disturbances that affect health and productivity. It is an opportunity for the student to develop and strengthen clinical skills in interviewing patients, formulating treatment plans, and carrying out treatment. The clerkship is arranged so that the student selects the assignment area on the basis of particular interest, i.e., an inpatient/outpatient setting, a child psychiatry program, a primarily outpatient mental health setting, or an

inpatient setting. Seminars have been developed to allow the student an indepth appreciation of the various aspects of the psychiatric states and emotional problems which affect the general practice of medicine. The student-staff ratio allows for small groups of students to meet with faculty, thereby enhancing teaching. The clerkship is an opportunity for the students to look at their personal feelings and values and understand how they influence patient care and to learn how to deal with psychiatric disease and to become more comfortable in dealing with the personalities of patients with organic disease.

Surgery Clerkship* 14 weeks Department of Surgery

The surgery clerkship consists of a 14-week clinical clerkship on the wards of the Bexar County Teaching Hospital, the Audie L. Murphy Memorial Veterans Administration Hospital, and/or the affiliated hospitals, and includes daily lectures on all aspects of surgery. The 14-week clerkship is divided into two 7-week rotations, one on general surgery and one on surgical specialties. Each of these rotations is then sub-divided into two 3 1/2 weeks sessions with the general surgery rotation consisting of sessions on each of two different general surgical services and the surgical specialties rotation including sessions on two different specialty services chosen electively from among seven surgical specialties.

During this surgical clerkship, the student is afforded the opportunity to participate actively in the diagnosis and therapy of patients suffering from both acute and chronic surgical illness and including both ambulatory and bed-ridden patients. The clerkship is interwoven with teaching ward round, clinical conferences, symposia, and lectures on all aspects of surgery and the surgical specialties.

The goals of the surgical clerkship are the development in each student of the adequate knowledge, basic manual skills, and attitudes about surgical disease which should be encompassed by every practicing physician.

*Successful completion of all required preclinical courses is prerequisite to enrollment in any of the clinical clerkships.

Elective and Selective Courses

During the first and second years of the regular four-year program there is ample opportunity to take elective courses in addition to the required courses. The decision to take such courses, and the selection, is entirely up to the student. During the senior year, on the other hand, all students are required to spend a total of 28 weeks in educational activities of their choice (selective courses). A large number of courses is offered every year as electives for first and second year students, and as selectives for senior students. The exact nature and number of courses varies according to students demand, time availabilities, etc. A brochure is compiled every year and distributed to students. As an illustration only, the courses listed in the 1974 Brochure are described in this catalogue.

First and Second Year Electives

Anatomy

Anatomy of the Newborn

March 25, 1974 through May 4, 1974

Maximum number of students: Minimum of 3, Maximum of 6

Prerequisite: Gross Anatomy

Detailed gross dissection and study of the newborn with special emphasis on developmental origins and features and relationships differing from the adult. Laboratory and conference. C. W. McNutt and V. Williams.

Regional Anatomy

6 weeks

Maximum number of students: Minimum of 3, Maximum of 6

Prerequisite: Gross Anatomy

Anatomy associated with one of the usual medical specialities such as orthopaedics, obstetrics and gynecology, etc.; detailed dissection, selective readings, and consultations with clinical staff. Laboratory and conference. C. W. McNutt, H. C. Dung & Vick Williams.

Advanced Anstomy of the Back, Head, and Neck

Summer, 1974, in phase with same portion of first year gross anatomy.

Maximum number of students: 8

Prerequisite: Gross Anatomy

Students will participate in lectures, dissections, presentations of prosected material and teaching in the first year gross anatomy laboratory. E. K. Adrian.

Advanced Anatomy of the Extremities

6 weeks, repeatable, 3rd and 4th periods only.

Maximum number of students: 8

Prerequisite: Gross Anatomy

Dissection and study in depth of the upper and lower extremities; selected readings and conferences on basic anatomy of the extremities, with emphasis upon clinically pertinent details. H. C. Dung and C. W. McNutt.

Scientific Cinematography Applied to

Basic Sciences

6 weeks, 2nd period only

Maximum number of students: 4

Theory and practice of the production of motion picture films for research or teaching purposes. This program includes a large variety of projects from which each student can select one related to his own interest. Besides regular cinematography, many other techniques (cinemacrography, cinemicrography, animation, time-lapse, editing, sound, etc.) are included. A. L. Burton.

<u>Neurochemistry</u>

6 weeks, repeatable

Maximum number of students: Minimum of 2, Maximum of 3

Prerequisite: Cellular and Molecular Biology; Neuroscience

Laboratory participation in research to determine the physiological role

of brain biogenic amines in behavior, neuroendocrinology, and drug

action. Includes practical experience in the use of spectrofluorometric procedures for the quantitation of brain amine levels in discrete brain areas and in the use of pharmacological methods for the determination of the turnover rate of these amines. W. W. Morgan.

Selected Research Projects under the Direction

of Individual Members of Faculty

Time arranged with faculty

Maximum number of students: Unspecified

Prerequisite: As per faculty member responsible for project
Individual research projects to be arranged between individual
instructor and student. The students must make prior arrangements
with individual faculty members to register for this elective research
experience.

Research on Conditions Affecting

Cell Proliferation in the Body

6 weeks, repeatable

Maximum number of students: 1 per project

Individual research projects dealing with cell proliferation rate of normal and perturbed organs and tissues. I. L. Cameron.

Advanced Anatomy of the Trunk

February 10, 1975 through March 21, 1975

Number of students: Minimum of 6, Maximum of 10

Prerequisite: Basic gross human anatomy, microanatomy, and

embryology

Anatomy of the thorax, abdomen, pelvis and perineum directed toward acquisition of detailed information concerning these anatomic regions. Thorough dissection by students and faculty supplemented by group conferences and selected readings in classic anatomic texts and surgical literature. G. L. Colborn.

Biochemistry

Research Projects under the Direction of

Individual Members of the Biochemistry Department

Time to be arranged with the consent of individual faculty members.

Maximum number of students: Determined on an individual basis.

Prerequisite: Permission of the faculty member involved

Individual research projects to be carried out in the laboratory of a faculty member as arranged by the individual and the instructor. The student must make prior arrangements with some faculty member to register for this elective.

Preceptorship in Biochemistry

Duration and time involved: Variable by arrangement

Maximum number of students: Determined by department based on

competitive selection of applicants.

Student will act as proctor to instruct, tutor, and grade test papers for first year medical students taking Cellular and Molecular Biology scheduled from June 30, 1975 through at least November 7, 1975. A minimum of 200 contact hours plus corresponding preparation time may be anticipated. Staff.

<u>Bioengineering</u>

Computer Simulation of Biological Systems

6 weeks, any of the 4 elective periods from November 11, 1974-June 27, 1975.

Maximum number of students: 4

Instruction in use of analog and hybrid computers to simulate dynamic systems in biology and medicine. Student will select a system, describe it mathematically, and program and test a suitable computer model.

C. W. Hiatt, G. J. Celitans.

Physiological Monitoring and Telemetry

6 weeks, any of the 4 elective periods from November 11, 1974-June 27, 1975.

Maximum number of students: 2

Practical training and experience in physiological monitoring and telemetry in the study of responses of experimental animals and human subjects under abnormal environmental conditions or stresses.

C. W. Hiatt, G. J. Celitans, J. H. K. Yoo.

Accidental Death and Injury

6 weeks, any of the 4 elective periods from November 11, 1975-June 27, 1975.

Maximum number of students: 2

Statistical study of accidental death and injury as a function of transport system design, human factors and meteorological conditions.

R. G. Domey.

Educational Resources

Seminar in History of Medicine

12 weeks, covering first and second period. November 11, 1974

through March 21, 1975. Meets one hour per week, at a time most convenient to participants.

Minimum number of students: 10

Prerequisite: Permission of instructor

Faculty and student discussions on topics relating to the social and intellectual history of the healing arts. Selected readings and research topics to be submitted. J. Bradley Aust, David A. Kronick, and faculty.

Medical Applications of Photography

Approximately 6 weeks; not available during first period

Maximum number of students: 2

Review of contemporary and historical photographic technology.

Discussions, demonstrations, and exercises in lighting, film, filters, and clinical photography. Demonstrations and practice in darkroom operations. Lewis W. Koster, Jack A. Rodgers.

Medical Art

Approximately 6 weeks

Maximum number of students: 1

Student participation in design of an art project pertinent to a medical specialty area. Individual studio projects to teach techniques and media used most frequently in preparing medical illustrations suitable for publication. Betty Montgomery, Jack A. Rodgers.

Family Practice

Child Abuse and Neglect: Diagnosis and Treatment

3 weeks, two afternoons weekly from 1:00 - 4:30 p.m.

Dates to be announced

Maximum number of students: 10

Pathophysiology of child abuse and neglect, its treatment at family level; medical, legal and social consequences. Crisis intervention and interview techniques. Experience in medical, social welfare agencies and courts. Myra Lappin.

Laboratory Animal Medicine

Special Problems in Comparative Pathology

6 weeks, non-repeatable

Maximum number of students: 4

Prerequisite: Permission of instructor

Introductory study of sub-human vertebrates; alterations of disease in laboratory animals covered by dissection, use of appropriate laboratory tests, microscopic examination of tissues, preparation of specimens and literature review. F. Lynd.

<u>Medicine</u>

Human Nutrition in Clinical Medicine

6 weeks, May 19, 1975 to June 27, 1975

11:00-12:00 Monday through Friday

Maximum number of students: 20

Prerequisites: Completion of first year medical curriculum

HS-158

Trends and concepts of nutrition as they relate to specific disease entities. Debate evidence on controversial and relevant topics.

Megavitamin therapy; diet as related to CHD in diabetes; dietary bulk and gastrointestinal disease; vegetarianism. Rounds and/or interviews to observe patients with specific nutritional problems. Sister Eleanor Young.

Human Nutrition--its physiological, economic, social

and Psychol Aspects

6 weeks; May 19, 1975 to June 27, 1975

1:00-2:00 Monday through Friday

Maximum number of students: 20

Basic concepts of human nutrition with particular reference to current consideration of physiological, psychological, economic and social factors. Sister Eleanor Young.

Applied Respiratory Physiology

6 weeks

Maximum students during period: 1

Laboratory course designed to acquaint the student with the application of modern physiological techniques to respiratory problems in man; intensive instruction in physiological principles. W. S. Blumenthal.

Research in Internal Medicine

6 weeks, all periods, repeatable

Time requirements and project content to be arranged individually between student and faculty instructor.

Experiences will be designed to involve the student in a research project in one of the ongoing investigative programs of the medicine faculty. The following areas are available:

Division Name	Faculty	Research Interest		
Cardiovascular	Lawrence D. Horwitz	"Exercise Hemodynamics in		
Diseases		Dog"		
	Robert N. Schnitzler	"Electrophysiological Studies:		
		Human and Animal"		
Prerequisite:	Cardiovascular Pathophysiology of equivalent			
	post-graduate or undergradu	ate courses.		
Endocrinology	Kenneth A. Woeber	"Factors Affecting the Peripheral		
& Metabolism		Metabolism of the Thyroid		
		Hormones"		
	Richard Becker	"Gonadotrophin Dynamics in		
		Thyroid Disease"		
Gastroenterology	Elliot Weser	"Adaptation of Small Bowel		
		after Intestinal Resection"		
	Ernest Urban	"Calcium Transport in Intestine"		
	Eleanor A. Young	"Metabolizm of Injected		
		Disaccharides"		
	Eleanor A. Young	"Lactose Tolerance in		
		Mexican-American Children"		
Hematology	David A. Sears	"Red Cell Membrane"		
	David A. Sears	"Hemolytic Disease"		
	David A. Sears	"Red Cell Metabolism"		
	James N. George	"Platelet Structure and Function"		
	James N. George	"Hemostasis and Coagulation"		
Infectious	David J. Drutz	"How White Cells Kill Bacteria"		
Disease	J. Richard Graybill	"The Pathophysiology of Infection		
		with Fungi"		
	Earl B. Matthew	"Cell Mediated Immunity to Viral		
		Infections"		
Oncology	William McGuire	"Biochemistry of Hormone Action		
		in Normal and Neoplastic Tissue"		
Renal	Marvin Forland	"Problems in Calcium and		
		Phosphorus Metabolism"		

Marvin Forland	"Immunological	Reaction	ĆO	Urinary

Tract Infections"

Joseph C. Dougherty 'Metabolic Activity of the

Isolated Perfused Kidney"

Meyer D. Lifschitz "Studies on Renal Sodium

Excretion"

Meyer D. Lifschitz "Renal Control of Renin"

Robert H. Persellin "Natural Regulators of

Inflammation, Phagocytosis"

Robert H. Persellin "Serologic Abnormalities in

Arthritis"

John T. Harrington, Jr. Lymphocyte Mediated Immunity
in Connective Tissue Diseases

and Neoplasms"

Microbiology

Basic Aspects of Infectious Diseases

Approximately 16 weeks, divided into 6 week modules.

January through May and September through December

Maximum number of students: Unspecified

Pathogenic bacteriology, introductory and advanced virology, introductory and advanced immunology, pathogenic fungi, microbial genetics, and mode of action of antimicrobial agents. Interested individuals should contact the department for course content and additional offerings. Staff.

Microbiology Research

Rheumatology

Year round, January through January

Supervised research on a selected problem in bacteriology, virology,
immunology, or mycology. Available instrumentation includes electron
microscopy, immunoflurescence, electrophoresis, ultracentrifugation,
radioisotope and manometric techniques. Staff.

Obstetrics and Gynecology

Clinical Applications of Reproductive Science

HS-161

- 24 weeks, November 11, 1974 thru June 27, 1975

 2 afternoons per week in 4-six week units

 Maximum number of students: 18
- 1. Labor: Physiology of the myometrium, physiology of labor, labor and delivery room experience, laboratory experience; seminars.
- 2. Reproduction and its control: Experience in infertility, Family
 Planning and Cancer Detection Clinics; seminars.
- 3. Pregnancy and Hypertensive Disorders: Clinical and laboratory studies in second and third trimester patients with toxemia of pregnancy; seminars.
- 4. Prenatal care: Physical examination and history taking in pregnancy, supervised experience in clinics, the physiology of pregnancy.
 Joseph Seitchik and Staff.

Pathology

Anatomic Pathology

6 weeks

Maximum number of student: 2

Surgical pathology, autopsy pathology or cytopathology. Emphasis on one aspect of anatomic pathology, specific organ system pathology or medical biopsy pathology may be arranged. Prosections at autopsy and description and grossing of specimens obtained during surgery or biopsy. Study and review of microscopic slides. Assigned reading and student presentation of selected cases at conferences. Staff.

Hematology and Blood Banking

6 weeks

Maximum number of students: 2

Examination of blood smears and laboratory data in the hematology laboratory; review of the laboratory aspects of blood banking and coagulation problems under faculty supervision. Assigned reading relevant to selected cases; practical experience in selected hematologic, immunohematologic, and blood banking techniques. Staff.

Clinical Microbiology

6 weeks

Maximum number of students: 2

Practical experience in isolation, identification, and reporting laboratory results in diagnostic bacteriology, mycology, parasitology, and virology; review of selected patients with infections, assigned reading relevant to cases; control of hospital infections. T. Huber.

Biochemical Pathology

6 weeks

Maximum number of students: 2

Observation of and participation in biochemical determinations on selected patients; review of abnormal laboratory data under faculty supervision and correlation with clinical observations; development of selected laboratory methods for biochemical analysis in endocrinology, steroid metabolism, toxicology, enzymology, or other subjects; assigned reading relevant to cases. Staff.

Research in Pathology

12 weeks or longer

Maximum number of students: Variable on staff and resources

Participation in selected facet of ongoing research projects being

conducted by a faculty member with assigned responsibilities for

technical performance reading, and interpretation of results.

Assignment to faculty member by special arrangement depending on

research program and interests of student. Staff.

Pediatrics _

<u>Pediatric Hematology</u>

6 weeks

Maximum number of students: 1 lst year, 1 2nd year

Emphasis on normal physiology of the hematopoietic system; independent study or participation in current projects such as use of electrophoresis in the investigation of abnormal hemoglobins, red cell and leukocyte

HS-163

enzyme techniques or cytogenetic investigation of hematologic disorders.

T. W. Williams.

Immunology-Allergy Research

12 weeks or more

Maximum number of students: 2

Introduction to clinical and/or lab research with encouragement to plan and carry out a supervised project. Possible areas include hypersensitivity diseases, immunopathologic mechanisms, immunologic deficiency and reconstitution, and immunologic aspects of oncology and infection. W. T. Kniker.

Allergy-Immunology Clinical

6 weeks or more

Maximum number of students: 2

Elective will be tailored to students' time. Minimal requirement will be to attend one clinic weekly, complete an assigned reading program, take a self-assessment-education course (taped) and observe research in progress. A research project is not required but may be accomplished if time permits. M. I. Michels and W. T. Kniker.

Pediatric Neurology

6 weeks, repeatable

Maximum number of students: 1 1st year, 1 2nd year

Students will become acquainted with specific clinical laboratory
techniques used in the investigation of neuromuscular disorders of
childhood. Emphasis will center around convulsive disorders,
degenerative diseases and metabolic diseases of the CNS. Theoretical
and practical application of electroencephalography and metabolic
screening tests will be stressed. There will be opportunities for
limited clinical research activities. R. W. Mackey and J. R. Seals.

Pharmacology

Research in Biochemical Pharmacology

6 weeks, repeatable

Maximum number of students: unspecified

A variety of projects involving drug metabolism with particular emphasis on CNS kinetics. M. A. Medina.

Alcohol Research

6 weeks, repeatable

Maximum number of students: Unspecified

Project concerning alcohol research: Mechanism of ethanol dependence and withdrawal reaction; mechanism of ethanol preference; mechanism of action of ethanol on central nervous system. Techniques such as analysis of brain biogenic amines. Effect of drugs and neuropharmacological agents assessed in one of the three areas. K. Blum.

Toxicology

6 weeks, repeatable

Maximum number of students: Unspecified

Prerequisite: Knowledge of chemistry helpful

Participation in a research project concerning biochemical investigation of the cholinergic nervous system in the brain and the effects of morphine on that system. Measurement of enzyme activities, transmitter concentration and turnover. W. B. Stavinoha.

Pharmacology of the Peripheral Autonomic Nervous System

Time arranged on an individual basis between student and staff

Maximum number of students: Unspecified

Theoretical and experimental aspects of the use of drugs affecting the autonomic nervous system. O. Carrier.

Research on Vascular Smooth Muscle

Time arranged on an individual basis between student and staff
Maximum number of students: Unspecified

HS-165

Ongoing research projects on the pharmacology/physiology of the autonomic nervous system. O. Carrier.

Introduction to Cardiovascular Research Techniques

All elective periods

Maximum number of students: Unspecified

In vivo and in vitro techniques to evaluate the contractility of the heart to various drugs. Chronic surgical instrumentation as a means for continuous evaluation of cardiac performance in intact laboratory animal.

V. Bishop and F. Peterson.

Research in Cardiovascular Pharmacology

All elective periods

Maximum number of students: Unspecified

Neural control of the cardiovascular system under normal conditions and following chronic drug administration. Both neural and cardiovascular techniques. V. Bishop and F. Peterson.

<u>Cardiovascular Research</u>

All elective periods

Maximum number of students: Unspecified

Cardiac inotropic effects of certain combinations of clinically used drugs using both in vivo and in vitro techniques. In vivo experiments on animals previously instrumented for the measurement of left ventricular size, pressure and outflow. V. Bishop and F. Peterson.

Neuropharmacology (A)

All elective periods

Maximum number of students: Unspecified

Participation in a research project to investigate the effects of barbiturates and hallucinogenic drugs on the content and turnover rates of the biogenic amines (noradrenaline, serotonin) in discrete areas of the brain. Standard techniques involved in the extraction of these amines from brain tissue, fluorescence spectrophotometric methods for their quantification, use of drugs to assess their turnover in the brain. R. D. Huffman.

Neuropharmacology (B)

All elective periods

Maximum number of students: Unspecified

Prerequisite: Neuroscience

Participation in a research project to investigate the acute and chronic effects of certain drugs of abuse (LSD, quaalude (methaqualone) and

-tetrahydrocannabinol (active principle in marijuana) on the electrophysiology of sensory and motor systems in the primate central

HS-167

nervous system. R. D. Huffman.

Neuropharmacology (C)

6 weeks, 3rd period only

Maximum number of students: Limited

Prerequisite: Taught as a graduate course, but may be taken by medical students with a good background in neuroscience.

Actions of various drugs on the peripheral and central nervous system.

R. D. Huffman.

Neuroscience_

Time arranged on an individual basis

Maximum number of students: Limited

Preraquisite: Neuroscience

Selected laboratory exercises using experimental animals to illustrate basic neurophysiological topics presented in the neuroscience course. Possible topics include excitation and conduction in nerve, neurohumoral transmission, electrophysiology of spinal reflexes, decerebrate rigidity, inhibitory systems (direct, presynaptic, reticular), evoked responses, and microelectrode techniques. R. D. Huffman.

Physical Medicine and Rehabilitation

Introduction to Medical Rehabilitation

6 weeks, February 10 through March 21, 1975

Approximately 4 hours per week, divided into two sessions

Maximum number of students: 15

Rehabilitation of management of major disabling condition of the neuromuscular system including stroke, spinal cord injuries, lower motor neuron disorders, myopathies, etc. Initial didactic presentation (lectures, discussions, audiovisual presentations) followed by patient presentation and clinical demonstrations. Opportunity to examine selected patients and follow their subsequent clinical course. Staff.

Management of Common Musculo-Skeletal Pain Syndromes

6 weeks, March 31 through May 9, 1975

Approximately 4 hours per week, divided into two sessions

Maximum number of students: 15

Diagnosis and management of common musculo-skeletal pain syndromes including low back pain, cervical disorders, shoulder disorders, arthritis, etc. including introduction to physical therapy modalities.

Didactic presentations (lectures, conferences, audiovisual presentations) followed by sessions devoted to patient presentations, examination of patients, observation of treatment methods, etc. Staff.

Physiology

Acid-Base Regulation_

6 weeks, 2nd elective period; 2 hours per week

Maximum number of students: Unlimited

Basic chemical and biochemical information underlying consideration of acid-base physiology. Physiological mechanisms involved in processing acids and bases in normal man. Pathophysiology of acid-base disturbances. Discussion of a series of patients. E. J. Masoro, H. B. Garfinkel.

Mechanics of Muscular Contraction

18 weeks

Maximum number of students: 2

Properties of skeletal muscles at very short lengths as they relate to normal mechanisms of force generation and relaxation. Initial period devoted to literature survey and project planning. Research and result analysis in two subsequent elective periods. R. J. McCarter.

Research in Neurophysiology

18 weeks

Maximum number of students: 2

Prerequisite: Completion of Cell Physiology

Individualized program of guided research in areas of current interest

in neurophysiology. Details to be arranged with instructor. First elective period devoted to planning and literature research culminating in a departmental seminar. Following two periods devoted to research.

T. M. Mikiten.

Research in Cellular Physiology

18 weeks, periods 1,2 & 3 only

Maximum number of students: 2

Prerequisite: Completion of Cellular Physiology

Student participation in on-going membrane physiology research. Selection and planning a specific problem during first period; laboratory work during two subsequent elective periods. C. Levinson.

Psychiatry

Neurophysiologic Correlates of Behavior

Thursdays, 1:00-3:00, May 9, 1974 through June 20, 1974

Maximum number of students: Minimum of 5, Maximum of 8

Adrenal cortical activity in normal and pathologic conditions; hormones and sexual behavior; autonomic function under stress, in the psychoses and in cardiovascular disturbances; neural correlates of behavior; sleep and behavior. C. Bowden.

Mental Health Issues among Mexican-Americans

Monday afternoons: 1:00-5:00 p.m.

Maximum number of students: 2

Conducted at Mexican-American Unity Council

Psychiatric interviewing and evaluation; community mental health and issues in the mental health of Mexican-Americans. Individual conferences and reading covering relevant community mental health and Mexican-American cultural issues. C. Martinez, Jr.

Social and Moral Values in the Health Sciences

Wednesdays, 12:00 - 1:30 p.m.; a minimum of any <u>two</u> modules, four weeks per module

HS-170

Maximum number of students: 15

Group centered discussion of pre-assigned readings on four module topics.

Module topics are (1) control of death and life, (2) medical research,

(3) modification and control of the capacities and activities of men,

and (4) the nature of justice, community and man. Specific topics

covered in each module are available from course coordinators.

A. Burstein.

Practicum in Group Dynamics

12 weeks (2 consecutive periods), 3 hours per week

Maximum number of students: 18

Students will participate in ongoing group activities designed to highlight the principles of group formation, group decision making, conflict resolution, and group maintenance. The student will become knowledgeable in the areas of styles of group management, styles of group participation, and levels of communication. The course objective is to develop beginning skills in group facilitation. This is not a course in group psychotherapy nor is it intended to serve as group psychotherapy for the participants. Also open to graduate and nursing students. J. Kobos.

Physiological Biofeedback

6 weeks, 2 days per week

4th period only - time to be arranged

Maximum number of students: 10

Study of physiological biofeedback by way of supervised reading and discussion. Subjects included range from early developmental work to current clinical applications such as headache relief. Individual student application of electrodes and experience of feedback from EEG, EMG, GSR, skin temperature, etc. Acquisition of skills using biofeedback as a clinical and investigative tool. P. S. Montgomery and K. Gaarder.

Study of Social and Cultural Variables

in the Etiology of Mental Illness

6 weeks (longer by special arrangement); 1/2 day per week - time to be arranged

Maximum number of students: 6

Review of literature and interviews with patients and family members. This will primarily be a study of Mexican-American families, their migration patterns, and problems in acculturation, and how they may relate to the development of mental illness. (Knowledge of Spanish helpful but not necessary.) R. Leon and S. Hoppe.

Radiology

Basic Principles in Diagnostic Radiology

6 weeks; fall, winter and spring periods
Classes one hour per week; time to be arranged

Maximum weber of students during period: 7

Study of radiographic examination with Radiology instructors in an informal environment: review of type of diagnostic procedures, radiological anatomy and various disease states on a system by system basis. Malcolm D. Jones & Staff.

Surgery

Introduction to Surgical Clerkships

6 weeks, all periods

Time requirements to be arranged individually

between student and faculty member

By special arrangement with one of the surgical faculty, a limited number of students can be accommodated on the surgical services or in the emergency room. There will be opportunities to observe surgical care on the surgical service and in the operating rooms and participate in patient care to the limits of your background and abilities. The following areas are available:

Cardiothoracic Surgery

J. Kent Trinkle

Emergency Room

H.D. Root

General Surgery

J.B. Aust

A.B. Cruz, Jr.

Arthur S. McFee

Carlos Pestana

Waid Rogers

Neurosurgery

Jim L. Story

Ophthalmology

George W. Weinstein

Oral Surgery

Hugh Tilson

Orthopaedics

C.A. Rockwood, Jr.

Otorhinolaryngology

George A. Gates

Urology

Howard Radwin

Supervised Surgical Research

6 weeks, all periods

Time requirements and project content to be arranged individually between student and faculty investigator.

Experiences will be designed to involve the student in a research project in one of the ongoing investigative programs of the surgery faculty. The following areas are available:

Chest and Cardiovascular

J. Kent Trinkle and Frederick L. Grover

Surgery

Neurosurgery

Jim L. Story and John P. Wissinger

Oncology

Anatolio B. Cruz

Ophthalmology

George W. Weinstein

Orthopaedics

David P. Green, Charles A. Rockwood,

Jr., and Kaye E. Wilkins

Otorhinolaryngology

George A. Gates

Shock and Trauma

Harlan D. Root

Transplantation, Protosystemic

Waid Rogers

Shunts and General Surgery

Urology

Howard M. Radwin and Jack R. Robison

Surgical Anatomy

6 weeks, 4th period only

Maximum number of students: To be arranged

Prerequisite: Gross Anatomy

Lectures on anatomy with emphasis on surgical approaches to deeper structures in applied anatomy and physiology, both normal and abnormal. This course may also be taken with another surgical (oncology) or anatomy elective when mutually agreeable. Lecture part of the elective is one hour once a week. A. B. Cruz, Jr. and Staff.

Fourth Year Selective Courses

Anatomy

Anatomy of the Newborn

Period: By arrangement with faculty

Maximum students during period: 6

Detailed gross dissection and study of the newborn with special emphasis on developmental origins and features and relationships differing from the adult. Laboratory and conference. C. W. McNutt, V. Williams.

Surgical Anatomy of the Back, Head and Neck

Period: By arrangement with faculty

Maximum students during period: 8

Students will participate in lectures, dissections, presentations of prosected material and teaching in the first year gross anatomy laboratory. E. K. Adrian.

Regional Anatomy

Period: By arrangement with faculty

Maximum students during period: 6

Anatomy associated with one of the usual medical specialities such as orthopaedics, obstetrics and gynecology, etc; detailed dissections, selective reading and consultation with clinical staff. Laboratory and conference. C. W. McNutt, V. Williams, and H. C. Dung.

Ultrastructural Studies of the Nervous System

Period: By arrangement with faculty

Maximum students during period: 2

Individual research projects to study various aspects of the ultrastructure of the nervous system, particularly cellular reactions to injury. Electron Microscopy elective must precede this elective.

V. Williams.

Scientific Cinematography Applied to Basic Sciences

Period: By arrangement with faculty

Maximum students during period: 2

Theory and practice of the production of motion picture films for research or teaching purposes. This program includes a large variety of projects from which each student can select one related to his own interest. Besides regular cinematography, many other techniques (cinemacrography, cinemicrography, animation, time-lapse, editing, sounds, etc.) are included. A. L. Burton.

Research in Neuroendocrinology

Period: By arrangement with faculty

Maximum students during period: 2

Literature search and specific research projects designed to acquaint the individual with the neuroendocrine mechanisms of reproductive physiology. Studies will deal primarily with the influences of the external environment and the pineal gland on the regulation of pituitary gondactropins. R. J. Reiter.

Research in Neurochemistry

Period: By arrangement with faculty

Maximum students during period: 2

Individual research projects to study the role or relationship of biogenic amines or nucleic acids in the brain to circadian rhythms, anesthesia, barbiturate addiction, or to the regulation of pituitary function. Emphasis will be placed on the practical use of spectrofluorometric and radioisotope procedures to study the chemistry of the biogenic amines in vivo. W.W. Morgan.

Selected Research Projects

Period: By arrangement with faculty

Maximum students during period: 2

Individual research projects to be arranged between the student and faculty member with whom he wishes to work. Anatomy Staff.

Anesthesiology

Clinical Anesthesiology

7 weeks

Maximum students during period: 2

Service as First-year Resident in Anesthesiology. Supervised, graded responsibility for anesthetic care of patients during and following surgery. H. Zauder and C. Awalt.

Respiratory Care

7 weeks

Maximum students during period: 2

"Subinternship" in the Surgical-Respiratory Intensive Care Unit, Bexar County Hospital. Emphasis on application of principles of respiratory physiology to care of chest trauma and the intensive care of the acutely ill surgical patient. H. Zauder & Staff.

Anesthesiology Research

7 weeks

Maximum students during period: 1 per sub-topic

Participation in ongoing departmental research programs:

- a. Emphasis on electrosleep and electroanesthesia;
- b. Clinical research in new anesthetic agents; effects of premedication on anesthetic requirements of patients; problems in biomedical instrumentation. <u>H. Zauder, R. Nichols and</u> N. Wulfsohn.
- c. Mechanism of action of steroids in shock. H. Zauder.
- d. Role of the autonomic nervous system on uterine activity during anesthesia. H. Zauder, C. Pauerstein, B. Fremming.

<u>Biochemistry</u>

Biochemistry Research

7 weeks, repeatable

Maximum students during period: 12

An opportunity to work in close collaboration with a member of the

Department on a problem in research of mutual interest. A sincere interest to try research, but no formal research training is required.

Areas of research interest in the Department include the following:

Carbohydrate Metabolism

Biosynthesis of Polysacchardies and Glycoproteins

Nucleotide Sugars

Enzyme Mechanisms

Lipid Chemistry

Sphingosine Metabolism

Conformation of Histones

Structure of Chromatin

Mechanism of Terminal Cellular Respiration

Properities of the Cytochromes

Properties of Copper Proteins

Nucleic Acids and Protein Synthesis in Eucaryotes

Hemoglobin Synthesis in Cultured Chick Blastoderm

Biochemistry in Cellular Differentiation

Biosynthesis of Biologically Active Polypeptides of Low Molecular Weight

Preceptorship in Biochemistry

Duration and time involved: Variable by arrangement

Maximum number of students: Determined by department based on competitive selection of applicants.

Student will act as proctor to instruct, tutor, and grade test papers for first year medical students taking Cellular and Molecular Biology scheduled from July 1, 1974 through at least November 4, 1974. A minimum of 200 contact hours plus corresponding preparation time may be anticipated. Staff.

Bioengineering_

· Computer Simulation of Biological Systems

7 weeks

Maximum number of students: 4

Instruction in use of analog and digital computers to simulate dynamic systems in biology and medicine. Student will select a system, describe it mathematically, and program and test a suitable computer model.

C. W. Hiatt, Frank Stafford.

Physiological Monitoring and Telemetry

7 weeks

Maximum number of students: 2

Practical training and experience in physiological monitoring and telemetry in the study of responses of experimental animals and human subjects under abnormal environmental conditions or stresses. <u>C. W.</u>
Hiatt, G. J. Celitans, J.H.K. Yoo.

Accidental Death and Injury

7 weeks

Maximum number of students: 2

Study of accidental death and injury as a function of transport system design, human factors, and meteorological conditions. R. G. Domey.

Supervised Research

7 weeks

Maximum number of students: To be arranged

Individual arrangement with a principal investigator to participate in his research endeavor. C. W. Hiatt, G. J. Celitans, R.G. Domey,

J.H.K.Yoo.

Educational Resources

Medical Applications of Photography

Approximately 6 weeks

Maximum number of students: 2

Review of contemporary and historical photographic technology.

Discussions, demonstrations, and exercises in lighting, film, filters, and clinical photography. Demonstrations and practice in darkroom operations. L. W. Koster, J. A. Rodgers.

Medical Art

Approximately 6 weeks

Maximum number of students: 1

Student participation in design of an art project pertinent to a medical specialty area. Individual studio projects to teach techniques and media used most frequently in preparing medical illustrations suitable for publication. B. Montgomery, J. A. Rodgers.

Family Practice

Clinical Clerkship in Family Health Care

7 weeks, repeatable

Maximum number of students: 6

Opportunity to participate in family oriented setting for the delivery of comprehensive ambulatory care with full time faculty supervision.

Included are the use of problem oriented medical records and paramedical personnel. H. L. Douglas & Staff.

Clinical Clerkship in Medical Follow-up Clinic

3 1/2 or 7 weeks, repeatable

Maximum number of students: 2

Paramedical oriented clinic involving total care of patients with diabetes, hypertension, and complications thereof. Utilization of medical assistants under physician supervision to provide better management of chronic medical disease problems. H.L. Douglas & Staff.

Preceptorships in Family Practice

7 weeks, repeatable

Maximum number of students: 4

Multiple opportunities, both in urban and rural settings with exposure to both office and hospital practice of Board Certified Family Physicians. The majority are with practicing physicians who hold medical school clinical faculty appointments. H.L.Douglas & Staff.

Clinical Clerkships in Outreach Facilities

3.1/2 or 7 weeks, repeatable

Maximum number of students: 2

Opportunity to work on a one-to-one relationship with faculty members in staffing two outreach facilities, one serving primarily

Spanish-American and one primarily a Black population, offering general ambulatory medical care. H.L. Douglas & Staff.

Clinical Investigation in Ambulatory Care Health Problems

7 weeks, repeatable

Maximum number of students: 4

Short term research project in ambulatory health care problems utilizing computer stored demographic, clinical and cost analysis data available from three years operating experience of two Family Health Centers.

Content of project to be individually determined. Richard Ellis.

Community Preceptorship

8 weeks

Maximum students in period: Unspecified

Administered by Department as an on-campus elective

Exposure to all areas of medical care at the Area Health Education

Center, Laredo, Texas. Rounds and calls in Internal Medicine,

Obstetrics, General Surgery, and Pediatrics; experience in

anesthesiology, radiology and urology as well as mental health; work

with blind, special health educational programs and the Laredo Public

Health Department. By arrangement with H. L. Douglas.

Human Ecology_

Medicine in Literature

7 weeks

Maximum students during period: Unlimited

Seminars and independent study based on exploration of imaginative

literature illuminating medical issues: human dynamics exemplified;

medical and psychological aspects of the author; social and ethical

aspects of medical practice reflected. Projects submitted may also include a literature study relating to medical sociology and the history of medicine. Written summary required. D. A. Kronick.

The Physician and Society

Sixteen 1 1/2-hour weekly seminars followed by an examination schedules Wednesdays from 3:30 to 5:00 p.m. concurrently with students' other "full-time" elective program.

Offered twice during year: August 21, 1974 through December 18, 1974; and January 22, 1975 through May 14, 1975.

Maximum students during period: 35

Students will be prepared to pass the Texas State Board of Medical Examiners' examination in Medical Jurisprudence.

The regulation of medical practice and the activities of the physician by laws (legal medicine and medical jurisprudence); the regulation of medical practice by professional associations, hospital staff, etc. (peer review); the organization and economics of the health care system and the roles of federal, state, and local governments; the physician's personal business, his role and responsibilities as a manager; and his relationships with patients, other physicians, and other health care personnel. H.C. McGill, Jr., H.S. Wigodsky, T. Sharp, Jr., and guest instructors.

Laboratory Animal Medicine

Special Problems in Comparative Pathology

7 weeks

Maximum number of students: 4

Prerequisite: Permission of instructor

Introductory study of sub-human vertebrates, alterations of disease in laboratory animals covered by dissection, use of appropriate laboratory tests, microscopic examination of tissue, preparation of specimens and literature review. F. Lynd.

Medicine

(Satisfactory completion of the third-year Clinical Clerkship in Medicine is prerequisite for senior Medicine electives.)

Cardiovascular Research

7 weeks; repeatable

Maximum students during period: 2 $\label{eq:period: 2}$ Participation in original research in the Cardiovascular Section. R. Talley & Staff.

Clinical Cardiology

7 week; repeatable

Maximum students during period: 3

Full time participation in consultations, clinics and conferences of the Section; participation in cardiac catheterization, instruction in electrocardiogram interpretation. Offered at Bexar County Hospital and Veterans Administration Hospital. R. Talley & Staff.

Clinical Dermatology

7 weeks

Maximum students during period: 4

Outpatient clinic work conferences and supervised inpatient consultations. Arrangements for student to spend part time at Brooke General Hospital or Wilford Hall Air Force Hospital. D. E. Vander Ploeg.

Endocrinology and Metabolism Research

21 weeks; repeatable

Maximum students during period: 1

Research in lipid metabolism, biochemistry, lipoprotein metabolism or selected endocrine topics. S. J. Friedberg.

Mechanism of Hormone Action Research

14 weeks, repeatable

Research in biochemistry of hormone action at the gene level; current

projects include The Role of Hormones in Breast Cancer, and The Mechanism of Estrogen Action in Reproductive Tissues. W.L. McGuire.

Clinical Endocrinology

7 weeks, repeatable

Maximum students during period: 2

Broad clinical exposure to entire spectrum of clinical endocrinology.

Inpatient consultations, diabetes and endocrine clinics, Section

Conferences; performance and interpretation of diagnostic procedures.

S. J. Friedberg & Staff.

Gastrointestinal Research

14 weeks, repeatable

Maximum students during period: 4

Participation in ongoing research in absorptive and secretory processes in the gut; independent research encouraged by special arrangement with instructor. E. Weser, E. Urban, M. Gold, E.A. Young.

Clinical Gastroenterology

7 weeks; repeatable

Maximum students during period: 4

Participation in the clinical gastrointestinal teaching program; supervised in-service consultations, outpatient clinic, conferences and participation in special gastrointestinal diagnostic techniques.

E. Weser & Staff.

Human Genetics

7 weeks; repeatable

Maximum students during period: 1

Consultations, also work in Birth Defects Center at Santa Rosa twice weekly; rounds with Dr. Frimpter (Medicine) and Dr. Louro (Pediatrics); experience in cytogenetics; work on specific projects and reposting of interesting cases as a positive contribution to the literature is encouraged. J. M. Louro, G.W. Frimpter.

Human Genetics Research

7 weeks; repeatable

Maximum students during period: 1

Primarily laboratory aspects of clinical investigation of problems in amino acid metabolism. Students may pursue a well-designed project of their own with guidance. Alternatively, they may participate in ongoing projects of the division. A period of seven weeks is probably inadequate to accomplish definitive work and follow-up during free time over the year is expected. By prior arrangement only. G. W. Frimpter.

Research in Hematology_

14 weeks minimum; repeatable

Maximum students during period: 2

Participation in ongoing clinical or basic research; individual projects encouraged and written report of results required. Opportunity may be provided for combined clinical and research experience in individual cases by special arrangement. D.A. Sears & Staff.

Clinical Hematology and Oncology

7 weeks; repeatable

Maximum students during period: 2

Participation in the clinical activities of the Section of Hematology and Oncology — consultations, rounds, conferences, seminars, and clinics. Opportunity for training in blood and marrow morphology; observation and performance of special clinical and laboratory procedures. Preparation of a short clinical paper or oral presentation is required. D.A. Sears & Staff.

Research in Infectious Disease

14 weeks; repeatable in 14-week increments

Maximum students during period: 1

Individual research projects involving methods of virology, immunology, cell or organ culture, or bacteriology designed for this period.

Preparation of a written report describing hypotheses, experimental

plan, methods, results and conclusions is required.

- a. Immunity in leprosy and gonococcal disease. D. J. Drutz.
- b. Cell mediated immunity to herpes virus group; hepatitis and mycoplasma. <u>E.B. Matthew</u>.

Clinical Infectious Disease

7 weeks; repeatable

Maximum students during period: 3

Clinical experience in infectious diseases occuring in hospitalized patients. Course designed to improve diagnostic skills and ability to apply laboratory data to a clinical problem. E. B. Matthew.

Introduction to Clinical Neurology I

7 weeks; repeatable; 3 1/2 weeks by special permission

Maximum students during period: 4

Bexar County Hospital, San Antonio State Hospital, and Veterans
Administration Hospital

Cannot be taken in conjunction with another part-time elective

In-depth analysis of neurological patients by 1 to 2 consultations per
day requiring formal note recording; exposure to patient evaluation and
management by attending adult neurology clinics on Tuesday mornings and
Friday afternoons seeing an average of one new patient and two or three
revisiting patients per student each week. Thursdays spent on Neurology
Service at the San Antonio State Hospital to become acquainted with
classic, chronic neurologic conditions. Daily rounds and scheduled
conferences. Participation in formal Wednesday afternoon Neurology
Seminars. Student evaluated by combined attending housestaff. Students
may spend a certain portion of the rotation at the Veterans
Administration Hospital depending upon the number of students taking the
elective in a given period and upon the rate of development of the
Neurology Service at that hospital during 1974-75. R. E. McMasters &
Staff.

Advanced Clinical Neurology

7 weeks; repeatable

Maximum students during period: 1

San Antonio State Hospital

Cannot be taken in conjunction with another part-time elective

Similar to Introduction to Clinical Neurology I with the exception that
the entire period will be spent at the San Antonio State Hospital.

Although outpatients will be seen, most of the emphasis will be placed
upon inpatient Neurology, and the student should have considerable
exposure to many chronic and classic Neurologic syndromes. The student
will be expected to attend the regular Saturday morning Neurosciences
Conferences at the Medical School. Eugene W. Eberlin, R.E. McMasters,
& Staff.

Neurology Externship

7 weeks, repeatable; not available for 3 1/2 period.

Maximum students during period: 1

Bexar County Hospital

Cannot be taken in conjunction with another part-time elective

Function as sub-intern under direct supervision of intern assigned to

Neurology. Considerable responsibility in the management of neurologic

patients: two days each week spent in the adult neurology clinic seeing

one to two new patients per student each week. Attendance at daily

rounds and at formal conferences as announced by weekly schedules;

participation in formal Wednesday afternoon Neurology Seminars;

participation on weekend or night call schedule. Performance evaluated

by faculty and housestaff. R. E. McMasters and Staff.

Research in Clinical Neurology

7 weeks; repeatable

Maximum students during period: 2

Initiation and conduct of a project in or related to the field of clinical neurology - preferably of a student's design. R. E. McMasters & Staff.

Introduction to Aphasia and Disorders of Communication

7 weeks; repeatable

Maximum students during period: 1

Research in modification of aphasia testing procedures and their standardization. Construction of dichotic listening tapes for right and left-handed normals. Directed readings in cerebral mechanisms of communication. E.J. Siller.

Introduction to Research in Aphasia and

Disorders of Communication

7 weeks; repeatable

Maximum students during period: 1

Recommendation: Fluency in Spanish is desirable but not required. Dichotic examination of posterior asphasic patients to establish differences in mono-lingual and bilingual responses. Investigation of delayed-auditory-feedback and auditory inattention mechanisms. Directed readings in cerebral mechanisms of aphasic disturbances.

E. J. Siller.

Research in Aphasia and Disorders of Communication

7 weeks; repeatable

Maximum students during period: 1

Directed research program in communication disorders. Work is accommodated to the particular interest of the student. E. J. Siller. Renal Research

7 weeks; repeatable

Maximum students during period: 2

Participation in ongoing research with opportunity to learn some of the fundamental techniques of renal physiology. Independent research encouraged if student spends two or more elective periods in the laboratory. L.E. Earley, M. Forland, J.C. Dougherty, and M.D. Lifschitz.

Clinical Nephrology

7 weeks; repeatable

Maximum students during period: 3

Full time participation in Section's consultation service, outpatient clinic, rounds, conferences, acute dialysis unit and renal biopsy program. Particular aspects emphasized according to individual interests. Also offered at Brooke General Hospital and Wilford Hall Medical Center. M. Forland & Staff.

Applied Respiratory Physiology

7 weeks

Maximum students during period: 1

Laboratory course designed to acquaint the student with the application of modern physiological techniques to respiratory problems in man; intensive instruction in physiological principles. W. S. Blumenthal.

Clinical Chest Disease

7 weeks

Maximum students during period: 2

Participation in clinical program of Chest Section including consultations, conferences and clinic. Intensive instruction in pulmonary function testing and interpretation of tests. W. S. Blumenthal.

Research in Basic or Applied Respiratory Physiology

or Clinical Chest Disease

7 weeks; repeatable

Maximum students during period: To be determined

Initiation of a research project in pulmonary physiology or participation in an ongoing project. Students will be accepted only after discussion with a division faculty member. Respiratory project may be continued on a part-time basis following the initial full-time period on the pulmonary service. W. S. Blumenthal.

Research in Rheumatology

14 weeks

Maximum students during period: 2

Individual research on autoantibodies and inflammation as seen in rheumatic diseases. R. H. Persellin.

or

Research involving the mechanisms of lymphocyte mediated immunity and application to rheumatologic diseases. J. T. Harrington.

Clinical Rheumatology

7 weeks; repeatable

Maximum students during period: 2

Participation in ongoing clinical activites of the Section. Introduction to applied immunologic techniques. R. H. Persellin and J.T. Harrington.

Clinical Clerkship in Admission Service

7 weeks; repeatable

Maximum students during period: 2

Opportunity to evaluate patients for admission to the Medical Service of the Audie Murphy Veterans' Administration Hospital under the supervision of the medical staff. R. Forrester & Staff.

Clinical Clerkship -- Medical Intensive Care Unit

7 weeks

Maximum students during period: 1

Application must be cleared with course instructor

Duties: Those of a medical intern under close supervision in the medical intensive care unit. R. Schnitzler.

Medical Externship

7 weeks, repeatable

Maximum students during period: 6

Opportunity to assume direct responsibility for the care of medical patients under the supervision of the residency staff. Experience is appropriate both as preparation for a medical internship and for students whose postgraduate education will not include further experience in care of medical problems. Positions available both at Bexar County Hospital and the Audie Murphy Veterans' Hospital. Staff.

Special Research

Maximum students during year: 8

Pursuit of original research, part or full time, for any period of time in any of the laboratories or clinics of the Department by special arrangements with the Section Head and Chairman of the Department.

Microbiology

Microbiology research

Duration: To be arranged

Maximum students: To be arranged

Clinical material and patient case studies made available to exemplify the role of microbiology in evaluating human disease. Collaboration with a senior investigator in a research problem conducting a project of mutual interest. Areas of current interest include:

Clinical and in vitro studies on the etiology and diagnosis of serum and infectious hepatitis; specifically the detection and significance of Australia antigen.

Immunological and biochemical studies of viral antigens and their relationship to viral immunity, the pathologic process, and the etiologic diagnosis of infection.

Role of viruses in chronic and degenerative diseases, specifically those of human cardiovascular and central nervous systems.

Mechanisms of development of antibiotic resistance in bacteria.

Immunologic reactions in patients with leukemia, tumors or

transplants.

Role of complement in defense mechanisms.

Antigenic components of Mycobacteria.

Antigenic components of pathogenic fungi.

Staff.

Graduate Courses in Microbiology

16 weeks (approximate)

Maximum students during period: To be arranged

Available September through May and June through August

Fourth year medical students may avail themselves of graduate courses

offered by the Department of Microbiology. Interested individuals should

contact the Department for details. Course offerings will include

Diagnostic microbiology (Bacteriology, Virology and Mycology)

Electron microscopy techniques useful in diagnostic microbiology

Medical & Diagnostic Mycology

Immunology-human transplantation and tumor immunity,
immunoprophylaxis, immunopathology, diagnostic immunology,
formation of normal and pathological antibodies.

Research tools for infectious diseases and immunology,

Virology, to include fundamental studies of virus-host interactions, chemistry, structure and immunology of viruses. Studies would also include applied research problems such as the development of rapid laboratory diagnostic techniques and viral vaccines.

Staff.

Obstetrics & Gynecology

Preparation for Clinical Practice

7 weeks

Maximum students during period: 4

Prerequisite: Successful completion, Third Year

Clinical Clerkship

Tutorial and externship. Dr. Gibbs and Staff.

Physiology of Reproduction - Research in Fertility

7 or 14 weeks

Maximum students during period: 4

Discussion, directed reading and laboratory investigations of reproduction, oral contraception. M. Chatkoff, C. Eddy, B. Hodgson, & C. Pauerstein.

Family Life and Human Sexuality Health Science Students, Spouses, & Significant Others

6 weeks, one evening per week (2 hours each week)

Maximum students: 50

Lectures and discussion in sexuality, personal and professional attitudes.

P. Weinberg, M. Shepard, & D. Bolling.

Gynecologic Oncology

4-7 weeks

Maximum students during period: 1

Prerequisite: Successful completion of Third Year

Clinical Clerkship

Student will share responsibility for care of patients with gynecologic malignancy and will participate in administering treatment to these individuals. Selected reading. A. J. White.

Alternative Health Care Setting - Free Clinic

7:00 - 10:00 p.m., Mondays and/or Tuesdays all year

Maximum students per period: Variable

Patient care is an alternative health care setting such as The Free Clinic. Participation is primarily gynecologic involving venereal disease, pregnancy diagnosis and counseling, gynecologic ambulatory care, and disease processes such as vaginits. P. Weinberg, M. Shepard, D. Bolling.

Pathology_

<u>Anatomic Pathology</u>

7 weeks

Maximum number of students: 6

Surgical pathology, autopsy pathology or cytopathology. Emphasis on one aspect of anatomic pathology, specific organ system pathology or medical biopsy pathology may be arranged. Prosections at autopsy, description and grossing of specimens obtained during surgery or biopsy. Study and review of microscopic slides. Assigned reading and student presentation of selected cases at conferences. Staff.

Hematology and Blood Banking

7 weeks

Maximum numbers of students: 2

Examination of blood smears and laboratory data in hematology laboratory; review of laboratory aspects of blood banking and coagulation problems under faculty supervision. Assigned reading relevant to selected cases; practical experience in selected hematologic, immunohematologic and blood banking techniques. Staff.

Clinical Microbiology

7 weeks

Maximum number of students: 2

Practical experience in isolation, identification, and reporting laboratory results in diagnostic bacteriology, mycology, parasitology, and virology; review of selected patients with infections, assigned reading relevant to cases; control of hospital infections. T. Huber.

Biochemical Pathology

7 weeks

Maximum number of students: 2

Observation of and participation in biochemical determinations on selected patients; review of abnormal laboratory data under faculty supervision and correlation with clinical observations; development of selected laboratory methods for biochemical analysis in endocrinology, steroid metabolism, toxicology, enzymology, or other subjects; assigned reading relevant to cases. Staff.

Research in Pathology

Time to be arranged

Maximum number of students: Variable of staff and resources

Participation in selected facet of ongoing research projects being

conducted by a faculty member with assigned responsibilities for

technical performance reading, and interpretation of results. Assignments

to faculty member by special arrangement depending on research program

and interests of student. Staff.

Pediatrics_

Full-Time electives

Students are encouraged to contact the department chairman or appropriate members of the staff to schedule the desired electives or to discuss possibilities for those which are not listed but in which the student has an interest.

Pediatric Externship - A

7 weeks; repeatable

Maximum students during period: 3

All* duties of a pediatric intern under the supervision of a pediatric resident and the pediatric full-time staff on the Bexar County Hospital Inpatient Services. All aspects of patient care at the inpatient level; week-end and night calls scheduled in regular pediatric house staff rotation. John R. Seals.

<u>Pediatric Externship - B</u>

7 weeks, repeatable

Maximum students during period: 2

Duties of a pediatric intern in the management of normal and ill newborns with supervision by the pediatric resident and full-time staff at either the Robert B. Green Newborn Nursery or the Santa Rosa Hospital Nursery.

Joint attendance by the student and pediatric resident at deliveries of high risk infants to gain experience in methods of resuscitation of the newborn; newborn nursery follow-up clinics, week-end and night calls

scheduled in the regular pediatric house staff rotation. H. W. Diserens, Robert B. Green Newborn Nursery. D.C. Mullins, Santa Rosa Hospital Nursery.

Pediatric Externship - Brooke General Hospital

7 weeks

Maximum students during period: 1

To be arranged through Dr. Michael J. Sweeney

All duties of a pediatric intern under supervision of pediatric residents and full-time pediatrics and nursery service staff. Department Chairman.

Pediatric Externship - Scott and White

7 weeks

Maximum students during period: 1

To be arranged through Dr. Michael J. Sweeney

All duties of a pediatric intern under supervision of pediatric residents and full-time pediatrics and nursery service staff at Scott and White Clinic and Scott and White Memorial Hospital, Temple, Texas. Exposure to a wide variety of inpatient and outpatient problems as seen in a group clinic practice. Emphasis placed on close supervision and consultation with full-time staff. R. E. Myers.

Ambulatory Pediatrics - Maverick County Child Health Care Center

(Eagle Pass, Texas)

7 weeks; non-repeatable

Maximum students during period: 1

A comprehensive health-care outpatient program in a rural setting sponsored by the Texas Chapter, American Academy of Pediatrics. The student will participate in screening and evaluation, preventive care, school health services, health education of the family and family planning, five days weekly and no night calls. W. M. Brendel.

Pediatric Cardiology - A

7 weeks; repeatable

Maximum students during period: 1

By prior arrangement the period may be equally divided between Pediatric and Adult Cardiology

Designed for acquisition of skills in diagnosis and management of congenital and acquired cardiac abnormalities including interpretation of EKG's, X-rays, angiocardiograms, and cardiac catherization data.

Provision for inpatient and outpatients experience at the Bexar County Hospital. J. B. Norton, Jr.

Pediatric Cardiology - B

7 weeks, repeatable

Maximum students during period: 1

Designed for acquisition of skills in diagnosis and management of congenital and acquired cardiac abnormalities including interpretation of EKG's, X-rays, angiocardiograms, and cardiac catheterization data. Provision for inpatient and outpatient experience at the Santa Rosa Children's Hospital. C. M. Kohler.

Pediatric Hematology

7 weeks; repeatable

Maximum students during period: 2

Participation in clinical investigations involving patients at the Bexar County, Robert B. Green, Santa Rosa, and Wilford Hall Hospitals.

Included are performance of laboratorry procedures such as osmotic fragility testing, red blood cell and leukocyte enzyme techniques, electorphoretic investigations of abnormal hemoglobins, cytogenic techniques, and supervised bone marrow aspirations and interpretation.

T. E. Williams.

Immunology-Allergy Research

14 weeks; repeatable

Maximum students during period: 2

Arrangements can be made to collaborate in research with other faculty members

Introduction to clinical and/or laboratory research with encouragement to plan and carry out a supervised project. Possible areas include hypersensitivity diseases, immunopathologic mechanisms, immunologic deficiency and reconstitution, and immunologic aspects of oncology and infection. W. T. Kniker.

Ambulatory Pediatrics

7 weeks; non-repeatable

Maximum students during period: 2

Evaluation and care of children as outpatients; participation on a scheduled basis in the General Pediatric Clinics, Pediatric Emergency Room and Pediatric Specialty Clinics - five days weekly. Students will work in the Pediatric Emergency Room one evening per week from 6:00 - 11:00 p.m. Invidualized schedules according to student needs and desires. H. S. Toy.

Pediatric Emergency Room

7 weeks

Maximum students during period: 1

Evaluation and care of the child receiving episodic health care and the acutely ill child, five days weekly, without night-call. H. S. Toy.

Pediatric Infectious Diseases

7 or 14 weeks

Maximum students during period: 1

Offered twice yearly by special arrangement

Clinical consultations, directed literature review, selected conferences related to current concepts in the diagnosis, pathogenesis and treatment of infections in infants and children; utilization of facilities of the Departments of Pediatrics, Microbiology and Pathology to gain practical laboratory skills. J. J. Eller.

Introduction to Experimental Virology and Immunology

7 weeks repeatable

Maximum students during period: To be arranged

Can be combined with Pediatric Infectious Diseases (above)
Laboratory research encompassing cellular biology, biochemistry,
immunology, and epidemiology of human viruses. Herpes virus infections
and their relationship to cancer are being studied utilizing nonhuman
primates at the Southwest Foundation For Education and Research.

J. J. Eller.

Pediatric Nephrology

7 weeks; repeatable

Maximum students during period: 2

Designed to provide insight into (1) normal physiology, pathophysiology and histopathology, including immunopathology of renal diseases; (2) diagnosis and care of children with acute and chronic renal diseases; (3) hemodialysis and renal transplantation; (4) fluid and electrolyte problems in infants and children and treatment thereof. M. J. Sweeney.

Pediatric Genetics and Cytogenetics

7 weeks

Maximum students during period: 2

Laboratory instruction on human chromosomal material. Exposure to genetic counselling methods. Review of human genetics. Discussion of major pediatric syndromes. Clinical exposure to human genetic problems at Birth Defect Evaluation Center. J. M. Louro.

Pediatric Neurology

7 weeks

Maximum students during period: 2

A comprehensive presentation of clinical neurological diseases in children, including inpatient service, outpatient clinics, conferences in neuroradiology, neuropathology and neurology-neurosurgery and EEG interpretation. R. W. Mackey and J. R. Seals.

Pediatric Surgery

7 weeks

Maximum students during period: 1

Attendance in surgery and participation in preoperative and postoperative management of children with pediatric surgical disorders. Offered under the auspices of Dr. I. A. Ratner at Santa Rosa Children's Hospital. Department Chairman.

Preceptorships in Pediatric Practice

7 weeks, non-repeatable

Maximum students during period: 5

Must be scheduled well in advance with the Coordinator Preceptorships to include inpatient, hospital, and community experience with practicing Pediatricians in rural setting and areas of low physician complement:

Williams S. Conkling, M.D.

Bolton L. Outlar, M.D.

Wilbur E. Crenwelge, M.D.

Alexander W. Pierce, M.D.

Navasota, Texas

Wharton, Texas

Fredericksburg, Texas

Wichita Falls, Texas

Coordinator: A.W. Pierce, Jr.

Part-Time Electives

During any one seven-week period, part-time pediatric electives in general pediatric clinics, subspecialty clinics, or emergency room participatingon may be taken consurrently in various combinations. It is not necessary that all such part-time subjects be limited to those offered by the Department of Pediatrics.

General Pediatric Clinics

7 weeks; repeatable

Time: 8:00 a.m. to 12:00 Noon

Maximum students during period: 1 per clinic listed below Emphasis on management of children on a longitudinal basis.

Clinic A, Mondays

Clinic B, Wednesdays

Clinic C, Thursdays

Clinic D, Fridays

H. S. Toy

Pediatric Emergency Room

7 weeks; repeatable

Time: As listed below

Maximum students during period: 1 per clinic listed below Evaluation and care of child receiving episodic health care and the acutely ill child.

from 8:00 AM to 12:00 Noon Clinic A, Mondays Clinic Al, Mondays from 1:00 PM to 5:00 PM Clinic B, Tuesdays from 8:00 AM to 12:00 Noon Clinic Bl, Tuesdays from 1:00 PM to 5:00 PM Clinic C, Wednesdays from 8:00 AM to 12:00 Noon Clinic Cl, Wednesdays from 1:00 PM to 5:00 PM Clinic D, Thursdays from 8:00 AM to 12:00 Noon Clinic D1, Thursdays from 1:00 PM to 5:00 PM Clinic E, Fridays from 8:00 AM to 12:00 Noon from 1:00 PM to 5:00 PM H.S. Toy. Clinic El, Fridays

Pediatric Endocrinology

7 weeks; repeatable

Time: Wednesdays from 1:00 PM to 5:00 PM

Maximum students during period: 2

Experience in the Pediatric Endocrine Clinic. Additional time may be elected for endocrinology in scheduled conferences, rounds or a combination adult-pediatric endocrine rotation. R. C. Franks.

Pediatric Hematology

7 weeks; repeatable

Time: Wednesdays from 1:00 PM to 5:00 PM

Maximum students during period: 1

Evaluation and management of children with a broad spectrum of hematologic and oncologic problems. $\underline{\text{T. E. Williams}}$.

Pediatric Nephrology

7 weeks; repeatable

Time: Wednesdays from 1:00 PM to 5:00 PM

Maximum students during period: 1

Participation in management of children with acute and chronic renal diseases. M. J. Sweeney.

Clinical Immunology and Allergy

7 weeks; repeatable

Time: To be individually arranged

Maximum students during period: 2

An in-depth, broad experience in many aspects of clinical immunology, including atopic and other hypersensitivity reactions, chronic lung diseases and tests of pulmonary function, dermatologic conditions, and evaluation of immunologic competence. Various clinical faculty members supervise the training at UTHSC, Wilford Hall, Brooke Army Medical Center, Robert B. Green Clinic and an office externship. Diagnosis and treatment are emphasized; research is not. W. T. Kniker, Wallace Moore, Jr., Max I. Michels, and Robert Greely.

Infectious Diseases in the Newborn

7 weeks

Maximum students during period: 1

Offered by special arrangement

Diagnosis and management of infections occurring in the newborn nursery.

May be combined with elective rotations in the nursery. J. J. Eller.

Pediatric_Neurology_

7 weeks; repeatable

Time: Tuesdays from 8:00 AM to 12:00 Noon

Maximum students during period: 1

Outpatient and long-term management of children with a variety of neurological disorders. Selective conferences. R. W. Mackey and J. R. Seals.

<u>Pediatric Cardiology</u>

7 weeks; repeatable

Time: Wednesdays from 8:00 AM to 12:00 Noon

Maximum students during period: 1

Provision of long-term care for children with congenital and acquired cardiac disease. J. B. Norton, Jr.

Pharmacology

Pharmacology Research

14 weeks

Maximum students during period: 6

Work on a research problem with members of the Pharmacology Department.

A. H. Briggs & Staff.

Principles of Pharmacology

16 weeks; September - December

Maximum students during period: To be arranged

Basic principles of pharmacology and toxicology to include molecular

structure, chemical bonding, thermodynamics and concept of free energy,

absorption and distribution of drugs, site of drug action, mechanism of

drug action, structure activity relationships and drug fate. A. H. Briggs

& Staff.

Endocrine Pharmacology

7 weeks

Maximum students during period: To be arranged

A study of the endocrine system, its relationship to drug action, and
the effects of drugs on the endocrine system. A. H. Briggs.

Neuropsychopharmacology

7 weeks

Maximum students during period: To be arranged $\begin{tabular}{ll} A study of the relationship between drug action and central nervous \\ system function. R. D. Huffman and K. Blum. \\ \end{tabular}$

Seminar in Pharmacology

7 weeks; repeatable

Maximum students during period: To be arranged

A seminar of recent advances in pharmacology conducted by staff and students. A. H. Briggs & Staff.

Clinical Pharmacology

7 weeks

Maximum students during period: Unlimited

Presentation and discussion of patients with drug problems; review of pharmacology and therapeutics. A. H. Briggs.

7 weeks

Maximum students during period: To be arranged

A critical examination of the current drug scene. Detailed study of
drug use and abuse by means of lectures, group discussions, television
tapes, films interviews with drug users, and work in outpatient
methadone programs. Subjects include marijuana, hallucinogens
(LSD, mescaline, etc.), CNS depressants (barbiturates, solvents, etc.),
alcohol, narcotics, CNS stimulants ("speed". etc.). A. H. Briggs, Staff
and Guests.

Biophysical Pharmacology

7 or 14 weeks

Maximum students during period: To be arranged

Biophysical techniques and concepts - radioisotopes, electronics,

mathematical analysis, etc. <u>V. S. Bishop</u>.

Special Topic in Pharmacology

Period: To be arranged

Maximum students during period: To be arranged

Problems selected from several areas of pharmacology, i.e. autonomics,

HS-205

renal, cardiovascular. A. W. Briggs & Staff.

Advanced Pharmacology I

Period: Fall of 1974 and every odd year thereafter (7 or 14 weeks)

Maximum students during period: To be arranged

Principles of drug action; molecular mechanisms of drug action; drug

Principles of drug action; molecular mechanisms of drug action; drug metabolism; drug receptor interactions, etc. Pharmacology Faculty.

Advanced Pharmacology II

Period: Spring of 1974 and ever even year thereafter (7 or 14 weeks)

Maximum students during period: To be arranged

Action of drugs upon the nervous system. Teuropharmacological and psychopharmacological drugs and their actions. R. D. Huffman, K. Blum, and L. Felpel.

Advanced Pharmacology III

Period: Fall 1974 and every even year thereafter (7 or 14 weeks)

Haximum students during period: To be arranged

Biochemical and toxicological mechanisms of drug action. II. Yedina and
W. B. Stavinoha.

Advanced Pharmacology IV

Period: Spring semester 1975 and every odd year thereafter (7 or 14 weeks)

Maximum students during period: To be arranged

Action of drugs on the autonomic nervous system; cardievascular and renal action of drugs. V. Bishop, O. Carrier, A. R. Briggs.

Physical Medicine and Rehabilitation Clinical Physical Medicine and Rehabilitation

7 weeks: repeatable

Individual arrangement for shorter periods or for combined electives are possible

Especially recommended for students planning to enter general HS-206

practice or to specialize in neurology, neurosurgery, orthopaedics, internal medicine, or physical medicine and rehabilitation.

Clinical rotation may be tailored to meet the individual student's interest areas within the fields, i.e., rehabilitation of neurologic and neuromuscular disorders: conservative management of arthritis and soft-tissue pain syndromes: electromyography and electrodiagnosis; utilization on application of physical modalities in practice: speech and hearing disorders and their management, etc. A. E. Grant & Staff.

Physiology

Mechanics of Muscular Contraction

7 weeks

Naximum students during period: 2

Properties of skeletal muscles at very short lengths as they relate to normal mechanisms of force generation and relaxation. R. J. M. McCarter.

Research in Neurophysiology

7 weeks

Maximum students during period: 2

Individualized program of guided research in areas of current interest in neurophysiology. Details to be arranged with instructor. \underline{T} . \underline{N} . Mikiton.

Research in Cellular Physiology

7 weeks

Maximum students during period: 2

Student participation in on-going membrane physiology research.

Selection and planning a specific problem during first week and

Laboratory work the remainder of the elective period. C. Levinson.

Water and Llectrolyte Balance in Manmalian System

7 weeks

Maximum students during period: 2

Lecture, laboratory and seminar course concerned with the mechanisms by $$_{\mbox{\scriptsize HS-207}}$$

which cells and tissue maintain water and electrolyte composition; an introduction to isotope tracer methodology. C. Levinson, T. C. Smith.

Structural and Functional Studies on Serum Lipoproteins

7 weeks

Maximum students during period: 2

Materials are selected on the basis of the general aspect of chemical and physical structure in conjunction with an intergrated approach to mechanisms and disorders of serum lipoproteins. B. P. Yu.

Psychiatry

Electives will be tailored to the particular interests and needs of the medical student. Part-time electives are possible and need not be taken strictly within the Department of Psychiatry. Students may contact Dr. Leon or those in charge of the various electives.

Psychiatry for the Family Physician

Psychiatry for the Internist

Psychiatry for the Obstetrician-Gynecologist

Psychiatry for the Pediatrician

Psychiatry for the Surgeon

For each of the above:

7 weeks

Maximum students during period: 1

Participation in the program of the consultation-liaison service.

Clinical responsibility, both in consultation and treatment, emphasizing patients and problems from the students' area of interest. As only one student may take the elective in a period, and it may not be available for every period, the student should make arrangements as early as possible. D. Fuller.

Clinical Neuropsychopharmacology

7 weeks, 10 hours per week, part time

Maximum students during period: 2

An integration of biochemical neuropharmacology with interpersonal and intrapsychic aspects of drug use, primarily involving drugs used in clinical psychiatric practice. The elective is a joint offering of the Departments of Psychiatry and Pharmacology. C. Martinez, D. Ross.

Clinical Psychiatry

7 weeks

Maximum students during period: 4

Participation in the clinical program of the department at the level of a first-year psychiatric resident. Depending upon the interests and

needs of the medical student, he may be assigned to one or more of the following units: inpatient service, outpatient service, crisis unit, children's service, day hospital, field program. C. Bowden.

Child and Adolescent Psychiatry

7 weeks

Maximum students during period: 2

Clinical experience in child and adolescent psychiatry covering aspects of family therapy, community consultation, group therapy, mental retardation, inpatient treatment, drug abuse, and learning disorders; experience to be modified by interest and need of student. A.C. Serrano, C.M. Pfeifer, James Stedman.

Drug Abuse

7 weeks

Maximum students during period: 2

Participation in the clinical evaluation and treatment of patients dependent upon both narcotic and non-narcotic drugs. $\underline{\text{C. Bowden, F.}}$ Maddux.

Research in Medical Sociology

7 weeks

Maximum students during period: 2

Participation in ongoing research projects of the section. Students are

encouraged to arrange an independent project with their instructor.

Areas of current study include epidemiology of mental illness, patterns of utilization of health care systems, and the influence of culture on psychiatric attitudes. H. Martin.

Practicum in Group Dynamics

12 weeks, 3 hours each week, part time only

Maximum students during period: 18

Students will participate in ongoing group activities designed to highlight the principles of group formation, decision making, conflict resolution, and maintenance. Personal learning will be in the areas of styles of managment, styles of participation, and levels of communication. This is not a course in group psychotherapy nor is it intended to serve as group psychotherapy for the participants. J. Kohos.

Indian Health Service

7 weeks

Maximum students during period: 2

Opportunity to work in one of the Indian Health Service Hospitals, especially in Oklahoma, Arizona, and New Mexico. The location and experience can be selected to emphasize psychiatric or general medical interests of the student. G. Meyer.

Radiology

General Radiology

7 weeks; repeatable

Maximum students during period: 12

Radiologic diagnosis, radiation therapy, and nuclear medicine. \underline{P} . Zanca $\underline{\&}$ Staff.

General Surgery

Senior Surgical Clerkships

3 1/2 or 7 weeks in each service

Maximum students during period: To be arranged

Function as a junior intern totally integrated into the daily operation of the service; meet and work-up patients; scrub and attend clinics: attend all organized conferences of the service; responsible for case presentations. J.B. Aust & Staff.

Surgical Oncology Clerkships

3 1/2 or 7 weeks

Maximum students during period: To be arranged

Participation in the daily operation of the Head & Neck-Oncology

Service; meet and work-up patients; scrub and attend clinics; attend all organized conferences of the service; responsible for case presentations.

Fourth year students function as junior interns. A.B. Cruz, Jr., & Staff.

Surgical Aspects of Transplantation

3 1/2 or 7 weeks

Maximum students during period: 2

Participation with the transplant team in the transplantation of organs in the laboratory and in the management of patients being treated by chronic dialysis preparatory to renal transplant. J.B. Aust & Staff.

Surgical Anatomy

7 weeks

Number of students during period: To be arranged

Lectures on anatomy with emphasis on surgical approaches to deeper

structures in applied anatomy and physiology, both normal and abnormal.

This course is usually taken in conjunction with Surgical Oncology. The

senior student is expected to participate in the daily operation of the

Head and Neck and Surgical Oncology Services, meet and work-up patients,

scrub and attend Clinics, attend all organized conferences of the

service, and be responsible for case presentations. Senior students may

function as junior interns. There will be cadaver dissection.

A.B. Cruz, Jr. & Staff.

Supervised Surgical Research

7 weeks; repeatable

Maximum students during period: 2 per faculty member

Work with a particular member of the surgical faculty in his research

laboratory. Participation determined by individual arrangement with

instructor. J. B. Aust & Staff.

Emergency Clinical Surgery

3 1/2 or 7 weeks

Maximum students during period: 3

Participation in the diagnosis and early resuscitation of patients with surgical problems presented in the emergency room. Specific attention given to treatment of severely injured patients and those whose condition requires prolonged artificial support. H.D. Root and Staff.

Special Project in Surgery_

3 1/2 or 7 weeks; repeatable

Maximum students during period: 2 per faculty member

Performance of a special project of specific interest to be arranged with
an individual faculty member. J.B. Aust and Staff.

Affiliated Surgical Clerkships

3 1/2 or 7 weeks

Maximum students during period: To be arranged

All arrangements must be made through the Department of Surgery, UTHSC

General surgery clerkships may be taken at Wilford Hall United States

Air Force Medical Center, Lackland Air Force Base, Texas, or at Brooke

General Hospital, Fort Sam Houston, Texas. Clerkship are also available with the Burn Unit of the United States Army Institute of Surgical Research, Fort Sam Houston. J.B. Aust & Staff.

Neurological Surgery

<u> Neurological Surgery</u>

3 1/2 or 7 weeks; repeatable

HS-212

Maximum students during period: To be arranged

Assumption of duties similar to those of an intern with emphasis on the pathophysiological correlates of neurosurgical disease. Active participation in patient care. Clinical and basic research encouraged. An opportunity to increase skills in neurological history taking, examination, and patient care. Operating Room attendance and participation required. J.L. Story & Staff.

Ophthalmology

Clerkship in Ophthalmology

3 1/2 or 7 weeks

Maximum students during period: 2 at UTHSC, 1 at the Audie Murphy

Veterans Administration Hospital,

and 4 each at Wilford Hall United

States Air Force Hospital and

Brooke General Hospital

Medical and Surgical aspects of ophthalmology: outpatient and inpatient evaluations with emphasis on ophthalmoscopy and other diagnostic techniques; required participation in rounds, conferences and teaching sessions; optional attendance at evening teaching activities.

Arrangements for all hospitals through UTHSC. G. W. Weinstein & Staff.

Oral Surgery

Clerkship in Oral Surgery

3 1/2 or 7 weeks

Maximum students during period: 2

Active student participation in the daily operation of the service. Meet and work-up patients, scrub and attend clinics. Attend all organized conferences of the service; responsible for case presentations. Function as junior intern totally integrated into activities oof the service. Exposure is provided in out-patient general anesthesiology, fracture of the jaws corrective surgery for dento-facial anomalies and exodontia.

H.B. Tilson & Staff.

Otorhinolaryngology

Otorhinolaryngic Surgery

3 1/2 or 7 weeks

Maximum students during period: 2 per hospital, 1 Veterans

Administration Hospital

Active participation in diagnostics and patient care in the outpatient, inpatient, and operating room areas to include ward rounds, patient work-ups, treatment seminars and the opportunity to develop diagnostic skills and gain experience in common treatment problems in the ear, nose, throat and head & neck areas. Clerkships at Bexar County Hospital and the Audie Murphy Veterans Administration Hospital, <u>Dr. George Cates</u>; Brooke General Hospital Beach Pavilion, <u>Dr. S. R. LeNay</u>; Wilford Hall USAF Medical Center, <u>Dr. F. W. Fite</u>. Arrangements for all clerkships to be made through division and department offices, UTHSC. <u>G.A. Gates and Staff</u>.

Plastic & Reconstructive Surgery

Clerkship in Plastic Surgery - Wilford Hall USAF Hospital

3 1/2 or 7 weeks

Maximum students during period: 1

Active participation in inpatient and outpatient care, with emphasis on broad exposure to basic surgical tenets and their applications from basic science; participation in joint conferences; clinical participation in evaluation and treatment of patients in the surgical fields of cosmetic, reconstructive, head and neck, burn, hand surgery, malignancy.

David Bowers.

Orthopaedic Surgery

Clerkship in Orthopaedics, Trauma & Fractures

3 1/2 weeks

Maximum students during period: 6

Work as a member of the Bexar County Teaching Hospital Orthopaedic Team.

Assignment with a specific resident to work in the emergency room,

clinics, operating room. Experience in extremity trauma, fracture

reductions, and application of plaster casts. C.A. Rockwood, Jr. & Staff.

Clerkship in Orthopaedics, Adult Reconstructive and Trauma

Services - Audie Murphy Nemorial Veterans Administration Hospital

3 1/2 or 7 weeks

Maximum students during period: 3

Work as a member of the Bexar County Teaching Hospital Orthopaedic Team.

Assignment with a specific resident to work in the outpatient clinics, on the wards and in surgery at the Veterans Administration Hospital. Most of the experience will include problems in joint replacement, low back pain both from a surgical and conservative viewpoint and some reconstructive hand surgery. This rotation applies more to the orthopaedic problems seen in older individuals. In addition there will be exposure to selected trauma problems. Orthopaedic Staff.

Orthopaedic Externship

3 1/2 or 7 weeks

Maximum students during period: 3

Prerequisite: Clerkship in Orthopaedics, Trauma & Fractures

Assignment to one of the Orthopaedic Services at the Bexar County

Hospital as junior intern. Work-up patients, emergency room coverage
with residents; attend surgery and clinics. Experience in general
orthopaedics & trauma. C.A. Rockwood, Jr. & Staff.

Preceptorship in Orthopaedics, Trauma and Fractures

3 1/2 or 7 weeks

Maximum students during period: Variable

Prerequisite: Clerkship in Orthopaedics, Trauma & Fractures.

Assignment to a practicing orthopaedic surgeon (or group) from the Clinical Faculty, either in San Antonio or out of town. The student will see patients in the surgeon's private office, scrub on surgical cases, and participate in the care of patients in the emergency room.

Clerkship in Orthopaedics - Wilford Hall USAF Hospital

3 1/2 or 7 weeks

Maximum students during period: 1 or 2

Assignment to Department of Orthopaedics at Wilford Hall. Work with the 16 Orthopaedic residents and four full-time faculty. Department averages 180 patients. Clinic, emergency room, operating room and ward experience with emphasis on adult reconstructive surgery, children's orthopaedics, and problems of the hand. Orthopaedic Staff.

Clerkship in Orthopaedics - Brooke General Hospital

3 1/2 or 7 weeks

Maximum students during period: 1 or 2

Assignment to Department of Orthopaedics at Brooke General Hospital.

Work with the 12 orthopaedic residents and four full-time faculty.

Department averages 300 patients with emphasis on trauma (war surgery) and management of amputees. Work in clinics, emergency room, operating room, and ward. Orthopaedic Staff.

Clerkship in Sports Medicine -

University of Texas at Austin

3 1/2 or 7 weeks

Maximum students during period: 2

Assignment to the Orthopaedic resident on rotation to the campus at Austin. Time divided between outpatient clinics in the Student Health Center in Austin and working with the athletic teams of the University. Emphasis on management of injuries as they specifically relate to the

athlete and the young adult. Orthopaedic Staff.

Clerkship in Hand Surgery

3 1/2 weeks

Maximum students during périod: 1

Prerequisite: Clerkship in Orthopaedics, Trauma, and Fractures.

Assignment to a specific orthopaedic resident on the Orthopaedic Hand

Surgery Service. Participation in care of acute traumatic and elective reconstructive problems of the hand. Functional anatomy and examination of the hand (clinical experience supplemented by gross dissection of the upper extremity) is emphasized as well as principles of patient management. D.P. Green & Staff.

Children's Orthopaedics

3 1/2 or 7 weeks

Maximum students during period: 2

Work with Children's Orthopaedic residents at the Santa Rosa Children's Hospital. Inpatient work-ups, attend surgery and daily children's clinics. Experience in the diagnosis of congenital musculoskeletal abnormalities, cerebral palsy, and pediatric bone and joint problems. (Summer months recommended.) Orthopaedic Staff.

Clinical Research Project in Orthopaedics

3 1/2 or 7 weeks

Maximum students during period: 4

Individual arrangements will be organized to work with faculty or resident in basic or clinical studies. For example - a complete review of a clinically oriented problem such as osteomyelitis - including the patho-physiology, the x-ray changes, etc. Orthopaedic Staff.

Emergency Medical Services - Ambulance

3 1/2 weeks; repeatable once

Maximum students during period: 5

Prerequisites: Successful completion of Emergency Medical Care in

medical curriculum: have a copy of Emergency Care Manual used in curriculum of Emergency Medical Technicians: review course content for Emergency Medical Technicians curriculum.

Assignment to a specific team of the San Antonio/Bekar County Emergency Medical Services System (EMS). Emergent runs in modulances with at-the-scene management of medical, surgical, and obstetrical emergencies; assistance in extrication, reports, dispatching, communication, vehicle maintenance, and resupply. Contact: R.A. Rockwood.

Orthopaedic Outpatient

3 1/2 or 7 weeks

Maximum students during period: 2

For students with interest in Family Practice or Pediatrics
Orthopaedic problems that can be handled on an outpatient basis.

Afternoons at the Robert B. Green Hospital Orthopaedic Outpatient
Clinics; evenings and every third weekend in Bexar County Hospital
Emergency Room handling acute orthopaedic injuries and fractures.

Mornings free for follow-up of surgical cases seen. C.A. Rockwood.

Thoracic and Cardiovascular Surgery

Clerkship in Thoracic and CV Surgery

3 1/2 or 7 weeks

Maximum students during period: No maximum

Active student participation in the daily operation of the service. Meet and work-up patients, scrub and attend clinics and conferences. Total integration into activities of the service, fourth year students function as junior interns. Specific programs, research projects or rotations may be arranged dependent upon individual interest. This is not a "spectator sport." Students will get an intensive exposure to clinical respiratory and cardiovascular pathophysiology. J.K. Trinkle & Staff.

<u>Clerkship in Thoracic Surgery - San Antonio</u>

State Chest Hospital

3 1/2 or 7 weeks

Maximum Students during period: To be arranged

Same as above. Highly recommended for those interested in both medical and surgical aspects of pulmonary disease. Director: Dr. Donald

Campbell. Arrangements through division and department offices, UTHSC.

J.K. Trinkle & Staff.

<u>Clerkship in Thoracic and Cardiovascular Surgery - Wilford Hall</u>
USAF Medical Center

Same as above. Director: Dr. William Stanford. J.K. Trinkle & Staff.

<u>Clerkship in Thoracic and Cardiovascular Surgery - Brooke General</u>
Hospital

Same as above. Director: Dr. William Cox. J.K. Trinkle & Staff.

Urologic Surgery

Externship in Urology

3 1/2 or 7 weeks

Maximum students during period: 2

Work as a junior house officer on the urology service at the Bexar County Teaching Hospital and the Audie Murphy Veterans Administration Hospital simultaneously. Participate in surgery, clinics and conferences with advanced responsibility over that of third-year clerkship. H.M. Radwin & Staff.

STUDENT ORGANIZATIONS

The Student American Medical Association

The Student American Medical Association (SAMA) is a national medical student organization created in 1954. Its chief aim is to acquaint future physicians with the privileges and responsibilities which organized medicine must assume in the general professional, social, and economic framework of the nation. The local society was organized in 1969, and attempts to represent medical students before the administration and faculty and also at state and national levels. SAMA at San Antonio is involved in several projects which benefit both the community and the medical students.

The SAMA Reproductive Clinic is involved in bringing needed gynecological and prenatal care to a black/chicano section of San Antonio. First-year students work in the laboratory where they have a chance to learn and practice many skills such as blood counts, venipuncture and other techniques of use during the clinical years. Second-year students, after a special training course, act as student-clinicians under the supervision of Obstetrics and Gynecology faculty members.

The SAMA DePaul Family Health Clinic seeks to bring quality health care in family practice setting to a low-income area of San Antonio.

First and second-year students staff the laboratory while third and fourth year students act as student-clinicians under the supervision of faculty members.

Other SAMA activities include publication of a student newspaper,
THE ORGAN, and a Student Directory. Plans for the future include a
Politics/Medicine/Law Newsletter and the establishment of a Rape Crisis
Center. A yearly picnic is given by SAMA for new first-year students
arrive to enable all students and faculty to meet in an informal
atmosphere.

Membership is voluntary, but encouraged, and dues are \$20.00 for a full four-year membership.

The Student National Medical Association

The Student National Medical Association was founded in 1964 as a

non-profit membership corporation chartered under the laws of the District of Columbia primarily for Black and other minority students in pursuit of a medical education. The local chapter was established in 1970 and associate membership is open to any medical student or intern. The aims and purposes of NSMA are to create an atmosphere wherein professional excellence and moral principles can find fullest expression; to disseminate information relative to minority problems within the field of medical education; to take necessary and proper steps to eradicate prejudicial practices in the field of medical education and related areas as these practices appear to be based on race, creed, color, sex or national origin; to develop workable programs for the implementation of better urban and rural health care; to provide national leadership in the promulgation of legislative policies for the provision of better health care; to sponsor programs for minority youth to encourage their entrance into the health professions; and to raise the levels of Black student recruitment, admissions, and retention in schools training health care professionals. Additionally, the SNMA makes available periodicals, publications, insurance plans, and financial services of various kinds for its members.

The Alpha Omega Alpha Society

The Nedical School established an Alpha Omega Alpha Society in 1975. AOA is a national society organized for the promotion of scholarship and research in medical schools, the encouragement of high standards of character and conduct among medical students and graduates, and the recognition of high attainment in medical science practice and related fields by alumni and faculty. Nomination to membership will occur following completion of the required clerkships; thus, individual students will not be singled out during the period of formal course grading. Election, which is based upon academic excellence achieved in all required courses of the curriculum, is limited to no more than one-sixth of the total number of graduates.

Other Organizations

The Christian Medical Society

The Family Practice Club

The Josephine Kingsley Memorial Branch of the American Women's Association

The National Chicano Health Organization

The Organization of Student Representatives of the American

Association of Medical Colleges

Phi Chi National Medical Fraternity

Phi Rho Sigma Fraternity

The Student Research Club

POST GRADUATE MEDICAL EDUCATION OF CRADUATES

5-Year Profile of Graduating Classes

Тур	e	of	Internship
or	Re	síd	lency

or Residency						
•	1970	1971	1972	1973	1974	
Rotating	14	6	11	25	27	
Mixed	1		3	2	1	
Medicine	7	8	18	17	23	
	i Li		16	19	15	
Surgery		1	1	3	4	
Pathology	44.44	٠.	1.)	44	
Obstetrics/	0	,	0	,	0	
Gynecology	2	4	8	4	9	
Pediatrics	1	7	7	1.7	7	
Family Practice			780 N 1070A	7	3	
Psychiatry	3	4	7	5	5	
Radiology				1		
Total	32	30	7 1.	1.00	94	
Graduates Interning in Texas						
Hospital	1970	1971	1972	1973	1974	
Austin State		1	****	****		
Baptist Memorial	***		1			
Baylor College Affil.					2	
Baylor Univ. Medical						
Center	1		3	7	1	
Bexar County Teaching	14	1.2	17	31	28	
Brackenridge				2		
Brooke General	***		2		3	
Children's Medical Ctr.				1		
Hermann			1		1	
John Peter Smith			3	4	3	
Memorial Medical Ctr.			1	•)	
					1.	
Methodist (at Dallas)	1	1	1	4	4	
Parkland Memorial			1	2		
St. Joseph		****			1	
St. Luke's Episcopal	****	~-			1	
St. Paul	1	1			1	
Scott and White Memorial	***	2	4	4	2	
Texas Tech Affiliated	·~ —				1	
Timberlawn Psychiatric					1	
Univ. of Texas Hosps.						
at Galveston	***	1	total form	***	1	
Veterans Admin.				1		
Wilford Hall USAF	3		3	7	1	
Wm. Beaumont General	1		2	4].	
Total	21	18	40	66	52	
Number of Graduates	33	30	71	101	96	
Percentage Interning						
in Texas	64%	60%	56%	65%	54%	

Institutions outside of Texas where one or more graduates of

The University of Texas Medical School at San Antonio have pursued post-graduate education.

. .zona

Phoenix

Phoenix Affiliated Hospitals

Arkansas

Little Rock

University Hospital

California

Bakersfield

Kern County General Hospital

Davis

Univ. of California Affiliated Hoppital

Fort Ord

US Army Hospital Spec, alized Treatme at Facility

Huntington

Huntington Memorial Laspital

Loma Linda

Loma Linda Univ. Affiliated Hospital

Los Angeles

L.A. County USC Medic l Center Univ. of California Muspital at L.A. Medical Center

Oakland

Oakland Naval Hospita.

Orange

Orange County Children's Hospital

San Bernardin

San Bernardino County General Hospital

San Diego

Naval Hospital San Diego County Unive sity

San Francisco

Letterman General Hospital St. Mary's Hospital University of California dospitals

San Jose

Santa Clora Valley Med.cal Center

Travis Air Force Base

David Grant USAF Medical Center

Columado

Denver

Fitzsimmons General (A. ay Med. Service abspired) St. Luke's Hospital University of Colorado Redical Center Connecticut

Waterbury

Waterbury Hospital

Delaware

Wilmington

Wilmington Medical Center

District of Columbia

Washington

District of Columbia Hospital Walter Reed General Hospital Washington Hospital

Florida

Gainesville

University of Florida

Georgia

Atlanta

Grady Memorial Hospital

Hawaii

Honolulu

Tripler General Hospital University of Hawaii Affiliated Hospital

Illinois

Belleville

USAF Medical Center, Scott AFB

Chicago

Children's Memorial Hospital Northwestern University Medical Center University of Illinois Affiliation Hospitals

Kentucky

Louisville

St. Joseph Infirmary

Maryland

Baltimore

Johns Hopkins Hospital
The Sheppard and Enough Pratt Hospitals

Bethesda

Naval Hospital

Massachusetts

Boston

Boston City Hospital Massachusetts General Hospital

Michigan

Detroit

Henry Ford Hospital Lafayette Clinic

Minnesota

Minneapolis

Hennepin County General Hospital University of Minnesota Hospitals Rochester

Mayo Graduate School of Medicine

St. Paul

St. Paul Ramsey Hospital

Mississippi

Biloxi

Keesler AFB Hospital

Jackson

University Hospital

Missouri

Columbia

University of Missouri Medical Center

St. Louis

Barnes Hospital Group

St. Louis Children's Hospital

Nebraska

Omaha

Creighton University Affiliated Hospital

New Nexico

Alburquerque

University of New Mexico Affiliated Hospital

New York

Bronx

Bronx Municipal Hospital Bronx State Hospital

Manhasset

North Shore Memorial

New York City

Montefiore Hospital

New York Medical College Netropolitan Hospital

Rochester

Strong Memorial Hospital

Syracuse

Syracuse Medical Center

North Carolina

Butner

John Umstead Hospital

Chapel Hill

North Carolina Memorial Hospital

Durham

Duke Medical Center

Chio

Cleveland

Case Western Reserve

Cleveland Metropolitan Hospital

Columbus

Riverside Methodist Hospital University Hospital

HS-226

Dayton

Good Samaritan Hospital

Wright-Patterson AFB

USAF Medical Center

Oklahoma

Oklahoma City

University of Oklahoma Hospitals University of Oklahoma Veterans Administration Hospital

Oregon

Portland

Providence Hospital
University of Oregon Medical School
Hospitals and Clinics

Pennsylvania

Philadelphia

Naval Hospital

South Carolina

Charleston

Medical Univ. of South Carolina Hospitals

South Dakota

Sioux Falls

McKennan Hospital Sioux Valley Hospital

Tennessee

Nashville

Vanderbilt Univ. Affiliated Hospitals

Utan

Salt Lake City

Latter Day Saints Hospital

Vermont

Burlington

Medical Center Hospital of Vermont

Virginia

Portsmouth

Naval Hospital

Richmond

Medical College of Virginia

Roanoke

Roanoke Memorial Hospital

Washington

Seattle

Providence Hospital University of Washington Affiliated Hospital

Spokane

Deacones Hospital

Tacoma

Madigan General Hospital

Wisconsin

Madison

University Hospitals

Milwaukee

Milwaukee County General

HS-227

FINANCIAL INFORMATION

Since matriculation is not complete until tuition and fees are fully paid a student should be prepared to make these payments during scheduled registration for each academic year. Both tuition and fees are subject to change according to the actions of the Texas State Legislature and the Board of Regents.

Prepayments

The filing fee is non-refundable and paid at the time of application. It ranges from \$10.00 to \$25.00 depending on the number of schools to which application is made. (see Application Procedure)

Tuition

In accordance with action of the 62nd Legislature, tuition for each academic year of twelve months is \$400.00 for residents of Texas and \$1200.00 for nonresidents. Prorated tuition is charged for academic years of less than twelve months. The detailed regulations governing definition of residency as set forth by the Legislature can be found in the Appendix, page ______. Any candidate whose legal residency in Texas is not clearly established may have a University opinion rendered by requesting a copy of The University of Texas Legal Residence Questionnaire from The University of Texas Medical and Dental Application Center. (see Application Procedure)

Fees

The laboratory fee is \$32.00 for each of the first two years.

A microscope rental fee is \$60.00 per year the first two years. The microscope, which is required, is of high quality. Naintenance is provided by the school.

The student activity fee is \$65.00 a year to help cover the costs of students' outpatient hospital charges in the Student Health Service.

(See also Student Health Service, page _____)

As authorized by the State Legislature and approved by the Board of Regents every student is required to pay the student health fee.

An identification fee of \$2.00 payable upon registration, is for a name tag which must be worn during all the medical program and for a student identification card. Lost items, which must be replaced, cost \$1.00 each.

The parking fee is \$3.00 a year and includes one decal. Additional decals for a second or replacement vehicle are \$1.00 each per year. The fee for a motorcycle is \$1.50 per year.

A graduation fee of \$25.00, payable at registration for the fourth year, covers the cost of the diploma, rental of cap, gown, and hood and related graduation expenses.

Other Expenses

Students are required to enroll in the Blue Cross Hospital Services Plan designed for students at The University of Texas Health Science Center at San Antonio or show evidence of enrollment in another hospitalization plan with equal or greater provisions. A student may enroll his spouse and/or children at additional cost. The current annual costs for this plan are: \$39.72 for student only: \$100.80 for student and one dependent; \$109.80 for student and two or more dependents. Inpatient hospital charges not reimbursed by hospitalization insurance are the responsibility of the student.

White coats are approximately \$13.00 each including the identifying medical school patch. This garment is traditionally worn by medical students throughout their medical school program. The number of coats necessary is a matter of individual student requirement.

Books and equipment, excluding the microscope rental fee, cost approximately \$600.00 the first year and \$250.00 the second year. Each year thereafter it will be at least \$150.00. These are estimates which

vary according to individual choice and market-price fluctuations.

Living arrangements are made by each individual student. Although there is no Health Science Center housing for students, the Financial Aid Office maintains a listing of houses and apartments and will assist students whenever possible. Married students should arrange for living accommodations well in advance of matriculation. A cafeteria is available in the Bexar County Hospital.

Cost of Medical Education

	Summary of Expenses					
Item	Freshmen	Sophomores	Juniors	Seniors		
Tuition, Resident	\$ 400	\$ 400	\$ 400	\$ 300		
Tuition, Out-of-State	\$1200	\$1200	\$1200	\$ 900		
Textbooks	\$ 600	\$ 250	\$ 150	\$ 150		
Microscope Rental	\$ 60	\$ 60	**************************************	faire was take		
Laboratory Fee	\$ 32	\$ 32		n der veren dende		
Parking Fee *	\$ 3	\$ 3	\$ 3	\$ 3		
Student Health Fee	\$ 65	\$ 65	\$ 65	\$ 65		
Identification Fee	\$ 2	M/Ph comb Adaph	provi salara rame	tuniga salama - angga		
Graduation Fee	STW ADMY. MA.S.	and and desi		\$ 25		
Nospitalization **	\$ 39.72	\$ 39.72	\$ 39.72	\$ 39.72		

^{*} Parking fee is \$3.00 for the first vehicle and \$1.00 for the second vehicle. Notorcycle fee is \$1.50.

Note: Tuition and/or fees are subject to change without prior notice.

Refund of Tuition and Fees

Any student officially withdrawing from school during the first week of class work will receive a refund of 70 percent of the refundable fees; during the second week the amount will be 60 percent; during the third week, 40 percent; and during the fourth week, 20 percent. No refunds are made upon withdrawal during the fifth week and thereafter and in no case shall the total refund exceed 70 percent of the tuition and fees.

^{**} Item varies with number of persons in family.

Refunds will be prepared within 30 days and mailed to the student's forwarding address left with the Registrar.

Exemption from Fees

Texas Ex-servicemen may, as directed by the State Legislature, be exempted from certain required fees but not deposits when meeting these criteria: (1) has resided in Texas for a period of not less than twelve months before the date of registration; (2) was a "bona fide" legal resident of the state at the time of entering service: (3) served in the armed forces or in certain auxiliary services in World War I, World War II, the Korean conflict, or the Cold War; (4) was honorably discharged therefrom (except those discharged because of being over the age of thirty-eight or because of personal request); (5) is not eligible for education benefits provided for veterans by the United States Government. Exemption from payment of certain fees also extends to children of members of the armed forces killed in action or died while in the service of World War II, or the Korean conflict, or the Cold War and to orphans of members of the Texas National Guard and the Texas Air National Guard killed since January 1, 1946 while on active duty. Application for this exemption should be made to the Registrar.

Children of Certain Disabled Public Employees, by an act of the 59th Legislature, i.e., children of certain firemen, peace officers, employees of the Texas Department of Corrections, and game wardens who in the line of duty have suffered injury resulting in death or disability, are exempt from payment of tuition and laboratory fees. For specific information relative to this provision, contact the Commissioner of Eigher Education, Sam Houston State Office Building, Austin, Texas.

High-School Graduates of State Orphanages of Texas, by an act of the 51st Legislature, who are citizens of Texas, are exempt from certain required fees but not from deposits. After application for admission has been approved, the candidate should request a scholarship card from the Financial Aid Administrator.



The Texas Rehabilitation Commission effers assistance for tuition and non-refundable fees to students who have certain disabling conditions provided their vocational objectives have been approved by a TRC Counselor. Examples of such conditions are orthopedic deformities, emotional disorders, diabetes, epilepsy, heart conditions, etc. Other services are also available to assist the handicapped student to become employable. Application for such service should be made at:

Texas Rehabilitation Commission 212-B Stumberg Room 300 San Antonio, Texas 78204

Military Programs for Students

Several branches of the Military have instituted programs whereby the medical student is subsidized during the time he is in medical school and his expenses are paid by the Federal Government. Students or applicants interested in learning more about such a program should contact the various services directly.

Scholarships

A limited number of tuition scholarships have been made available by the State Legislature.

George W. Brackenridge Scholarship, established in 1965 by the Trustees of the George W. Brackenridge Foundation, is awarded to qualified medical students enrolled in The University of Texas Health Science Center at San Antonio.

The Aladar Deutsch Scholarship, established in 1972 by 'Ir. Seymon Deutsch in memory of his father, a Hungarian immigrant. The recipient is selected by the Scholarship and Loan Committee.

The Pearl M. Fox Memorial Scholarship Fund established by Dr. Murray Fox, a graduate of the class of 1971 and his sister, Mrs. Jerry Fleischer in memory of their mother. The recipient is to be a third or fourth year medical student selected by the Scholarship and Loan Committee.

The Hambrock and McGanity Award for Excellence in Obstetrics and Gynecology was established in 1973 by Dr. and Mrs. William J. McGanity in honor of their parents, Louis and Lucy Hambrock and Arthur and Ethel McGanity. Provides two annual awards in San Antonio totaling \$600. Recipients are selected by the Scholarship and Loan Committee.

The Health Professions Scholarship Grant Program. Funds are awarded to qualified students on the basis of exceptional need. The recipients are selected by the Scholarship and Loan Committee.

The Robert Wood Johnson Foundation Scholarship Fund, established in 1972, is administered by the medical school under the guidance of the Association of American Medical Colleges. Awards are made to medical students on the basis of exceptional need.

The George L. Jordan III Scholarship was established in 1972 by Dr. George L. Jordan in memory of his son who was a medical student in this school. The recipient is selected by the Scholarship and Loan Committee.

A limited number of Merit Scholarships for minority freshmen are available. These funds were established in 1973 from the donations of various individuals, firms and foundations.

The Fitzhugh Carter Pannill Scholarships was established in 1967 by Mrs. F.C. Pannill in honor of her husband. The recipient is selected by the Scholarship and Loan Committee.

The Philip Pauerstein Memorial Fund was established in 1970 by Carl J. Pauerstein, M.D. The recipient is selected by the Scholarship and Loan Committee.

The Southern Medical Association Medical Student Scholarship Program was established in 1969 providing \$500.00 annually for assistance to first-year medical students of superior abilities.

The Evelyn Knott Woolley Scholarship Fund established in 1873 by Trs.

Woolley. The recipient must be a female medical student selected by the Scholarship and Loan Committee.

The Peter Allen Zanca Memorial Scholarship Fund, established in 1960 by Mrs. William P. McCarthy and Dr. Peter Zanca in memory of First Lieutenant Peter Allen Zanca, U.S. Infantry, who lost his life in combat in 1968 in Vietnam, provides a scholarship of \$200.00 to be awarded annually to a second or third-year medical student enrolled in University of Texas Medical School at San Antonio.

Physicians Shortage Scholarship Grant

The Department of Health Education and Welfare awards scholarship grants to eligible students of medicine who agree to engage in the full time practice of primary care for a prescribed period of time in a physician shortage area. Priorities for these grants are given to students of low income backgrounds and/or who reside in a physician shortage area. Information and applications can be obtained from the Financial Aid Office.

Loan Funds

The University of Texas Medical School at San Antonio is fortunate in having available loan funds for students requiring aid.

Application forms and complete information concerning loans available to medical students can be obtained from the Financial Aid Administrator in the Office of Student Services. The loan funds include the following:

The American Academy of Orthopaedic Surgeon Student Short Term Loan

The Bexar County Medical Society Emergency Loan Fund

The Greek Charities of San Antonio Student Loan Fund

The Kenneth Compton Student Loan Fund

The Optimist Club of Turtle Creek Student Loan Fund

The Philomathic Study Club Student Loan Fund

The Richard Spencer Lewis Memorial Student Loan Fund

The Student Emergency Loan Fund

The Student Short Term Loan Fund

HS-234

The Texas Academy of General Practices
Long Term Loans:

The American Medical Association Education and Research Foundation

Loan Guarantee Program

Federally preserved Loan Program (Funds obtained from banks to other lending institutions)

The George W. Brackenridge Loan Fund (for women only)

The Health Professions Student Loan Program

The Hinson-Hazelwood College Student Loan Plan

The Houston Academy of Medicine Memorial Education and Research Foundation

The National Medical Association Project 75

The Robert Wood Johnson Foundation Student Loan Fund

The May Owen Trust Fund

The Minnie Stevens Piper Foundation

The Ella Kate and Wallace Rolston Medical and Mursing Student Loan Fund

The Sam E. Thompson Loan Fund

RESIDENCE STATUS

Pertinent rules and regulations governing residence status pursuant to Title 3, Texas Education Code, effective July 16, 1974 are quoted below. Under these regulations, the term "residence" means "domiciled" and the term "resided in" means "domiciled in". Interested students should consult the Registrar for further information.

Minors

Statute: Section 54.052 (b) An individual, under twenty-one (21) years of age, who is living away from his family, and whose family resides in another state or has not resided in Texas for the 12-month period immediately preceding the date of registration shall be classified as a nonresident student;

Section 54.052 (c) An individual eighteen (18) years of age or under whose family has not resided in Texas for the 12-ronth period immediately preceding the date of registration shall be classified as a nonresident student regardless of whether he has become the legal ward of residents of Texas or has been adopted by residents of Texas while he is attending an educational institution in Texas, or within a 12-ronth period before his attendance, or under circumstances indicating that the guardianship or adoption was for the purpose of obtaining status as a resident student;

Section 54.055 An individual 18 years of age or under whose parents were formerly residents of Texas is entitled to pay the resident tuition fee following the parents' change of legal residence to another state, as long as the individual remains continuously enrolled in a regular session in a state-supported institution of higher education.

Residence of Individuals Over Eighteen

Statute: Section 54.052 (d) An individual eighteen (18) years of age or over who has come from outside Texas and who is gainfully employed in Texas, for a 12-month period immediately preceding registration

in an educational institution shall be classified as a resident student as long as he continues to maintain a legal residence in Texas; and

Section 54.052 (e) An individual eighteen (18) years of age or over who resides out of the state or who has come from outside

Texas and who registers in an educational institution before having resided in Texas for a 12-month period shall be classified as a nonresident student.

Section 54.054 A nonresident student classification is presumed to be correct as long as the residence of the individual in the state is primarily for the purpose of attending an educational institution. After residing in Teras for at least twelve (12) months, a nonresident student may be reclassified as a resident student as provided in the rules and regulations adopted by the Coordinating Board, Texas College and University System. Any individual reclassified as a resident student is entitled to pay the tuition fee for a resident of Texas at any subsequent registration as long as he continues to maintain his legal residence in Texas.

Married Students

Statute: Section 54.056 A nonresident who marries and remains married to a resident of Texas, classified as such under this Act at the time of the marriage and at the time the nonresident registers, is entitled to pay the resident tuition fee regardless of the length of time he has lived in Texas, and any student who is a resident of Texas who marries a nonresident is entitled to pay the resident tuition fee as long as he does not adopt the legal residence of the spouse in another state.

Military Personnel and Veterans

Statute: Section 54.058 (a) Military personnel are classified as provided by this section in the following manner:

- (b) An officer, enlisted man or woman, selected or drafted of the Army, Army Reserve, Army National Guard, Air dational Guard, Texas State Guard, Air Force, Air Force Reserve, Havy, Havy Reserve, Harine Corps, Marine Corps Reserve, Coast Guard, or Coast Guard Reserve of the United States, who is assigned to duty in Teras is entitled to register himself, his spouse, and their children in a state institution of higher education by paying the tuition fee and other fees or charges required of Texas residents, without regard to the length of time he has been assigned to duty or resided within the state. However, out-of-state Army Dational Guard or Air National Guard members attending training with Texas Army or Air National Guard members under National Guard Pureau regulations may not be exempted from nonresident tuition by virtue of that training status nor may out-of-state Army, Air Force, Navy, Varine Corps, or Coast Guard Reserves training with units in Texas under similar regulations be exempted from nonresident tuition by virtue of such training status. It is the intent of the legislature that only those members of the Army or Air Hational Guard, Texas State Guard, or other reserve forces mentioned above he everyted from the nonresident tuition fee and other fees and charges only when they become members of Teras units of the military organizations mentioned above.
- (c) As long as they reside continuously in Texas, the spouse and children of a member of the Armed Forces of the United States who has been assigned to duty elsewhere irmediately following assignment to duty in Texas are entitled to pay the tuition fees and other fees or charges provided for Texas residents.
- (e) A Texas institution of higher education may charge to the United States Government the nonresident tuition fee for a veteran enrolled under the provisions of a Federal law or regulation authorizing educational or training benefits for veterans;

- (f) The spouse and children of a merior of the Armed Forces of the United States who dies or is killed are entitled to pay the resident tuition fee, if the wife and children become residents of Texas within 60 days of the date of death; and
- (g) If a member of the Armed Forces of the United States is stationed outside Texas and his spouse and children establish residence in Texas, by residing in Texas and by filing with the Texas institution of higher education at which they plan to register a letter of intent to establish residence in Texas, the institution of higher education shall permit the spouse and children to pay the tuition, fees, and other charges provided for Texas residents without regard to length of time that they have resided within the State.

Employees of Institutions of Higher Education Other Than Students

Statute: Section 54.057 A teacher, professor, or other employees of a Texas institution of higher education is entitled to register himself, his spouse, and their dillian in a state institution of higher education by paying the tration fee and other fees or charged required for Texas residents without regard to the length of time he has resided in Texas. A teacher, professor, or other employed of a Texas institution of higher education is any person employed at least one-half time on a regular monthly salary basis by a state institution of higher education.

Student Employees

Statute: Section 54.051 (o) 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 free and other fees or charges required for Texas residents, without regard to the length of time he had 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 orployer institution. This exemption shall continue for students exployed too consecutive somesters 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.

Competitive Scholarships

Statute: Section 54.051 (p) A nonresident student holding a competitive scholarship of at least \$200 for the academic year or summer for which he is enrolled is entitled to pay the fees and charges required of Texas residents without regard to the length of time has resided in Texas, provided that he must compete with other students, including Texas residents, for the scholarship and that the scholarship must be awarded by a scholarship committee officially recognized by the administration of the institution of higher education.

Citizens of Any Country Other Than the United States of America

Statute: Section 54.057 An alien who is living in this country under a visa permitting permanent residence or who has filed with the proper Federal immigration authorities a declaration of intention to become a citizen has the same privilege of qualifying for resident status for fee purposes under this Act as has a citizen of the United States. A resident alien residing in a junior college district located immediately adjacent to Texas boundary lines shall be charged the resident tuition by that junior college.

Reciprocity Clause Applicable to Junior Colleges

Statute: Section 54.060 The nonresident tuition fee prescribed in this Act 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 immediately adjacent to the state in which the nonresident student resides. The nonresident student described in this Subsection 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.

Student Responsibilities

The responsibility of registering under the proper residence classification is that of the student, and if there is any question of right to classification as a resident of Texas, it is his or her obligation, 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.

Every student who is classified as a resident student but who becomes a nonresident at any time by virtue of a change of legal residence by his or her own action or by the person controlling his or her domicile is required to notify the proper administrative officials of this institution at once.

Penalties

Statute: Section 54.053 The governing board of each institution required by this Act to charge a nonresident tuition or registration fee is subject to the rules, regulations, and interpretations issued by the Coordinating Board, Texas College and University System, for the administration of the nonresident tuition provisions of this Act.

The rules, regulations, and interpretations promulgated by the Coordinating Board shall be furnished to the presidents or administrative heads of all Texas public senior and junior colleges and universities.

Section 54.061 The governing board of an institution of higher education may assess and collect from each nonresident student who fails to comply with the rules and regulations of the boards concerning nonresident fees a penalty not to exceed \$10 a semester.

MEDICAL SCHOOL FACULTY

(To be added; not attached for Docket.)

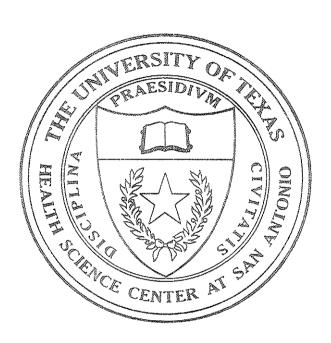
THE UNIVERSITY OF TEXAS

HEALTH SCIENCE CENTER AT SAN ANTONIO

GRADUATE SCHOOL OF BIOMEDICAL SCIENCES

CATALOGUE FOR 1974 - 1975

and ANNOUNCEMENTS FOR 1975 - 1976



(to be printed inside front cover)

Catalogues published by The University of Texas

Health Science Center at San Antonio:

Dental School

Graduate School of Biomedical Sciences

Medical School

HS-243

CONTENTS

BOARD OF REGENTS OFFICERS OF ADMINISTRATION DEPARTMENTAL CHAIRMEN ACADEMIC CALENDAR 1974 - 1975 ACADEMIC CALENDAR 1975 - 1976 GENERAL INFORMATION IE-1 1E-1 San Antonio South Texas Medical Center 1E-1 THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO 2E - 1History 2E-1 Accreditation 2E-3Policy 2E-3 Release of Transcripts and Academic Records 1E-Al STUDENT AND FACULTY SUPPORT ACTIVITIES 1E-2 The Office of Student Services 1E-2Director of Student Services 1E-2 1E-2 Registrar and Admission 1E-2 Coordinator of Curriculum and Academic Programs 1E-2 Financial Aid Student Health Services 1E-3 The Office of Educational Resources 2E-4 Director of Educational Resources 2E-4 The Library 2E-4 Art, Photograph, Printing Services 2E-4 2E-4 Television Services 2E-4 Classroom Services 2E-5 Instructional Development Multidiscipline Laboratories 2E-5 The Office of Continuing Education 2E-6 SCHOOLS OF THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER IE-4 1E-4 The Dental School The Graduate School of Biomedical Sciences
The Medical School 1E-4 1E-4 The School of Pharmacy Program 1E-4 AFFILIATED FACILITIES 1E-5 1E-5 Academic Institutions The University of Texas at San Antonio 1E-5 The University of Texas School of Nursing at San Antonio 1E-5 1E-5 Hospitals and Clinics 1E-5 The Bexar County Teaching Hospital The Robert B. Green Memorial Hospital 1E-6 1E-6 The Audie L. Murphy Memorial Veterans Hospital Brooke General Hospital 1E-6 Wilford Hall USAF Medical Center 1E-6 LE-6 The United States Air Force School of Aerospace Medicine The Santa Rosa Medical Center 1E-7 The Baptist Memorial Hospital System 1E-7

CONTENTS (Continued) The San Antonio State Chest 1E-7 122-7 The San Antonio Metropolitan Health District 1E-8 The Cancer Therapy and Research Center Other Affiliated Facilities 1E-8 The Southwest Foundation for Research and Education 1E-8 The Southwest Research Institute 1E-8 The Ecumenical Center for Religion and Health 1E-8 GRADUATE DEGREE PROGRAMS 1B - 2ADMISSION TO THE GRADUATE SCHOOL 18-3 Basic Requirements 18-3 Bachelor's degree 1B - 3Satisfactory grades in undergraduate courses 18-3 Satisfactory scores on the Graduate Record Examinations 1B-3 Graduate Record Examinations 1B-3 Application Procedure 1B-5 Acceptance Considerations 1B-5 Action Before Matriculation 1B-6 DOUBLE DEGREE PROGRAM 1B-7 SPECIAL STUDENTS 1B-9 REGISTRATION 1B-10 1B-10 Semester Credit Hours Course Load Adding Courses 1B-10 1B-11 Dropping Courses 1B-11 Registration in Absentia 1B-11 Registration for Final Credit Hours 1B-11 Registration at Other Components of The University of Texas System | 1B-11 | Registration for Audit | 1B-12 File Number 1B-12 REQUIREMENTS AND REGULATIONS 1B-13 1B-13 Residence Required for Graduation Time Limits 1B-13 Ph.D. degree 1B-13 1B-13 M.A. degree 1B-13 Credit Hour Requirements Ph.D. degree 1B-13 1B-1A M.A. degree 2B-1 Foreign Language Requirement Supervised Teaching Requirement 2B-1 Student Debts 2B-1 2B-4 GRADES, CONTINUATION, GRADUATION 28-4 Grading System 2B-4 Continuation, Probation, Dismissal 10B-1 Withdrawal 10B-2 Leave of Absence Transfer between Graduate Programs 10B-2 10B-3 Graduation

HS-245

3993

CONTENTS (Continued)	
SEQUENTIAL PROCEDURES	1013-3
Doctor of Philosophy Degree	10B-3
Phase II	10B-3 10B-4
Master of Arts Degree Graduation Procedures Supplemental Information	2B-7 10B-5 10B-6
PROGRAM IN ANATOMY	3B-1
Objectives of Graduate Work Programs of Graduate Work Physical Facilities Faculty Specific Degree Requirements	3B-1 3B-1 3B-1 3B-2 1B-2A
Master of Arts Degree Doctor of Philosophy Degree Procedural Sequence	1B-2A 1B-3A 1B-4A
Graduate Courses	1B-5A
PROGRAM IN BIOCHEMISTRY	4B-1
Objectives of Graduate Work Programs of Graduate Work Physical Facilities Faculty Specific Degree Requirements Graduate Courses	4B-1 4B-1 4B-1 4B-2 4B-4 4B-4
PROGRAM IN BIOPHYSICS	4B-9
Objectives of Graduate Work Programs of Graduate Work Physical Facilities Faculty Specific Degree Requirements Graduate Courses	4B-9 4B-9 4B-9 4B-10 1B-12A 1B-13A
PROGRAM IN MICROBIOLOGY	5B-10
Objectives of Graduate Work Programs of Graduate Work Physical Facilities Faculty Specific Degree Requirements Graduate Courses	5B-10 5B-10 5B-10 5B-11 6B-1 10B-10
PROGRAM IN PHARMACOLOGY	6B-8
Objectives of Graduate Work Programs of Graduate Work Physical Facilities Faculty Specific Degree Requirements Graduate Courses The Doctor of Pharmacy (Pharm.D.) Program Purpose Academics Faculty Clinical Practicum Academic Resources Clinical Resources Detailed Information on the Pharm. D. Program	6B-8 6B-8 6B-9 6B-9 6B-11 10B-11 7B-4 7B-5 7B-5 7B-5 7B-6 7B-6

CONTENTS (Continued) PROGRAM IN PHYSIOLOGY 7B - 7Objectives of Graduate Work 7B - 7Programs of Graduate Work Physical Facilities 7B - 77B-7 Faculty 103-8 Specific Degree Requirements 10B-9 Graduate Courses 7B-9 STUDENT ORGANIZATION 8B - 2The Graduate Student Association 8B - 2FINANCIAL INFORMATION 9B - 1Tuition 9B-1 Residency 9B - 2Fees 9B - 2Laboratory Fees 9B-2 Prorated microscopic rental fee 9B - 2Student activity fee 9B-2 Identification fee 9B-2 Parking fee 9B-2 Graduation fee 9B-3 Microfilming fee 9B-3 Audit fee 9B - 3Other Expenses 9B-3 Hospitalization 9B - 3Living Arrangements 9B-3 Summary of Tuition and Fees 9B-4 Refund of Tuition and Fees 9B-4 Exemption from Fees 9B - 5Texas Ex-servicemen 9B - 5Children of Certain Disabled P ublic Employees 913 - 5High School Graduates of State Orphanages of Texas 9B-6 Texas Rehabilitation Commission 9B - 6Quantity-of-Work Rule 9B - 6Assistantships 9B-8 Scholarships 98-8 Loan Funds 9B - 8RESIDENT STATUS 10-1 Minors 1D - 1Residence of Individuals over Eighteen 10-1 Married Students 1D-2 Military Personnel and Veterans 1D - 2Employees of Institutions of Higher Education Other than Students 1D-4 Student Employees 1D-4 Competitive Scholarships 1D-5 Citizens of Any Country Other than the United States of America 1D-5 Reciprocity Clause Applicable to Junior Colleges 1D-5 Student Responsibilities 1D-6 Penalties 1D-6

DEGREES CONFERRED

Doctor of Philosophy Master of Arts

GRADUATE SCHOOL FACULTY

BOARD OF REGENTS

Officers

Allan Shivers, Chairman

Dan C. Williams, Vice-Chairman

Betty Anne Thedford, Secretary

Members

Terms Expire January 1977
Mrs. Lyndon B. JohnsonStonewall
A.G. McNeese, Jr
Joe T. Nelson, M.D
Terms Expire January 1979
James E. Bauerle, D.D.SSan Antonio
Edward ClarkAustin
Allan ShiversAustin
Terms Expire January 1981
Thos. H. LawFort Worth
Walter G. Sterling
Dan C. WilliamsDallas

Standing Committees*

SYSTEM ADMINISTRATION: Williams, Chairman

ACADEMIC AND DEVELOPMENTAL AFFAIRS: Mrs. Johnson, Chairman

BUILDINGS AND GROUNDS: Bauerle, Chairman

LAND AND INVESTMENT: Clark, Chairman

MEDICAL AFFAIRS: Nelson, Chairman

BOARD FOR LEASE OF UNIVERSITY LANDS: State Land Commissioner Bob Armstrong (ex officio), Chairman; Nelson, Williams

^{*} All members of the Board constitute each committee. HS-248

OFFICERS OF ADMINISTRATION

The University of Texas System, Austin

Charles A. LeMaistre, B. A., M.D., Chancellor Everitt Donald Walker, M.B.A., C.P.A., Deputy Chancellor William H. Knisely, Ph.B., B.S., M.S., Ph.D. Assistant to the Chancellor for Health Affairs

The University of Texas Health Science Center at San Antonio

Frank Harrison, B.S., M.S., Ph.D., M.D., President
Robert B. Price, B.B.A., M.B.A., C.P.A., Vice President for Business Affairs
James W. Wagener, B.A., M.A., Ph.D., Assistant to the President
Magda Hinojosa, B.S., M.P.H., Special Assistant to the President
David M. Shapiro, B.S., Ph.D., Director of Student Services
Charles A. Stewart, J., Ph.D., Director of Continuing Education Services
James S. Waldron, B.S., M.S., Ph.D., Director of Educational Resources
Billy J. Barker, B.B.A., Director of Financial Services
Auben W. Brunnemann, B.A., Coordinator of Curriculum and Academic Programs
Joseph P. Burger, M.S., Director, Multidiscipline Teaching Laboratories
Betty M. Compton, B.A., Registrar and Admissions
Charles E. Johnson, Jr., B.S., Student Financial Aid Administrator
David A. Kronick, Ph.D., Librarian
S. Perry Post, M.D., Director, Student Health Services
Bruce M. Smith, B.B.A., C.P.A., Business Manager

Dental School Administration

Philip J. Boyne, D.M.D., M.S., Dean J. Duncan Robertson, B.S., D.M.D., Associate Dean for Administrative Affairs Shailer A. Peterson, B.A., M.A., Ph.D., Coordinator of Academic Affairs and Admissions Edwin M. Collins, D.D.S., Clinic Coordinator

Graduate School Administration

Armand J. Guarino, B.S., Ph.D., Dean Evelyn L. Oginsky, B.A., M.S., Ph.D., Associate Dean

Medical School Administration

Stanley E. Crawford, B.A., M.D., Dean Paul Cutler, B.A., M.D., Associate Dean for Continuing Medical Education Carlos Pestana, M.D., Ph.D., Associate Dean for Student Affairs

DEPARTMENTAL CHAIRMEN of THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER at SAN ANTONIO

Basic Sciences

Anatomy Edward G. Rennels, B.Ed., M.A., Ph.D.

Biochemistry Armand J. Guarino, B.S., Ph.D.

Bioengineering Caspar W. Hiatt, III, B.S., M.P.H., Ph.D.

Laboratory Animal Medicine Robert J. Young, D.V.M., M.P.H., (acting)

Microbiology Alexis Shelokov, A.B., M.D.

Pathology Frank M. Townsend, M.D.

Pharmacology Arthur H. Briggs, B.A., M.D.

Physiology Edward J. Masoro, B.A., Ph.D.

Dental Sciences

Biomaterials Donald C. Hudson, D.D.S.

Community Dentistry Charles T. Smith, B.A., D.D.S., (acting)

Dental Anatomy J. Duncan Robertson, B.S., D.M.D., (acting)

Diagnosis and Roentgenology Charles R. Morris, D.D.S.

Endodontics Glenn R. Walters, B.S., D.D.S., (acting)

General Practice Billy E. Rigsby, D.D.S.

Operative Dentistry James M. Childers, D.M.D.

Dan C. Peavy, B.S., D.D.S., M.S.D., (acting)

Outpatient Clinic Coordinator Edwin M. Collins, B.Sc., D.D.S., M.Sc.

Pedodontics James L. Bugg, B.A., D.M.D., M.S.D.

Periodontics Sam W. Hoskins, Jr., D.D.S., M.S.D.

Prosthodontics Earl E. Feldmann, D.D.S., (acting)

Surgery, Oral Hugh B. Tilson, D.D.S., M.S.

Medical Sciences

Orthodontics

Anesthesiology Howard L. Zauder, B.A., M.S., Ph.D., M.D.

Family Practice Herschel L. Douglas, M.D.

Medicine Laurence E. Earley, B.S., M.D.

Obstetrics and Gynecology Joseph Seitchik, B.A., M.A., M.D.

Pediatrics Phillip A. Brunell, B.S., M.S., M.D.

Physical Medicine and Rehabilitation Arthur E. Grant, M.D.

Psychiatry Robert L. Leon, M.D.

Radiology Malcolm D. Jones, A.B., M.D.

Surgery J. Bradley Aust, M.D., M.S., Ph.D.

ACADEMIC CALENDAR 1974 - 1975

Fall Semester 1974

Pre-registration counseling* Friday, August 16, 1974 Registration** Friday, August 23, 1974 First day of Classes Monday, August 26, 1974 Lyndon B. Johnson's Birthday Holiday Tuesday, August 27, 1974 Labor Day Holiday Monday, September 2, 1974 Thanksgiving Holidays November 28 - 30, 1974 Last day of final examinations Friday, December 20, 1974 Graduation Day (No Public Exercises) Friday, December 20, 1974

Spring Semester 1975

Pre-registration counseling*

Registration**

Monday, December 16, 1974

Monday, January 13, 1975

First Day of Classes

Wednesday, January 15, 1975

Good Friday Holiday

Friday, March 28, 1975

San Jacinto Fiesta Afternoon Holiday

Friday, April 25, 1975

Last day of Final examinations

Friday, May 16, 1975

Graduation Day

Saturday, May 31, 1975

Summer Session 1975

Pre-registration counseling* Friday, May 16, 1975

Registration** Friday, May 30, 1975

First day of classes Monday, June 2, 1975

Independence Day Holiday Friday, July 4, 1975

Last day of final examinations Friday, August 22, 1975

Graduation Day (No Public Exercises) Friday, August 22, 1975

*Course cards due at Graduate School office. Pre-registration counseling for current and special students is on dates indicated. New students may pre-register from pre-registration counseling day to one day prior to registration.

**Fees are paid at time of registration.

TENTATIVE ACADEMIC CALENDAR 1975 - 1976

Fall Semester 1975

Pre-registration counseling* Friday, August 15, 1975 Registration** Friday, August 22, 1975 First day of classes Monday, August 25, 1975 Wednesday, August 27, 1975 Lyndon B. Johnson's Birthday Holiday Labor Day Holiday Monday, September 1, 1975 Thanksgiving Holidays November 27 - 29, 1975 Last day of final examinations Friday, December 19, 1975 Graduation Day (No Public Exercises) Friday, December 19, 1975

Spring Semester 1976

Pre-registration counseling*

Monday, December 15, 1975

Registration**

Monday, January 12, 1976

First day of classes

Wednesday, January 14, 1976

Good Friday Holiday

Friday, April 16, 1976

San Jacinto Fiesta Afternoon Holiday

Friday, April 23, 1976

Last day of final examinations

Friday, May 14, 1976

Graduation Day

Saturday, May 29, 1976

Summer Session 1976

Pre-registration counseling*

Registration**

Friday, May 14, 1976

Frist day of Classes

Monday, May 31, 1976

Independence Day Holiday

Monday , July 5, 1976

Last day of final examinations

Friday, August 20, 1976

Graduation Day (No Public Exercises)

Friday, August 20, 1976

*Course cards due at Graduate School office. Pre-registration counseling for current and special students is on dates indicated. New students may pre-register from pre-registration counseling day to one day prior to registration.

HS-252

^{**}Fees are paid at time of registration.

GENERAL INFORMATION

San Antonio

San Antonio is the fifteenth largest city in the United States with a population of 770,000 and is one of the nation's most interesting and colorful cities. Its twin cultural heritage - Spanish and American - is reflected from the early missions and the historic Alamo to modern skyscrapers.

Located in South Central Texas in a subtropical climate, it enjoys normal mean temperature ranges from 52 degrees in January to 84 degrees in July. As a center of higher education, two universities and four colleges are located in San Antonio as well as The University of Texas Health Science Center and School of Nursing. In addition, a new University of Texas academic institution was authorized in 1969 by the 61st Texas Legislature, and is now under construction in the foothills of Texas' "hill country" north of the Health Science Center.

South Texas Medical Center

The South Texas Medical Center is an area of some 680 acres in Northwest San Antonio established by the San Antonio Medical Foundation to attract institutions and facilities which would offer the highest standards of achievement for health, education, research, patient care and health care services.

In 1961, The Foundation donated 100 acres to The University of Texas

System, the present location of The University of Texas Health Science

Center at San Antonio and The University of Texas System School of Nursing
on the San Antonio Campus. In addition to these two institutions, the

Southwest Medical Center includes - Bexar County Teaching Hospital, Audie

L. Murphy Memorial Veterans Hospital, Cerebral Palsy Treatment Center,

Community Guidance Center of Bexar County, Bexar County Unit of the

American Cancer Society, Texas Cradle Society, San Antonio Community Hospital,

Cancer Therapy and Research Center, Ecumenical Center for Religion and Health,

Villa Rosa Psychiatry and Rehabilitation Center, Lutheran General

Hospital (under construction), and Southwest Methodist Hospital. The

South Texas Medical Center has grown to include 19 institutions with

7,400 employees and a combined annual budget of more than \$87,000,000.

THE INTVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO

History

The University of Texas Health Science Center at San Antonio originated as a Medical School which was authorized by the 56th Texas Legislature in 1959. Its construction was started in 1966, and completed in July 1968.

Faculty recruitment for the Medical School began in 1965. Enrollment began in 1966, but students attended classes at The University of Texas Medical Schools in Dallas and Galveston until the San Antonio facility could be completed. In 1969 the first full class of 104 students matriculated in the new facility, and the first graduating class of 33 students received Doctor of Medicine degrees in 1970.

The initial Medical School building contained 432,816 square feet on four levels and included classrooms, multidisciplinary teaching laboratories, a 634-seat auditorium, a library, faculty offices and research laboratories, and administrative offices as well as areas necessary to service the building.

In 1969 the 61st Texas Legislature authorized the beginning of The University of Texas Dental School at San Antonio. By using temporary facilities in the Medical School, the Dental School opened in September of 1970 with 16 first-year dental students, and graduated its first class in June of 1974.

Construction of a separate building for the Dental School on the same 100 acres was begun early in 1973 and is scheduled for completion by late 1975. This building will also be a four-level structure of 453,769 square feet and it will be compatible in architecture with buildings of the Medical School. The two schools will be connected at each level to permit maximum sharing of teaching and research facilities. The completed dental facility will provide accommodations to admit 152 dental students each year into the four-year Doctor of Dental Surgery program, 48 dental hygiene students to enter the two-year dental hygiene program, 48 dental assistant

students to enter the one-year dental assistant program, and 24 dental laboratory technicians to enter the two-year dental laboratory technician program. It is planned that graduate programs in all dental spcialities will be offered. Emphasis will also be placed on research in appropriate training areas as well as in programs of continuing dental education.

During the early years of the Medical School, the basic science faculty also initiated the development of graduate programs leading to the Master of Arts and the Doctor of Philosophy degrees. In 1970, graduate programs for these degrees were approved by the Coordinating Board, Texas College and University System, for anatomy, biochemistry, biophysics, microbiology and pharmacology. Enrollment began that year with 15 students and by 1975-76 will be in excess of 100 students. In 1972, The University of Texas Graduate School of Biomedical Sciences at San Antonio was established and assumed responsibility for the administration of these programs.

In October, 1974, the Master of Arts and Doctor of Philosophy degrees in physiology were approved for implementation by the Coordinating Board, Texas College and University System.

A combined program can be individually arranged with the Medical and Dental Schools which may allow a medical or dental student to obtain an M.A. or a Ph.D. degree in addition to an M.D. or a D.D.S. degree concurrently.

The University of Texas Board of Regents in 1972 recognized the potential for conjoint development of these health professions in this geographical setting, and to better coordinate those biomedical units for efficiency and effectiveness in academic programs, as well as management and fiscal operation, authorized the establishment of The University of Texas Health Science Center at San Antonio, to be composed of the Dental School, the Graduate School of Biomedical Sciences, the Medical School, and a School of Allied Health Sciences.

In October of 1973, the Coordinating Board, Texas College and University System, approved a program for a Doctor of Pharmacy Program (Pharm.D.) to be administered jointly by The University of Texas Health Science Center at San Antonio and the College of Pharmacy at The University of Texas at Austin. In addition to this program, the Health Science Center also serves as a clinical resource for several of the students in the baccalaureate program of the College of Pharmacy in Austin.

In 1969, the Texas Legislature authorized the implementation of The University of Texas School of Nursing at San Antonio. This institution is administratively associated with the System-wide School of Nursing of The University of Texas, but shares the campus of the Health Science Center.

Construction of a separate building for the School of Nursing was begun near the new Dental School early in 1973. It was completed and occupied in 1974. The building consists of 78,756 square feet on two levels and will accommodate 400 undergraduate and 75 graduate nursing students.

One of the purposes for the reorganization of the institution as a Health Science Center was to provide an educational environment in which students of the various health professions could pursue their formal course work in close professional association. As the future Physician, Dentist, Nurse, Pharmacist, Research Scientist, and various Allied Health Personnel pursue their studies toward their career objectives in this setting, it is expected that they will develop from the beginning a mutual respect for the functional relationship of each other in their common objective—health maintenance.

Accreditation

The University of Texas Health Science Center at San Antonio has been awarded full regional accreditation through the Southern Association of Colleges and Schools.

The dental education program has received full accreditation by the Council on Dental Education of the American Dental Association.

The medical education program has received full accreditation by the Liaison Committee on Medical Education of the Association of American Medical Colleges and the American Medical Association.

Policy

With respect to the admission and education of students, the employment and promotions of teaching and nonteaching personnel, and student and faculty activities conducted on premises owned or occupied by The University neither The University of Texas nor any of its component institutions shall discriminate either in favor of or against any person on account of race, creed, sex, or color.

Release of Transcripts and Academic Records

Transcripts and other information from a student's academic records will be 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. An exception may be made in response to a subpoena or a court order.

STUDENT AND FACULTY SUPPORT ACTIVITIES

The Office of Student Services

The Director of Student Services is generally charged with representing students' needs and providing support service for student development.

This office encompasses the Registrar and Admissions, Coordinator of Curriculum and Academic Programs, Student Financial Aid, the Student Health Center, and Counseling Services. Students are encouraged to seek assistance from the Director and his staff in matters dealing with curricular and extracurricular concern.

The Registrar, in addition to being custodian of all student academic records and responsible for the registration and enrollment of students in the various academic courses, is also the administrator for all student admissions, withdrawals and graduation. Actions of the various admissions committees as well as those of the student promotions committees are implemented through this office in consonance with policies and directives of The University of Texas System and those of The Health Science Center and its Schools.

The Coordinator of Curriculum and Academic Programs develops and publishes catalogues, calendars, and day-to-day academic schedules in concurrence with approved policies determined by various faculty committees and individual School Administration. Coordination between the several academic programs is effected to insure availability of faculty and appropriate laboratory and classroom facilities.

Financial assistance is offered to qualified students through scholarships and loans available for the individual schools. These are supervised by the Scholarship and Loan Committee and provided through the Financial Aid Administrator. Assistance is made only on the basis of demonstrated need. While financial help cannot be guaranteed, every effort will be made to provide the maximum assistance possible to meet demonstrated financial requirements. At the time accepted students indicate they will matriculate, they may request an application for financial aid. All applications should be sent to the Office of Financial Aid. Scholarships, loans and other types of available financial assistance are listed in the financial information section on page _____.

Student Health Services are available at the Student Health Center located in the Bexar County Hospital, and are provided by faculty members of the Department of Family Practice. These services are supported by the Student Activity Fee.

New students are given an initial health assessment and thereafter may use the Health Center for acute illnesses or injuries as well as periodic examinations, family planning information and supplies, problem counseling, follow-up advice on chronic diseases, and the usual care offered in the offices of family physicians. All necessary laboratory, X-ray, and similar tests are provided without charge for students. The student activity fee does not cover health services for student dependents.

The Office of Educational Resources

The Director of Educational Resources coordinates and implements the various services which support the educational functions of The Health Science Center and extends these services to include the support of research activities, administrative requirements and public information.

The Library serves not only as the primary resource and repository of information for the learning, research and health care functions of the Center, but also as a laboratory where students acquire skills of information processing. An active orientation program is an important function of the library staff. The Library collection covers the broad range of all health related sciences — dentistry, medicine, nursing, basic sciences, environmental health, behavioral sciences, and veterinary sciences in over 81,000 volumes as well as subscriptions to over 2,000 periodicals. It serves as one of the eleven resource libraries in the five states of the South Central Regional Medical Library, and has access through a teletypewriter and computer terminals to data bases and literature resources nation wide, including direct access to the National Library of Medicine.

The Library's Learning Resource Center provides individual and small group study carrels for non-book media and study facilities for student use.

Some of these are equipped with television monitors and programs are available from The Health Science Center Demand Access Television System.

Art, photography and printing services provide design and production of teaching materials, graphic presentation of research results, and preparation of materials for publication. Complete service for the production of motion pictures in support of teaching, research, and documentation is available.

Television services provide more than 90 hours per week of demand-access programs requested by students or faculty members and are available in any of nearly 100 individual stations. The video library contains over 400 separate instructional programs on video tapes.

Audiovisual equipment and technical assistance are provided by Classroom Services.

Upon request, The Office of Educational Resources provides assistance in instructional development to include the design, development, and implementation of instructional programs; consultation with faculty and students in identifying instructional needs and problems; aid in the specification of goals and objectives; provision of resources to develop pilot instructional programs and materials; development of instructional programs and materials; development of instructional mechanisms, and instruction materials.

Facilities and services for all types of laboratory instruction required by various disciplines of the health sciences are provided by the Multidiscipline Laboratories. Each laboratory in the Medical School building has a capacity for either 16, 24, or 32 students, and is designed and equipped to provide office and work space for students, for stimulating independent investigation, for promoting correlation between disciplines, for promoting closer interaction between faculty and students, and for saving space and equipment through more efficient use. These services will be greatly expanded upon acquisition of the new Dental School building.

The Office of Continuing Education Services

The learning process of a professional cannot end with the attainment of a professional degree, but must be extended continously to keep abreast of new developments in special areas of interest. Such learning is difficult for the unassisted individual because of the enormous body of scientific information. It is the function of the Director of Continuing Education Services to coordinate and support programs designed by the faculty of the Health Science Center to further and facilitate post-graduate professional learning.

A biweekly series of Therapeutic Seminars is presented at The Health Science Center for physicians in the locality and are set up as teleconferences to allow direct participation by physicians over a five-state area.

Approximately 25 post-graduate courses are offered each year. These vary in length from one weekend to afternoon classes extending as long as 10 weeks so that the physician has opportunity for formal training commensurate with individual time available, interests, and requirements.

Preceptorships are also provided. These programs permit a physician to participate in the development and evaluation of an educational experience designed on an individual basis.

A program of continuing dental education is being planned and will be announced as developed.

SCHOOLS OF THE UNIVERSITY OF TENAS HEALTH SCIENCE CENTER

Separate catalogues are published for each of the schools of The University of Texas Health Science Center at San Antonio. Catalogues and applications may be obtained as follows:

The University of Texas Dental School at San Antonio

The University of Texas Medical School at San Antonio

Catalogues may be obtained by writing to the Office of Student Services,

The University of Texas Health Science Center at San Antonio, 7703

Floyd Curl Drive, San Antonio, Texas 78284.

Applications may be obtained by writing to The University of Texas Medical and Dental Application Center, 800 Brazos, Suite 801, Austin, Texas 78701.

The University of Texas Graduate School of Biomedical Sciences at San

Antonio.

Catalogues and applications may be obtained by writing to the Office of the Graduate School of Biomedical Sciences at San Antonio, The University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, Texas 78284.

The University of Texas School of Pharmacy, The Doctor of Pharmacy
Program at San Antonio

This program is briefly described in the Pharmacology section of the catalogue of The University of Texas Graduate School of Biomedical Sciences at San Antonio. A detailed description as well as an application may be obtained by writing to the College of Pharmacy, The University of Texas at Austin, Austin, Texas 78712.

FACILITIES AFFILIATED WITH THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER
There are many institutions in San Antonio that provide an excellent
resource for programs of The Health Science Center. Many members of
the staffs of these organizations hold joint appointments in the Dental,
Graduate, or Medical Schools and participate in educational and research
programs.

These institutions consitute an important resource for the training of students as well as the provision of needed laboratory space for the conduct of research.

A listing of these institutions follows:

Academic institutions

The University of Texas at San Antonio, a major university having both undergraduate and graduate programs, is in the process of being constructed on a 600-acre campus 5 miles north of the Health Science Center. Although facilities are not yet completed, plans for cooperative teaching and research between the two institutions have been initiated.

The University of Texas School of Nursing at San Antonio shares the campus with The University of Texas Health Science Center at San Antonio. It was authorized by the Texas Legislature in 1969 and began admitting students in 1970. Present enrollment includes 300 undergraduate and 59 graduate students.

Hospitals and Clinics

The Bexar County Teaching Hospital, operated by the Bexar County Hospital District, adjoins the Health Science Center and is connected at several levels. It was planned integrally with the Medical School and is a 12-story, 429-bed facility providing all general hospital services. The hospital has approved post-graduate training programs in anesthesiology, surgery, internal medicine, obstetrics-gynecology, ophthalmology,

orthopedic surgery, etorhinolaryngology, neurosurgery, theracic surgery, oral surgery, pathology, pediatrics, physical medicine and rehabilitation, psychiatry, radiology, urology, and family practice.

The Robert B. Green Memorial Hospital is also operated by the Bexar

County Hospital District. It is also located in urban San Antonio and houses
the ambulatory care clinics, a family care clinic, 57 obstetrical beds and
90 newborn bassinets. Its outpatient department includes 55 different
clinics which treat more than 129,000 patients each year.

Ground was broken in the South Texas Medical Center on November 20, 1970, for the new Audie L. Murphy Memorial Veteran Hospital. It was completed and became operational in October, 1973 with a planned bed capacity of 760 for medical, surgical and psychiatric patients. It will serve 40 counties of Southwest Texas. The facility provides 40,000 square feet of space for research.

Brooke General Hospital is a major component of Brooke Army Medical

Center. It has a bed capacity of 800 and offers definitive medical and

surgical care for Army, and other authorized personnel. It also provides

outpatient care. Internship and residency training programs are available.

The United States Army Institute of Surgical Research has gained international

renown for its outstanding research and excellence in the treatment of

serious burn cases.

Wilford Hall USAF Medical Center is a component of the Aerospace Medical Division of the Air Force Systems Command. It operates a 1000-bed general hospital that admits approximately 25,000 patients annually and its clinics see nearly 750,000 outpatients each year.

The United States Air Force School of Aerospace Medicine is located at Brooks Air Force Base, Texas. It was originally organized in 1917 and has been continuously active since that time in research and development.

in medical aspects of acrospace flight, in clinical practices of special interest to acrospace, and in post-graduate education in acrospace medicine and allied subjects.

The Santa Rosa Medical Center has a total of 1,050 heds in five units: the General Hospital, Children's Hospital, Otto Koehler Radiation Therapy and Research Unit and the Outpatient Clinic are in downtown San Antonio, while the Villa Rosa Psychiatry and Rehabilitation Center is in the South Texas Medical Center. The Santa Rosa system is moving toward specialized patient care, emphasizing pediatrics, orthopedics, nuclear medicine, neurosurgery and thoracic surgery. Residency training is available in seven specialties on a cooperative basis with the Bexar County Hospital District and The University.

The Baptist Memorial Hospital System operates three hospitals which offer general hospital service with a total capacity of 1,068 beds. Training in orthopedics and ophthalmology is available as a cooperative part of Bexar County Hospital University Residency Programs.

The University of Texas Health Science Center is also affiliated with the <u>San Antonio State Chest Hospital</u>. This is a 406-bed hospital with primary responsibility for the treatment of tuberculosis, employeema and other lung disease cases.

San Antonio Metropolitan Health District, The University of Texas Health Science Center Dental School at San Antonio maintains a working agreement with the San Antonio Metropolitan Health District. The District operates a dental health program which is designed to effect improvements in the dental health of the community by providing clinical facilities for chairside health education, application of preventive treatment procedures, and corrective treatment for indigent children through twelve years of age. These clinical facilities are utilized by the Dental School in its educational program.

The Cancer Therapy and Research Center is located in the South Texas

Medical Center. It provides services for the care of cancer patients

including Linear Accelerators and Electron Beam Therapy as well as the

standard Cobalt Therapy. The Center is developing programs for training

radiation therapy residents with The University.

Other Affiliated Facilities

An affiliation agreement is maintained between The University of Texas

Health Science Center and the Southwest Foundation for Research and

Education. This agreement allows the two institutions to share facilities

and faculties. The Southwest Foundation is a biomedical research

institution which has laboratories in San Antonio and a branch in Kenya,

Africa. Its annual research budget is \$3.000,000. Its staff works

primarily in the fields of cancer, heart, endocrine, and infectious disease

with emphasis upon virology and parasitology. The Foundation has 155,000

square feet of offices and laboratories. A large indoor and outdoor

animal facility houses a primate colony and other animals to support the

biomedical research effort.

An agreement between The Health Science Center and the Southwest Research Institute allows cooperation in research. The Southwest Research Institute, a nonprofit applied research organization has its headquarters in San Antonio and also has laboratories in Houston and Corpus Christi and an office in Washington, D.C. The staff conducts research and development projects which include a broad spectrum of the biological and physical sciences. Its annual research budget is over \$25,000,000.

The Ecumenical Center for Religion and Health located at the South Texas

Medical Center helps physicians, ministers and related professionals work

together to meet human needs. Activities of the Center are under the direction

of a Board of Trustees representing the major religions of the community.

Training courses and workshops for professionals are held in areas of personal

problem solving and counseling.

GRADUATE DEGREE PROGRAMS

Graduate programs leading to the Master of Arts and Doctor of Philosophy
degrees are offered by The University of Texas Graduate School of Biomedical
Sciences at San Antonio in the following fields: Anatomy, Biochemistry,
Biophysics, Microbiology, Pharmacology and Physiology.

Within these programs, candidates for degrees may acquire competence in many fields under the guidance of established teachers and investigators. Each program is supervised by a Committee on Graduate Studies composed of members of the Graduate Faculty of the Program. The Committee is responsible for recommending the admission of students to the Program, approving academic programs and certifying eligibility of students for admission to candidacy for a degree. The administrative head of each Program is the Chairman of the Committee on Graduate Studies. A Graduate Advisor represents the Program in all matters pertaining to the graduate students taking major work in the area.

The Dean of the Graduate School of Biomedical Sciences is the administrative head of the Graduate Programs. The Dean serves as Chairman of the Graduate Executive Committee, composed of faculty representatives from each Program and a student representative elected by the graduate student body. The Graduate Executive Committee formulates general academic policies, rules on recommendations submitted by the Committees on Graduate Studies, and submits recommendations to the President for the granting of Master of Arts and Doctor of Philosophy degrees.

All of the Graduate Programs have been approved by the Coordinating Board, Texas College and University System.

ADMISSION TO THE GRADUATE SCHOOL

Basic Requirements

- 1. A bachelor's degree from an accredited institution in the United

 States or proof of equivalent degree and training at a foreign
 institution. Adequate subject preparation for the proposed area of
 graduate study is essential.
- 2. Satisfactory grades in undergraduate courses, particularly in junior and senior level courses preparatory for graduate study in biomedical sciences. In general, the undergraduate grade point average should be no lower than "B" (3.0 in a 4.0 system). The grades received in graduate courses, which are computed separately, are also considered in evaluation of the application.
- 3. Satisfactory scores on the Graduate Record Examinations. In general, a minimum of 1000 for the combined scores on the verbal and quantitative portions of the Aptitude Test is required. Scores on GRE tests taken more than 6 years prior to the date of application are not acceptable.

Graduate Record Examinations

The Educational Testing Service administers the Graduate Record

Examinations Aptitude Test and Advanced Tests, which are given at various

centers throughout the world on regularly established dates:

January 18, 1975

April 26, 1975

February 22, 1975*

June 21, 1975

October 18, 1975

February 28, 1976*

December 13, 1975

April 24, 1976

January 17, 1976

June 12, 1976

*Aptitude test only; administered in the United States and Puerto Rico only

For applicants unable to take the GRE on one of the above dates, the ETS has established Special Administration centers where the examinations may be taken on other specified dates.

An information bulletin and application may be obtained on request from

the Educational Testing Service at one of the following addresses:

Box 1502

For applicants living in or west of Montana, Wyoming,

Berkeley, Calif. Colorado, Arkansas, or Texas.

94701

Box 955

For applicants living in states east of the above.

Princeton, N.J.

08540

The test scores should be forwarded by the Educational Testing Service directly to The University of Texas Graduate School of Biomedical Sciences at San Antonio (Code R-6908-8).

Application Procedure

Applicants for admission should obtain an application form and instructions for completing the application from The Graduate School of Biomedical Sciences.

Each application must include the completed application form; an official certified transcript from each college attended, including each graduate or professional school; a letter from the applicant containing a statement of objectives; three letters of recommendation concerning the potential of the applicant for graduate education; the scores on the Graduate Record Examinations.

All individuals applying for admission to the Graduate Programs who plan to enter in the Summer Session or Fall Semester should have their completed applications on file in the Graduate Office by March 1st; to enter in Spring Semester, by September 1st. An applicant may submit an incomplete transcript with the original application and substitute a complete official transcript showing the most recently completed semester(s) of course work as soon as it becomes available; it must be received by the Registrar before the student registers for the first semester of graduate courses.

Acceptance Considerations

Each application is evaluated by the appropriate Committee on Graduate Studies on the basis of several criteria, including quality of previous

course work, scores in the GRE tests, working experience in relevant scientific areas, and potential for a productive scientific career. In addition to the basic requirements listed in the section above, each Committee on Graduate Studies has established for that Program specific course requirements for admission, which are outlined in the description of each Program in a later section of the catalogue. Admission of qualified applicants to a specific program will be limited by the Committee on Graduate Studies to the number of students that the staff of that program can effectively guide, and the available facilities accommodate. Preference may be given to applicants for the Ph.D. degree over applicants for the M.A. degree. A qualified applicant may be admitted directly to a doctoral program without a Master's degree. All recommendations by the Committees on Graduate Studies for admission of applicants are subject to approval by the Graduate Executive Committee. The applicant is informed in writing by the Dean of the Graduate School of Biomedical Sciences of the action and of any conditions imposed on

Action Before Matriculation

acceptance.

After receiving notification of admission, the student should arrange an appointment with the Dean or the Associate Dean and with the specific Graduate Advisor of the proposed major department to discuss his or her academic program in preparation for registration for the first semester. Immunizations with oral policyelitis vaccine (for those under age 20), tetanus toxoid, and diphtheria toxoid are required prior to matriculation.

DOUBLE DEGREE PROGRAM

The Double Degree Program was designed to allow a medical or dental student to obtain an M.A. or a Ph.D. degree in addition to an M.D. or a D.D.S. at The University of Texas Health Science Center at San Antonio. The scientist who is well trained in the basic health science in which he or she obtains a graduate degree usually has not encountered the opportunity to apply this specialized knowledge to clinical medicine or dentistry. The physician and dentist on the other hand often become aware of clinical problems which might easily have their solution in a basic science discipline. In short, there may be a communications gap between these types of scientists. It is advantageous to have a number of individuals who have depth of knowledge in both basic science and clinical medicine or dentistry in order to bridge this gap. The development of a mechanism at The University of Texas Health Science Center at San Antonio for students to be trained in two areas is an effort to provide the biomedical community with such individuals. The program is based on the premise that any student desirous of obtaining both an M.D. or a D.D.S. and a graduate M.A. or Ph.D. degree while a student at The University of Texas Health Science Center at San Antonio would plan to meet the full requirements defined for both degrees. Accreditation of the Medical School and its programs is achieved through the Liaison Committee of the American Medical Association and the Association of American Medical Colleges. Any medical student in such a combined degree program must meet all requirements established by the Medical School which have been approved by this Liaison Committee. Accreditation of the Dental School and its programs is achieved by meeting all of the requirements of the Council on Dental Education of the American Dental Association. Any dental student in such a combined degree program must meet all requirements established by the Dental School which have been approved by the Council on Dental Education of the American Dental Association. Approval of the Graduate Programs is obtained through the Coordinating Board, Texas College and University System. All students in a double degree program must for either the M.A. or Ph.D. degree meet the full requirements for these programs as

approved by the Coordinating Board.

Each student must satisfy the entrance requirements of both the Medical School or Dental School and the Graduate School of Biomedical Sciences, and approval for admission shall be accomplished separately. Admission to the Medical School or Dental School in no way guarantees admission to the Graduate School, nor does admission to the Graduate School guarantee admission to the Medical or Dental Schools. Students need not register their intent of securing both an M.D. or D.D.S. and an M.A. or Ph.D. at the time of admission to either medical, dental or graduate programs. At any time, a student in the Medical or Dental School may make the decision to pursue a course of study for a graduate degree and may apply for admission to one of the graduate programs. The same principle applies to the student who originally enters the Graduate School. A student may withdraw from either school without in any way jeopardizing the pursuit of a degree in the other.

The total time added to the typical medical or dental school curriculum is generally a year for the M.A. degree or three years for the Ph.D. degree. Utilization of summer work and elective periods in the medical or dental curriculum contributes to economy in total time span. The specific details as to the logistics of pursuing a graduate program while registered in the Medical or Dental Schools will depend on the specific graduate program undertaken, and in every instance should be worked out between the student and the appropriate Committee on Graduate Studies with final approval by the Graduate Executive Committee.

For additional information, consult the Associate Dean for Student

Affairs of the Medical School, the Associate Dean of the Dental School or

the Associate Dean of the Graduate School of Biomedical Sciences.

SPECIAL STUDENTS

Under certain conditions an individual may wish to register as a Special Student for one or two graduate courses for credit. The basic requirements for such registration are

- 1. Submission of a completed Special Student application form.
- 2. A bachelor's degree from an accredited institution in the United States or proof of equivalent degree and training at a foreign institution. In exceptional circumstances, a senior level undergraduate with a superior academic record may be permitted to register for a single course relevant to his or her undergraduate program of study. Official transcripts from all institutions attended (undergraduate and graduate) are required.
- 3. Adequate academic preparation for each course, as evidenced by satisfactory grades in relevant course work.
- 4. Approval of registration each semester by the Associate Dean of the Graduate School, and by the instructor of each course.
- 5. Maintenance of a grade point average of at least "B" (3.0 in the 4.0 system) in courses taken as a Special Student.
- 6. A maximum course load of 9 credit hours in Fall or Spring Semester, and 6 credit hours in Summer Session.
- 7. The Registrar agrees that no undue crowding of facilities will result.

Credit toward a graduate degree for courses taken as a Special Student will be considered by the Graduate Executive Committee if the student's application for admission to a graduate program is approved.

For additional information, consult the Associate Dean of the Graduate School of Biomedical Sciences.

RECISTRATION

A student must register each semester and summer session that he or she is enrolled in a course. This includes courses in Research, Thesis, Dissertation and Supervised Teaching. A student cannot receive credit for a course for which he or she has not registered. Days set aside for pre-registration and for registration are indicated in the calendar in this catalogue. On the pre-registration counseling date, course cards, instructions and information on course offerings may be obtained from the graduate advisors of the various programs or from the Graduate School Office. At this time students obtain written approval from their graduate advisors for enrollment in the courses selected. With respect to courses given by a department outside of the student's major program, the student must also obtain approval to register for each course from the appropriate instructor or from the graduate advisor of the program offering the course. All students currently enrolled should submit their completed course cards to the Graduate School Office at least one week prior to registration day.

Registration is directed by the Office of the Registrar located in the Office of Student Services. Fees are paid at the time of registration. Students are urged to register on the appointed days. A student registering after the appointed day for that semester will be required to pay a special charge of five dollars (\$5.00) to defray the costs of extra service required for late registration.

Semester Credit Hours

The unit of measure for credit purposes in graduate work is the semester hour. Courses which meet for 3 hours of lecture a week have a credit value of three semester hours for one semester or six semester hours for two semseters. A course with 2 hours of lecture and 6 hours of laboratory work a week has a credit value of four semester hours.

Course Load

The minimal full-time course load for a semester is twelve semseter hours.

The maximum load is individually determined by the student's faculty

advisor and the Committee on Graduate Studies involved. If a student is

employed as a teaching assistant, research assistant or tutor, the course

load may be reduced correspondingly.

Adding Courses

After the specified date of registration, a student may add one or more courses by obtaining the approval of the instructor(s), the graduate advisor(s), and the Registrar.

Dropping Courses

During the first half of a course, a student who is not on probation may drop a course without penalty provided the student is passing the course at the time and has the approval of the instructor, the Graduate Advisor and the Dean. The symbol () will be recorded for the course by the Registrar. However, a student on probation will not be allowed to drop a course. In case of illness, a student may drop a course without penalty at any time before the beginning of examinations with the consent of the Dean.

Registration in Absentia

It is a requirement that a student be registered for the semester in which he or she graduates. If a candidate has completed the last requirements for a degree, including the submission of a thesis or dissertation and needs to register only for the purpose of having the degree conferred, he or she may register in absentia. This is the only purpose for which a student may register in absentia.

Registration for Final Credit Hours

If a student is registering only for final credit-hours (final semester or summer session) in preparation of a thesis or dissertation, the tuition may be reduced to \$12.00 for residents of Texas and \$50.00 for nonresidents (United States citizens and foreign students). As a rule, a student may register for final credit-hours only once.

Registration at Other Components of The University of Texas System

A student who has been formally admitted to a Graduate Program of the Graduate School of Biomedical Sciences at The University of Texas Health Science Center at San Antonio may apply for permission to take a course(s) at any one of the other components of The University of Texas System:

The University of Texas at Arlington

The University of Texas at Austin

The University of Texas at Dallas

The University of Texas at El Paso

The University of Texas of the Permian Basin

The University of Texas at San Antonio

The University of Texas Health Science Center at Dallas

The University of Texas Medical Branch at Galveston

The University of Texas Health Science Center at Houston

The University of Texas System Cancer Center

The University of Texas System School of Nursing

Consent of the student's Graduate Advisor and the Dean must be obtained before the student may apply to another component for permission to take courses. Arrangements are made by the Registrar for proration of tuition and fees.

Registration for Audit

Permission to audit a course or courses is sometimes granted. Auditing conveys only the privilege of observing, and excludes handing in papers or taking part in class discussions, laboratory exercises or field work. No grade is given and no credit is recorded. Graduate students must obtain permission to register to audit a course from the instructor of the course and the Graduate Advisor of the program in which they are enrolled. All other persons who wish to register to audit a course must apply for admission as a Special Student, satisfy the requirements for such admission set forth in a preceding section of this catalogue, and obtain permission to register from the instructor of the course. The fee schedule for auditing of course(s) is described in the section on Financial Information in this catalogue.

File Number

The student's social security number serves as the matriculation and file number. This number is the primary means of identifying the student's official academic record. Prospective students who do not have social security numbers should apply for one in time to include it on their applications for admission as graduate students.

REQUIREMENTS AND REGULATIONS

A student enrolled in the Graduate School of Biomedical Sciences is subject to all established requirements and regulations. Exceptions to these rules and solutions not covered by previously determined guidelines will be handled on an individual basis by the Graduate Executive Committee. At least once each semester students should confer with their graduate advisors about their progress, changes in the scheduling of classes, additional requirements, new regulations and deadlines for graduation.

Residence Required for Graduation

Each graduate student must spend a minimum of two 16-week semesters, or the equivalent, as a full-time student in residence at The University of Texas Graduate School of Biomedical Sciences at San Antonio.

A candidate for the M.A. degree must be registered in the Thesis course for at least one semester; a candidate for the Ph.D. degree must be registered in the Dissertation course for a period longer than a single semester.

Time Limits

Ph.D. degree: No official time limit has been placed on the time for acquiring a Ph.D. degree. Course work taken more than six years prior to the end of the candidate's final semester may not be accepted for credit and if necessary for the degree must be repeated or specifically approved by the Committee on Graduate Studies. All doctoral work is subject to review by the Graduate Executive Committee and the Dean.

M.A. degree: All requirements for a Master's degree must be completed within one six-year period. In special cases, upon recommendation of the Committee on Graduate Studies, the Dean may consider reinstatement.

Credit Hour Requirements

Ph.D. degree: A specific number of semester credit hours has not been set for the attainment of the Ph.D. degree. The curriculum requirements of each Graduate Program are defined in the section on Program

Descriptions, and the curriculum of each student is supervised by the appropriate Committee on Graduate Studies.

M.A. degree: A minimum of 30 semester credit hours is required for the M.A. degree. Not more than a total of 12 of the credit hours awarded in Research, Thesis, Seminar, and Supervised Teaching may be included in the 30 semester hour minimum. With the exception of students participating in the double degree program, all work for the M.A. degree is ordinarily done at The University of Texas Graduate School of Biomedical Sciences at San Antonio. Under some circumstances, a maximum of 6 semester hours of graduate course work may be transferred from another institution but only on the basis of a petition by the Committee on Graduate Studies in the student's major area and approval by the Dean. In cases where such transfer is approved, the student must still meet the residence requirement of two full semesters. For students participating in the double degree program usually 6 semester hours in the medical or dental

curriculum may be credited toward the M.A. degree. As a rule, these semester hours will come from survey courses in the student's major area.

Foreign Language Requirement

There is no general requirement for demonstration of proficiency in one or more foreign languages before admission to candidacy for a doctoral degree. In modern baccalaureate curricula, training in foreign languages is being stressed as an important component of a liberal education. During graduate work, the reading of scientific papers in foreign journals and the acquiring of an ability to converse with fellow scientists from various parts of the world will be encouraged. If knowledge of certain foreign languages is deemed essential for training in a specific program, a student will be asked to pass an examination to demonstrate an adequate experience with a particular language or languages. In addition to making it possible for the graduate student to obtain in-depth knowledge and training in a specific area of his or her choice, the aim of the Graduate Program is to provide the student with the opportunity to broaden his or her background in the humanities as well as in the social and natural sciences. Consult the section on Program Descriptions for specific information about the foreign language requirements.

Supervised Teaching Requirement

Directed teaching in the student's major area under the close supervision of one or more faculty members is required of each doctoral student. Up to 6 semester hours of credit toward a degree may be granted to the student who completes at least two semesters of teaching. In order to receive this credit the student must enroll in a special graduate course in Supervised Teaching in his or her area and receive a grade of S.

Student Debts

The University of Texas Health Science Center at San Antonio is not responsible for debts contracted by individual students or by student organizations. On the other hand the University expects all students and

student organizations to conduct themselves honorably in all commercial transactions. The school will not assume the role of a collection agency for organizations, firms and persons to whom students may owe bills, nor will the University adjudicate disputes between students and creditors over the existence or the amounts of debts.

A student, however, is expected to discharge contractual obligations. In the event of conduct on the part of a student clearly demonstrating flagrant disregard of commercial obligations (refusal to pay or meet admitted debts or obligations will be thus construed), appropriate action will be taken.

In event of nonpayment to the school one or more actions may be taken:

(1) barring readmission of the student; (2) withholding the student's grades and official transcript; (3) withholding a degree to which the student would otherwise be entitled.

GRADES, CONTINUATION, GRADUATION

Grading System

Credit is given in the Graduate Programs for the grades A, B and C; no credit is allowed for courses in which grades of D or F are earned. However, all A to F grades are included in the computation of the grade-point average. Grade points are assigned as follows: A, denoting excellent scholarship, 4 points; B, good, 3 points; C, fair, 2 points; D, pass, 1 point; and F, failure, O. Credit for courses in which a D or F is received may be obtained only by repetition of the course; if a course is repeated, the last grade becomes the official grade for the course.

A grade of S (satisfactory) or U (unsatisfactory) is given in the following courses: Seminar, Supervised Teaching, Research, Thesis and Dissertation. These grades are not included in the computation of the grade-point averages.

Other symbols used in reporting the standing of students in their classes are: P - final examination postponed; R - reexamination to be allowed; Q - course dropped while receiving a passing grade - no penalty; WP - withdrawal from course passing; WF - withdrawal from course failing; I - incomplete. An I is used to report cases where the student has not completed all of the assignments before conclusion of the course; if the required work is completed within two years the symbol I may be converted into a letter grade by the instructor.

The grading system described above applies to courses in the medical and dental curricula in which graduate students may be enrolled, as well as to courses in the Graduate Programs.

Continuation, Probation, Dismissal

Continuation in the Graduate Programs is dependent upon two requirements:

- (1) satisfactory progress in removing any conditions imposed at the time of admission, and
- (2) maintenance of a minimum cumulative B or 3.0 average for all courses taken while enrolled in the Graduate School of Biomedical Sciences.

 A student whose cumulative grade point average falls below 3.0 will

be placed on probation and warned by the Dean of the Graduate School of Biomedical Sciences that continuation in the graduate program is in jeopardy. A student will remain on probation as long as his or her grade point average is below B. While on probation a student must maintain a B average in those courses for which he or she is registered or be subject to dismissal. Except in the case of illness permission will not be given to drop courses while the student is on probation. The graduate student who has been dismissed may be readmitted for further graduate study by petition from the Committee on Graduate Studies of his or her major area. The request will be considered by the Graduate Executive Committee, and according to the recommended action will be approved or disapproved by the Dean. Under no circumstances will a student on probation be admitted to candidacy or be awarded a degree.

A satisfactory rate of progress toward the degree is required throughout the student's enrollment. A Committee on Graduate Studies with the Dean's consent may terminate a student's enrollment at any time if the student's rate of progress is not satisfactory.

Withdrawal 10B-1

Permission for withdrawal from a Graduate Program may be granted by the Dean, on written request by the student, and after consultation with the Graduate Advisor of the Program. In the case of withdrawal before the end of a semester or summer session, and thus the dropping of all courses, the grading symbol WP or WF will be recorded for each course not completed, depending on the student's standing on the last day of enrollment. In the case of withdrawal at the end of a semester or summer session, the appropriate grading symbol, A through F, will be recorded for each completed course, and WP or WF for each course not completed. Any student who withdraws at any time must complete a Terminal Clearance Form at the time of withdrawal. An application for readmission by a student who has previously withdrawn is subject to the same requirements, procedures, and acceptance considerations as apply to first-time applicants.

Leave of Absence

Permission for a leave of absence from a Graduate Program for a maximum period of one year may be granted by the Chairman of the Committee on Graduate Studies of the Program, subject to approval by the Dean. Such permission will be granted only on written application and for extenuating circumstances, and indicates that the student will be allowed to return to the Program within the one-year time limit. The grading symbol I (incomplete) will be recorded for each course not completed, and the student will be required to complete these courses as soon as they are offered after his or her return from the leave of absence.

Transfer between Graduate Programs

Any student who wishes to transfer to another Graduate Program must make formal application to the Program, and the application is subject to the same requirements, procedures, and acceptance considerations as apply to other applicants to the Program.

Graduation

The degree of Doctor of Philosophy is awarded by the Board of Regents upon the satisfactory completion of prescribed academic programs including the preparation and defense of an acceptable dissertation, recommendation of the Graduate Executive Committee, and certification of the candidate by the Dean and President to the Board of Regents.

The degree of Master of Arts is awarded upon the satisfactory completion of a minimum of 30 semester hours, the requirements particular to each Graduate Program, recommendation of the Graduate Executive Committee, and certification by the Board of Regents.

Since requirements for degrees in the Graduate School Programs may be changed from year to year, the student is bound only by the requirements in force at the time of admission within a six-year limit. However, the student may elect to fulfill requirements approved at a subsequent date. Degrees are awarded at the end of the fall semester, the spring semester and the summer session, but formal public ceremonies are held only at the end of the spring semester.

SEQUENTIAL PROCEDURES

Doctor of Philosophy Degree

- Phase I. From admission through successful completion of the qualifying examination and admission to candidacy.
 - 1. As soon as possible after admission to a Program, the appropriate Committee on Graduate Studies shall appoint a faculty advisor for the student. The advisor's function is to serve as the "contact person" on the faculty who shall see to it that course requirements and any contingencies of admission are satisfied by the candidate. This advisor may or may not ultimately be the supervising professor.
 - 2. After the student has been in the program for a year and has met most of the course requirements, the Committee on Graduate Studies shall construct and administer a qualifying examination. This examination may be written, oral, or both. The make-up of the Examination Committee shall be left to the Committee on Graduate Studies, but one member must be outside of the student's HS-285

program area. The results of examination will be documented and forwarded to the Graduate Executive Committee by the Graduate Advisor after approval by the Committee on Graduate Studies as criteria for the student's qualification for candidacy. When the student has been admitted to candidacy by the Dean on recommendation of the Graduate Executive Committee, he or she will enter Phase II of the program.

- Phase II. Successful completion of the qualifying examination through awarding of the degree.
 - As soon as possible after admission to candidacy the Supervising Professor shall be appointed. Under usual circumstances this faculty member should be selected by the student with the guidance and approval of the Committee on Graduate Studies. The appointment would be made after obtaining the consent of the individual selected.
 - Professor, the Committee on Graduata Studies shall consider names of at least four other members for the Supervising Committee.

 Two of the members shall be faculty members of the program and two shall be from a supporting area. An additional member of the committee should be from outside this institution. The names of the proposed Supervising Committee with the Supervising Professor as chairman shall be submitted to the Graduate Executive Committee for approval.
 - 3. The Dean on receiving the recommendations from the Committee on Graduate Studies may appoint an ad hoc committee of three faculty members to review the composition of the Supervising Committee and submit its recommendation for approval or disapproval to the Graduate Executive Committee. In the event the Graduate Executive Committee does not approve the proposed Supervising Committee, this fact along with any recommendations shall be returned to the Committee on Graduate Studies for reconsideration and resubmission.
 - 4. At an early date, the Supervising Professor will convene the Supervising Committee to discuss with the candidate the problem HS-286

chosen for the dissertation and proposals for its solution. At appropriate intervals thereafter progress reports (written or oral) shall be presented so that the current status of the work may be evaluated. In this way, the Committee will be kept fully informed and provided with the continued input into the problem early in the training program.

- 5. The Final Oral Examination will be conducted by the Supervising Committee with the Supervising Professor as Chairman. All interested persons may attend and have the right to question the candidate. Only the Supervising Committee will vote on the examination; more than one dissenting vote will indicate failure. In the event of a failing performance, the Committee will decide upon the appropriateness of another examination.
- 6. The report from the Supervising Committee on a successful Final Oral Examination, with recommendation for the awarding of the Ph.D. degree (or M.A. degree see below), will be submitted to the Graduate Executive Committee. On approval of the recommendation, the Dean of the Graduate School will notify the President of The University of Texas Health Science Center at San Antonio that the candidate has fulfilled all requirements of the Graduate School for that degree. Upon certification by the President, the degree is conferred by the Board of Regents of The University of Texas System.

NOTE: Student may not register for dissertation until admitted to candidacy. Registration for the doctoral dissertation must cover a longer period than 1 semester. (If the degree is to be received in June, the candidate must register for Dissertation the previous fall semester.)

Master of Arts Degree

The procedures for the M.A. degree will follow closely those outlined for the Ph.D. Degree. The Committee on Graduate Studies may or may not elect to examine the student prior to recommending admission to candidacy and selection of the Supervising Committee. Generally within the last year the student will select a Supervising Professor, and with the advice of the Committee on Graduate Studies select a Supervising Committee composed

of two additional faculty members from the student's major area and one from a minor area. The Final Oral Examination may include general aspects of the student's major and minor fields of study in addition to the defense of the thesis. The Supervising Committee will notify the Graduate Executive Committee when the candidate has completed satisfactorily the assigned academic program, and as applicable, a final oral examination and a thesis. Upon their approval, the Dean will recommend the awarding of a Master of Arts degree to the candidate.

NOTE: The Master of Arts degree is not required as an intermediate stage before the Ph.D. degree. A qualified applicant without the M.A. degree may be admitted directly to a doctoral program.

Graduation Procedures

Ph.D. and M.A. candidates

The following must be completed in the semester in which the candidate graduates, in accordance with the schedule of deadlines shown; earlier completion is highly recommended.

Final Deadline

Visual Manufacture (All Control of Control o	They had fill better the continue of the conti
Diploma Name Card*	End of second week of semester
Request for Final Oral*, Vita+	32 days prior to graduation
(one copy**), Abstract+ of	
Dissertation or Thesis (20 copies**)	
Date of Final Oral	22 days prior to graduation
Report of Final Oral	15 days prior to graduation
Dissertation+ (3 copies**) or	15 days prior to graduation
Thesis+ (3 copies**)	
List of schools attended during	15 days prior to graduation
graduate studies*	
Receipts from Cashier for	15 days prior to graduation
publication of abstract,	
microfilming and/or binding	
Ph.D. candidates only	
Microfilm Agreement*	15 days prior to graduation
Copyright Disclaimer*	15 days prior to graduation
Survey of Earned Doctorate*	15 days prior to graduation

- * Forms available in the Graduate School Office.
- ** Originals, or multilith or Copy Center Copies
- + See "Instructions for Preparation of Thesis, Dissertations and Dissertation Abstracts", available in the Graduate School Office.

Supplemental Information

For supplemental information concerning a specific Graduate Program, communicate with the Chairman of the Committee on Graduate Studies, or the Graduate Advisor, of that Program. For inquiries regarding general requirements and regulations, communicate with the Graduate School Office.

PROGRAM IN ANATOMY

Objectives of Graduate Work

This program is designed to provide the student with academic research, technical, experimental and teaching backgrounds which will enable an individual to qualify for a rewarding career of teaching and research in medical, dental, and nursing or other allied health fields.

Programs of Graduate Work

The courses required depend on the goal of each individual student. The faculty's research interest is focused upon four main areas: cell biology, ultrastructure, neurosciences and reproductive biology. A sufficiently large variety of courses is available on this campus to suit the program of each student. Students acquire teaching experience by assisting with instruction of medical and dental students. Students working toward the Doctor of Philosophy degree must pass departmental qualifying examinations before admission to candidacy.

Requirements for the Master of Arts degree specify 30 semester hours of work including a thesis. For the Doctor of Philosophy degree, a dissertation based on the results of a research project is required.

Physical Facilities

Each faculty member maintains a laboratory containing specialized equipment useful for research in the area of interest. In addition, the department maintains special all-purpose facilities including: two electron microscopes and all necessary equipment for ultrastructural studies; a radioautography laboratory, photographic dark rooms, radioisotope counting facilities, ultracentrifuges, spectrophotometers and other apparatus necessary for modern metabolic, anatomical and chemical studies, complete micro- and macro-cinematography facilities; animal quarters under the supervision of the Department of Laboratory Animal Medicine which house a number of invertebrate, amphibian and mammalian species. The school maintains a machine shop as well as computer and visual aid support groups. The Health Science Center Library contains a comprehensive collection of journals and books in the

anatomical and other biological fields. Ample study and laboratory space is available for a substantial number of anatomy graduate students.

Faculty

Chairman, Committee on Graduate Studies - Edward G. Rennels

Graduate Advisor - Erle K. Adrian, Jr.

Professor Erle K. Adrian, Jr.

Cellular responses to nervous tissue injury.

Professor Alexis L. Burton

Tissue culture cinematography and experimental cytology.

Professor Ivan L. Cameron

Cell biology, cell reproduction and differentiation.

Professor Anatolio B. Cruz**

Surgical oncology.

Professor John J. Ghidoni**

Cardiovascular pathology.

Professor Frank Harrison, President of The University of Texas

Health Science Center

Neuroscience, health professions education.

Professor William H. Knisely, Assistant to the Chancellor for Health Affairs, The University of Texas System

Pulmonary circulation, health professions education.

Professor Frederick T. Lynd**

Comparative gross and microscopic anatomy.

Professor Clarence W. McNutt

Genetics, mammalian development.

Professor Russel J. Reiter

Meuroendocrinology,

Professor Edward G. Rennels, Chairman, Department of Anatomy
Reproductive biology, endocrinology.

Professor Jim L. Story**

Experimental neurosurgery.

Associate Professor Gene L. Colborn

Ultrastructure and morphogenesis of the cardiovascular system.

HS-291

Associate Professor Nobuyoshi Hagino
Reproductive biology, neuroendocrinology.

Associate Professor Marshall L. Houston
Embryology and placentology.

Visiting Associate Professor Masataka Shiino

Ultrastructure and physiological cytology of pituitary cells.

Associate Professor Vick Williams
Ultrastructure of nervous tissue.

Associate Professor William B. Winborn

Cellular ultrastructure.

Assistant Professor E. Phyllis Bowie
Immunocytology of pituitary gland.

Assistant Professor Hou-Chi Dung

Neurological mutations of the mouse; ultrastructure of lymphoid tissues.

Assistant Professor Damon C. Herbert

Cytophysiology of pituitary gland.

Assistant Professor Martin A. Kramen***

Developmental biology.

Assistant Professor William W. Morgan

Brain biogenic amines, diurnal rhythms, neuroendocrinology.

Instructor M. Glenn Williams

Electron microscopy.

** Staff member with joint appointment in Department of Anatomy and major appointment in another department.

*** Staff member with joint appointment in Department of Anatomy and major appointment at The University of Texas at San Antonio.

Specific Degree Requirements

Master of Arts Degree. For the Master of Arts degree in Anatomy a minimum of 30 semester hours of graduate credit is required. A thesis and final thesis examination are also required.

Upon application to the Graduate Program, dental or medical students who have already demonstrated adequate graduate level proficiency in the

basic courses in anatomy and other areas may be admitted to the Master's degree program. These students will be required to take at least 12 additional semester hours of advanced graduate level course work in addition to the necessary credit hours for research and thesis.

Doctor of Philosophy Degree. Graduate study programs leading to the degree of Doctor of Philosophy will depend upon the student, the area of specialization which culminates in the dissertation, and the professional career for which the student is preparing. It is expected that all graduate students working towards the doctoral degree in Anatomy will be required to take the following introductory courses:

- 1. Microscopic Anatomy
- 2. Human Embryology
- 3. Neuroscience
- 4. Gross Anstomy

These courses are presently given in conjunction with The Medical or Dental Schools and should be considered as background courses for the graduate students in anatomy. In addition to the above courses, each graduate student should take or should have taken an acceptable course in biochemistry and an acceptable course in physiology (i.e., through systems physiology).

Based on the research interest of the faculty the following five special advanced level graduate courses will be offered on a regular basis:

- 1. An advanced course in Gross Anatomy
- 2. Cell and Quantitative Biology
- 3. Neurobiology which includes aspects of neurochemistry, neurophysiology, neuroanatomy and some neuropharmacology
- 4. Endocrinology of Reproduction
- 5. Electron Microscopy a course in ultrastructure and use of the electron microscope

Two of the courses on this list are required of all anatomy graduate students in the doctoral program. Students may also be required to take additional courses offered by the department.

The individual program leading to the Doctor of Phulilosophy degree will be planned by the student and his or her faculty advisor. This plan is

to be approved by the Committee on Graduate Studies. Admission to a graduate program is not to be interpredted as admission to candidacy for the Doctor of Philosophy degree. Advancement to doctoral candidacy requires approval of the Committee on Graduate Studies and is based upon the total record of the student's performance in the graduate courses and successful completion of qualifying examination. These examinations will be written and oral. The qualifying examination will not be given until the student has demonstrated reading proficiency in one foreign language. Procedural Sequence for Graduate Students working towards a Ph.D. degree

- 1. Students beginning graduate study in Anatomy will ordinarily enter in the Summer Session. During the first year each new incoming student must have an academic advisor. Students who do not request a specific advisor will have one appointed by the program's Graduate Advisor. Appointment of advisors to students will be on a rotating basis among the various faculty members who wish to serve as advisors. It is suggested that every student spend some time in the laboratories of two or three faculty members during his or her first two years. It is suggested that at least two different research areas be represented in the selection of these early laboratory research experiences. During this research exposure the student will be expected to participate in ongoing research projects but will not be required to undertake an independent research project. The duration of exposure in a particular laboratory need not be more than one month.
- 2. By the end of the second year of Graduate School a student should select a research area of interest and a research advisor. This research advisor need not of necessity be the chairman of the qualifying examination committee.
- 3. It is strongly recommended that the qualifying examination (written and oral) be taken at the end of the second year, but it must be taken by the end of the third year.
- 4. During the course of the Ph.D. program, every student must assist in the teaching of at least two different anatomy courses.

Graduate Courses

The course offerings in the Graduate Program are contingent upon adequate student enrollment.

Gross Anatomy

7 semester hours

Laboratory Fee: \$8.00

Lectures, conferences, and laboratory work covering the entire human body. Groups of four students dissect a cadaver under supervision of the Anatomy staff. Prosections, demonstration specimens, X-rays, films and other learning aids are used to supplement the laboratory work and are available to students for study at their convenience. Staff.

Microscopic Anatomy

5 semester hours

Laboratory Fee: \$8.00

This course consists of a series of lectures and laboratory sessions which cover current concepts in cell biology and human histology. Basic information on the structure and function of cells and tissues is presented in the lectures; this is followed by staff-supervised laboratory sessions emphasizing the recognition of cells and the fundamental tissues. Each student is provided with a box of microscopic slides of human tissues. The laboratory sessions are accompanied by microscopic slide demonstrations and/or television tapes of tissues under study. Supplemental study material, such as films, television tapes, and transparent photomicrographs, are available upon request through the Audio-Visual Department and the Learning Resources Center. The general purpose of this course is to acquaint the student with basic cytology and histology of normal human tissues thereby providing a firm foundation of knowledge for the understanding of normal and disease processes. Staff.

Human Embryology

2 semester hours

The goal of this course is to give the student the necessary knowledge of normal human development to understand adult relationships and the mechanisms of congenital malformations. The course consists of 24 hours

of lectures covering the early development of the embryo, its implanatation in the uterus and the development of the various systems of the body. Malformations are discussed by clinical specialists and as much as possible, clinical cases are presented as examples. Burton.

<u>Neuroscience</u>

5 semester hours

Laboratory Fee: \$8.00

Lectures, conferences and laboratories deal with study of the anatomy and function of the brain and spinal cord. Presentation of neurological cases. Primarily designed for medical students and taught by interdisciplinary task force from the Departments of Anatomy, Pharmacology, Physical Medicine and Rehabilitation, Physiology, Medicine and Surgery.

Task Force Staff.

Cell and Quantitative Biology

4 semester hours

Prerequisite: Biochemistry

The course includes both lecture material and laboratory work. The students will be introduced to procedures used in cell biology research and in the analysis and presentation of data. Laboratory techniques and projects are emphasized. At least five students must register for the course. Cameron and Morgan.

Electron Microscopy

3 semester hours

Introductory techniques: selected readings on techniques and instrumentation accompanied by practical application in all aspects of tissue preparation, microscopy and photography. Research on selected or assigned problems. Winborn.

Problems in Neurochemistry

3 semester hours

Prerequisites: General Biochemistry and Neuroscience

Maximum students during period: 5

Individual research projects to study the role or relationship of biogenic amines or nucleic acids in the brain to circadian rhythms, anesthesia, barbiturate addiction, or to the regulation of pituitary

HS-296

function. Emphasis will be placed on the practical use of spectrofluorometric and radioisotope procedures to study the chemistry of the biogenic amines in vivo. Morgan.

Endocrinology of Reproduction

3 semester hours

Prerequisites: Microscopic Anatomy, Neuroscience, and General Biochemistry

Lectures and seminars on anatomy, biochemistry and physiology of pituitary, gonads, and neural structures regulating reproductive processes. Laboratory excercises on alternate weeks will demonstrate procedures and techniques and enable students to explore certain areas of current research. Hagino, Herbert, Kramen, Reiter and Rennels.

Problems in Neuroendocrinology

3 semester hours

Prerequisite: Neuroscience

Literature search and specific research projects designed to acquaint the individual with the neuroendocrine mechanisms of reproductive physiology. Studies will deal primarily with the influences of the external environment and the pineal gland on the regulation of pituitary gonadotropins. Reiter.

Anatomy of the Newborn

2 semester hours

Prerequisite: Gross Anatomy

Laboratory and conference. Detailed gross dissection and study of the newborn with special emphasis on developmental origins, features and relationships differing from the adult. McNutt and V. Williams.

Regional Anatomy of the Back, Head and Neck 3 semester hours

Prerequisite: Gross Anatomy

Students will participate in lectures, dissections, presentations of prosected material and teaching in the first year gross anatomy laboratory. Adrian.

Regional Anatomy

3 semester hours

Prerequisite: Gross Anatomy

Laboratory and conference. Study of anatomy associated with one of the medical specialties such as orthopaedics, obstetrics and gynecology, etc.; detailed dissection, selective reading and consultation with clinical staff. McNutt, V. Williams, Colborn and Dung.

Anatomy of the Thorax

3 semester hours

Prerequisites: Gross Anatomy and Microscopic Anatomy
Intensive study of general thoracic anatomy, with special consideration
given to the gross and microscopic architecture of the heart. Readings
of classic and current literature will be supplemented with dissection
of human and animal materials. Colborn.

Advanced Anatomy of the Trunk

3 semester hours

Prerequisites: Gross Anatomy, Microscopic Anatomy, and Human Embryology

A course in the anatomy of the thorax, abdomen, pelvis, and perineum directed toward acquisition of detailed information concerning these anatomic regions. Thorough dissection by students and faculty will be supplemented by group conferences and selected readings in classic anatomic texts and surgical literature. At least six students must register for the course. Colborn.

Neurobiology_

4 semester hours

Prerequisite: Neuroscience

Lectures, conferences, demonstrations and laboratories dealing with aspects of neurochemistry, neurophysiology, neuroanatomy and neuropharmacology. Staff.

Problems in Cell Biology_

3 semester hours

Prerequisites: General Biochemistry and Microscopic Anatomy

Specific research projects dealing with some aspect of cell biology.

Cameron.

HS-298

Medical Genetics

2 semester hours

Lectures and conferences on the application of genetic principles to development of functions or diseases of man. McNutt.

Scientific Cinematography Applied to

3 semester hours

Basic Sciences

Theory and practices of the production of motion picture films for research and teaching perposes. This program includes a large variety of projects from which each student can select one related to his or her com interest. Besides regular cinematography, many other techniques (cinemackography, cinemicrography, animation, time-lapse, editing, sound, etc.) are included. Burton.

Histopathologic Studies of Mutant Mice 3 semester hours

Prerequisite: Microscopic Anatomy

Microscopic slides and electron micrographs of various organs from normal and neurological mutants will be studied. Dung.

Frinciples and Techniques of Radioautography 1 semester hour Lectures and laboratory work dealing with the use of radioisotopes in histology. Students will learn about the handling of radioactive materials, the processing of labeled tissues for light and electron microscopy, and the preparation and analysis of radioautographs. Special project and report. Adrian.

Supervised Teaching in Anatomical Sciences 2 or 3 semester hours Participation in the teaching program of the first year medical or dental curriculum. Semester hours variable depending on time spent in teaching. Staff.

History of Anatomy

2 semester hours

Lectures, assigned readings, and student presentations dealing with the great anatomists and their discoveries. Adrian.

Seminar

1 semester hour

Attendance and participation in the regularly scheduled Anatomy

Department seminar series. In general, each student will be required to present one seminar session. Staff.

Research

Credit to be arranged

Independent, original research under the direction of a faculty advisor.

Thesis

Credit to be arranged

For Masters of Arts candidates. Instruction on and preparation of the thesis. Registration for at least 1 semester is required of M.A. candidates.

Dissertation

Credit to be arranged

Prerequisite: Admission to candidacy for Doctor of Philosophy degree Registration for at least 2 semesters is required of Ph.D. candidates.

PROGRAM IN BIOCHEMISTRY

Objectives of Graduate Work

To offer the student advanced training in the field of biochemistry so that he or she will be able to pursue a career of independent research and teaching.

Programs of Graduate Work

In the initial phase of the program the student takes formal courses in several areas of biochemistry as well as in cognate areas such as chemistry, microbiology, physiology, or biophysics. This aspect of the training is designed to strengthen and broaden the student's general knowledge in the biological and chemical sciences. Also during this period the student participates in a biochemical techniques course which familiarizes the student with current techniques and instruments routinely used in this field. Students participate in seminar courses, the purpose of which is to introduce them to the current literature. These seminars attempt to teach the student a critical approach to the literature. In the latter part of the training period, the student chooses an area of biochemical interest and pursues a research problem leading to a dissertation. Throughout this period when a reasonable mastery of the subject matter has been achieved, the student participates in the teaching activities of the department. Initially, this is limited to supervised teaching in conference sections for medical and dental students and eventually leads to presentation of formal lectures. Major emphasis is on the Doctor of Philosophy degree program, although a limited number of Master of Arts degree candidates are considered.

Physical Facilities

The Department of Biochemistry contains approximately 12,000 square feet of well-equipped laboratory space. The following major pieces of equipment are available: preparative ultracentrifuges; analytical ultracentrifuge; scintillation counters; low background Geiger counter; radioactive strip scanners; Cary recording spectrophotometers; Gilford spectrophotometers; nuclear magnetic and paramagnetic resonance

spectrometers; all types of chromatography apparatus; high and low voltage paper electrophoresis; sonicators, French press and other types of homogenizers for breaking cells; gas chromatography equipment; fraction collectors; cold rooms.

Faculty

Chairman, Committee on Graduate Studies - David C. Wharton

Graduate Advisor - David C. Wharton

Adjunct Professor Dale A. Clarke

Atherosclerosis, its biochemical mechanism, including the metabolism of the lipoproteins and their component lipids, particularly cholesterol.

Professor Alan D. Elbein

Biosynthesis and metabolism of complex carbohydrates including cell walls, glycoproteins and various storage compounds.

Mechanism of protein secretion. Interrelations between enzymes and various other macromolecules.

Professor Armand J. Guarino, Chairman, Department of Biochemistry
Professor Casper W. Hiatt**

Molecular photobiology; microbial biophysics.

Professor Jonathan S. Nishimura

Mechanisms of enzyme action with particular emphasis on transphosphorylation reactions in which coenzyme A participates. Amino acid metabolism.

Professor Robert A. Weisman

The mechanism and control of cellulose synthesizing enzymes; the role of adenyl cyclase and cyclic AMP in the encystment of amoebas.

Professor David C. Wharton

Biological exoidations especially the structure and function of cytochromes and other electron transporting metalloproteins.

The application of physical techniques to the study of enzymic reactions.

Associate Professor Roy W. Keenan

The chemistry and metabolism of the lipids, particularly the phospholipids, sphingolipids and the investigation of the factors which govern the biosynthesis and degradation of these compounds.

Associate Professor John C. Lee

Studies on the structure and function of ribonucleic acids and ribosomes. Hemoglobin differentiation and its relationship to hemoglobinopathies.

Adjunct Associate Professor P. Narasimha Rao

Total synthesis of steroid hormones, including labeling with radioisotopes. Development of specific radioimmunoassays for hormonal steroids.

Adjunct Associate Professor John R. Rowlands

The application of nuclear magnetic resonance, electron spin resonance and magnetic circular dichroism to biological problems.

Assistant Professor Marvin L. Chatkoff**

Molecular actions of progesterone and estrogen in the endometrium of the human uterus. Interactions of steroids with chromatin and their effect on the control of transcription and DNA replication. Induced changes in the secondary and tertiary structure of DNA.

Assistant Professor Robert H. Hayashi**

Factors involved in the early stages of pre-eclampsia.

Assistant Professor Glen P. Mott**

The regulation of cholesterol and bile acid metabolism as related to atherosclerosis.

Assistant Professor Allan W. Rees

Physical biochemistry of macromolecules, and structure and configuration of chromatin, particularly with respect to how the folding or coiling of DNA strands is controlled by the chromosomal proteins. Other research interests include centrifugal and viscometric methodology and the comparison HS-303

of structure and physical properties of lysozymes.

Assistant Professor David M. Shapiro

The metabolic control of DNA and RNA synthesis in both bacterial viruses and mammalian systems.

** Staff member with joint appointment in Department of Biochemistry and major appointment in another department.

Specific Degree Requirements

Applicants for admission should have a B.A. or B.S. degree and have completed the following undergraduate courses: one year of Biology, one year of Calculus, one year of Physics, one year of Organic Chemistry and one year of Physical Chemistry. Applicants lacking one of these requirements may receive acceptance contingent upon satisfactory completion of this requirement.

Students pursuing the Doctor of Philosophy degree will be expected to acquire a comprehensive knowledge of biochemistry, which will be determined by a series of written qualifying examinations. Students will also be expected to demonstrate proficiency in at least one cognate area. This may be in chemistry, microbiology, physiology, biophysics or some other suitable field. A dissertation, which represents an original contribution to the field of biochemistry and which is publishable in a reputable, scholarly journal, will be required of all candidates for the degree of Doctor of Philosophy.

The requirements for the Master of Arts degree will be less rigorous than those for the Ph.D. degree. These requirements may be met by a thesis or an approved substitute.

Graduate Courses

The course offerings in the Graduate Program are contingent upon adequate student enrollment.

<u>Cell and Molecular Biology</u>

8 semester hours

Prerequisites: General chemistry, organic chemistry and physics

This course is designed primarily for medical students and may be taken

for graduate credit only under unusual circumstances. Topics included

are the chemistry and metabolism of carbohydrates, lipids, amino acids, proteins and nucleic acids. Staff.

General Biochemistry

5 semester hours

Prerequisites: General chemistry, organic chemistry and physics

This course is a survey of the field of biochemistry designed for graduate students. It covers such areas as protein structure, enzymology, the metabolism and chemistry of carbohydrates, lipids, amino acids and nucleotides as well as the synthesis and function of macromolecules. Wharton and Lee.

Dental Biochemistry

6 semester hours

Prerequisites: Organic chemistry, biology and permission of instructor

This course is primarily designed as a survey course for dental students. On a limited basis, a small number of graduate students may be accommodated. The course is basically a brief survey of the metabolism of the major classes of foodstuffs. A portion of the course deals with matters relating to the biochemistry of the oral cavity.

Keenan and Elbein.

Biochemical Techniques

Credit to be arranged

Prerequisite: Survey course in biochemistry or permission of instructor

An introduction to the use of modern biochemical techniques and instruments, as well as a presentation of the principles governing their operation. Topics such as ultracentrifugation, high voltage electrophoresis, protein fractionation, laboratory methods in enzymology, various types of chromatography will be included. Staff.

Advanced Biochemistry Courses are present in the following eight areas:

Enzymology

1 semester hour

Prerequisite: A survey course in biochemistry

A study of the structure, regulation and mechanism of action of enzymes.

Particular emphasis will be placed on the kinetics of enzymatic reactions, structure-function relationships and the nature of allosteric interactions. Wharton.

Physical Biochemistry

1 semester hour

Prerequisite: A survey course in biochemistry

The theory of physical properties of biological macromolecules, including viscometry, sedimentation velocity and equilibrium, buoyant density banding, associating systems, light scattering, and optical rotatory dispersion and circular dichroism. Rees.

Biochemistry of Carbohydrates

1 semester hour

Prerequisite: A survey course in biochemistry

A study of the metabolism of various monosaccharides including the biosynthesis, transformation, and degradation of these compounds.

Discussions on the synthesis and turnover of various carbohydrate macromolecules such as glycoproteins and glycosaminoglycans will also be presented. Elbein.

Lipid Biochemistry

1 semester hour

Prerequisite: A survey course in biochemistry

This course is not intended as a survey of lipid biochemistry, but rather consists of a critical examination of selected topics in lipid chemistry and metabolism. The subjects selected for consideration will depend mainly on the current research activities in the field at the time the course is presented. Keenan.

Nucleic Acid Metabolism

1 semester hour

Prerequisite: A survey course in biochemistry

The specific metabolism of nucleic acids is discussed with particular emphasis on the regulation and mechanism of DNA and RNA biosynthesis. A

HS-306

major emphasis will be placed on the experimental methodology employed in this field. Lee and Shapiro.

Biochemistry of the Amino Acids

1 semester hour

Prerequisite: A survey course in biochemistry

A study of the chemistry and metabolism of amino acids with particular emphasis on their biosynthesis in microorganisms and animals. Nishimura.

Current Aspects of Protein Biosynthesis

1 semester hour

Prerequisite: A survey course in biochemistry

Consideration of the mechanism of biosynthesis of proteins, its

regulation and enzymology; the relation of the RNA metabolism to protein

synthesis; the structure, synthesis and function of the ribosomes;

the genetic code. Lee.

Biochemistry of Development

1 semester hour

Prerequisite: A survey course in biochemistry; Nucleic Acid

Metabolism and Protein Biosynthesis sections of Advanced

Biochemistry

A critical evaluation of biochemical and molecular events during the development of selected biological systems with emphasis on eukaryotic differentiation. Weisman.

Seminar

1 semester hour

Prerequisite: A survey course in biochemistry

Selected topics of current interest will be presented. These shall be largely student presentations. The purpose of the seminar is to give the student experience in presenting scientific papers, and in critically evaluating the work presented. Staff.

Supervised Teaching

1 semester hour

Teaching medical or dental biochemistry under close supervision of instructors. Management of small conference teaching groups as well as

formal lecture presentations will be included. Staff.

Research_

Credit to be arranged

Independent, original research under the direction of a faculty advisor.

<u>Thesis</u>

Credit to be arranged

Registration for at least 1 semester is required of M.A. candidates.

Dissertation

Credit to be arranged

Registration for at least 2 semesters is required of Ph.D. candidates.

PROGRAM IN BIOPHYSICS

Objectives of Graduate Work

The graduate program in Biophysics is an interdisciplinary offering from the Departments of Bioengineering, Physiology, Laboratory Animal Medicine, and Radiology. Its purpose is to train highly qualified candidates in specialized biophysical sciences which are essential to the education of students in the health sciences.

Programs of Graduate Work

Biophysics is an interdisciplinary field and is likely to attract graduate students with widely varying backgrounds. A rigidly designed curriculum is therefore a decided disadvantage. Each student is best served by having a curriculum designed around specific needs. In this way, deficiencies in certain areas are made up, while other courses are not required in areas of demonstrated proficiency. Each student is thus able to acquire a broad background in biophysics and related disciplines by completing a number of required courses, and subsequently to specialize in a particular direction by taking optional courses.

Areas of specialization in biophysics include biomathematics, biostatistics, medical electronics, medical physics, health physics,

biostatistics, medical electronics, medical physics, health physics, radioisotope techniques, computer applications, and certain aspects of cellular physiology and biophysical chemistry. Candidates successfully completing this program will be prepared for careers in teaching and research in the health sciences.

Physical Facilities

Facilities for the program in Biophysics are distributed among the several participating departments and include a total of 15 or more research laboratory modules. The Department of Bioengineering operates an Instrument Shop, with complete facilities for machine work, glass-blowing, and electronics fabrication. An EAI 580 Analog Computer and a PDP 11/45 Digital Computer with 80 K word memory are available for use by graduate students. Real-time processing facilities are available for both analog and digital data. Several terminals can be used to

access the IBM 370/155 Computer at Trinity University, providing facilities for computation of large numerical problems. Facilities of the Department of Radiology are excellent for students working with ionizing radiation, and a cooperative agreement in effect with the School of Aerospace Medicine, Brooks Air Force Base, permits qualified students to use the superb radiological equipment at that institution.

Laboratories of the Department of Physiology are well equipped for the study of membrane biophysics and ionic transport phenomena. Modern facilities for animal experimentation, including histopathological examination of specimens, are provided by the Department of Laboratory Animal Medicine.

Faculty

Chairman, Committee on Graduate Studies - Caspar W. Hiatt
Graduate Advisor - Gerard J. Celitans

Professor Richard G. Domey

Design of experiments, assessment and evaluation of performance.

Professor Benjamin D. Fremming

Reproductive physiology and experimental surgery.

Professor Caspar W. Hiatt*, Chairman, Department of Bioengineering
Molecular photobiology; microbial biophysics.

Professor Malcolm D. Jones, Chairman, Department of Radiology

Effect of fusion on degenerative disc disease; soft tissue

diagnostic procedures in trauma; quantitation of experimentally

infused soft tissue lesions; longitudinal age changes in the

primate spine.

Professor Frederick T. Lynd*

Veterinary pathology.

Professor Robert J. Young, Acting Chairman, Department of Laboratory
Animal Medicine

Veterinary radiology and orthopaedics.

Adjunct Associate Professor Richard A. Albanese

Mathematical models, radiation transport and diffusion theory.

Associate Professor Gerard J. Celitans

Radiation physics: beta and gamma ray spectroscopy; mathematical biophysics.

Adjunct Associate Professor George J. Gruber

HS-310

Health physics; medical instrumentation and ultrasonics: health statistics.

Adjunct Associate Professor Lloyd W. Johnston

Radiation physics including megavoltage dosimetry.

Associate Professor Charles Levinson

Cellular metabolism, ion transport.

Adjunct Associate Professor Robert P. Popovich

Biomedical engineering, mass transfer, transport phenomena.

Associate Professor Robert G. Waggener

X-ray spectra measurements, information content of diagnostic X-rays, ionizing radiation. new techniques in nuclear medicine.

Adjunct Assistant Professor Charles E. Burton Medical electronics and instrumentation.

Adjunct Assistant Professor David L. Goff

Radiation physics including computer applications to dosimetry

Assistant Professor Jack B. Johnson

Physiology data acquisition, biomedical instrumentation,

computers in medicine, telemetry.

Assistant Professor Roger J.M. McCarter

Muscular contractions and mechanics.

and nuclear medicine.

Assistant Professor C. Alex McMahan

Nuclear physics, statistical methods.

Adjunct Assistant Professor Martin L. Meltz

Radiation biology, cell and molecular biology and cell

mutagenesis.

Assistant Professor Terry M. Mikiten

Synaptic transmission; biophysics of excitable membranes.

Assistant Professor Thomas C. Smith

Membrane biophysics, membrane transport.

Assistant Professor James Hee K. Yoo

Biophysical control theory; biomedical instrumentation; sensor

based computer application; chemosensor development and telemetry; artificial organs.

Instructor Frank S. Stafford

Mathematical models; numerical analysis.

Instructor Yuriy V. Terekhov

Methods and instrumentation in clinical physiology.

* Staff member with major appointment in a department belonging to the Program in Biophysics (Bioengineering, Physiology, Laboratory Animal Medicine, and Radiology) and a joint appointment in another department.

Specific Degree Requirements

biophysics.

Candidates for admission to this program must have a B.S. or B.A. degree in science or engineering, and must have completed the following undergraduate courses:

Biology: One year of general biology

Chemistry: One year of organic chemistry and one year of physical chemistry

Physics: One year of general physics with calculus prerequisite, and one year of modern physics, or equivalent

Mathematics: One year of differential and integral calculus

Qualified students who have deficiencies in these areas may be admitted
to the graduate program with the stipulation that the deficiencies must
be removed during the first year of graduate study.

All candidates will be expected to complete a core curriculum of courses before they proceed to specialize in a certain area. The required courses comprising the core curriculum include General Biophysics, Principles of Physiology, General Biochemistry, Nuclear Physics and Chemistry, Radiation Biology, Biostatistics, and Biology and Experimental Methods of Animal Models. Candidates will be exempted from any of these courses if they can demonstrate a proficiency in the subject.

Candidates for the Master of Arts degree must fulfill the general requirements for the degree at The University of Texas Health Science Center at San Antonio, and must submit and defend an acceptable thesis describing an original investigation of a subject in the field of

A student will be admitted to candidacy for the <u>Doctor of Philosophy</u>
degree by demonstrating the acquisition of comprehensive knowledge of
biophysics through successful completion of written and oral
qualifying examinations. Candidates will also be expected to demonstrate
a reading proficiency in at least one foreign language. The Doctor of
Philosophy degree will require the submission and defense of an acceptable
dissertation describing a research project whose results represent an
original contribution to the field of biophysics.

Graduate Courses

The course offerings in the Graduate Program are contingent upon adequate student enrollment.

Required Courses. These courses are required of all students in Biophysics, regardless of their area of specialization.

General Biophysics I and II

6 semester hours

Prerequisites: General biology, physical chemistry and modern physics,

or consent of instructors

Lectures and occasional laboratory - 2 semesters, 3 semester hours each Biophysics and the living cell; flow of energy and thermodynamics of the living cell; information theory as applied to biology; structure of matter, chemical bonds and intermolecular interactions; structure of water in biological materials; structure of amino acids, proteins and nucleic acids; structure of polysaccharides and lipids, structure of

viruses, cells and membranes; methods of determining sizes, shapes and spatial relations of molecules including ultracentrifugation, X-ray analysis, absorption spectroscopy, ionizing radiation and microscopy; biophysical models of muscle, nerve and eye; the physics of dynamic cellular processes.

Principles of Physiology I and II

6 semester hours

For course description, see p. 000.

Nuclear Physics and Chemistry I and II

6 semester hours

Prerequistes: Physical chemistry and modern physics, or consent of instructor

Lectures with occasional laboratory - 2 semesters, 3 semester hours each Nuclear structure: fundamental particles, binding energy and nuclear forces, models of nuclear structure. Nuclear reactions and radionuclides; nuclear bombardment reactions, particle accelerations, neutron sources; nuclear instability and transformations, natural occurence of radioactivity. Properties of nuclear radiations: alpha and beta particles, neutrons, X-ray and gamma-radiation. Quantitative aspects of radioactive decay and radiation dosimetry. Interaction of radiation with matter: absorption and energy loss; radiation chemistry. Celitans.

Radiation Biology

3 semester hours

Prerequisite: General Biochemistry or consent of instructor Lectures only

Physics of radiation biology; cell-survival curves; the oxygen effect;

LET and RBE; radiosensitivity and cell age in the mitotic cycle; repair

of sublethal damage and dose-rate effect; chemical and pharmacological

modifiers; solid tumor systems and reoxygenation; cell, tissue, and

tumor kinetics; sensitivity of tissues; acute effects of whole-body

irradiation; late effects of radiation; effects on the embryo and fetus;

radiation cataractogenesis; time dose and fractionation in radiotherapy;

nominal standard dose; new radiation modalities. Meltz.

Introductory Biostatistics

3 semester hours

For course description, see p. 000.

Biology and Experimental Methods

3 semester hours

of Animal Models

For course description, see p. 000.

Seminar

1 semester hour

Selected topics in various aspects of biophysics. Staff.

Supervised Teaching

Credit to be arranged

Presentation of lectures and management of conference sections under close supervision of instructors. Staff.

Research

Credit to be arranged

Independent, original research under the direction of a faculty advisor.

Thesis

Credit to be arranged

Registration for at least 1 semester is required of M.A. candidates.

Dissertation

Credit to be arranged

Registration for at least 2 semesters is required of Ph.D. candidates.

Elective Courses. Students in Biophysics should select from the following list those courses relevant to their area of specialization. Most of these elective courses should be taken only after the required formal courses listed above have been completed.

Theoretical Biology

3 semester hours

Prerequisites: Physical chemistry and General Biochemistry, or consent of instructors

Lectures and seminars

Fundamental questions of physical basis of life processes; theoretical

foundation of population genetics; molecular radiobiology; mathematical formulation of CNS nerve networks; general perception theory; energy transfer and biochemical synthesis; irreversible thermodynamics and applications to life processes; coding and information theory; theoretical cell biology. Staff.

Quantum Mechanics

3 semester hours

Prerequisite: Modern physics, or consent of instructors
Lectures only

Principles of quantum mechanics and quantum processes in physics, chemistry and biology. You and Celitans.

Advanced Biostatistics

3 semester hours

Prerequisite: Introductory Biostatistics or consent of instructor Lectures and application problems

Non-normal, non-parametric statistical methods, their underlying assumptions and their uses. Multiple correlation and regression, including stepwise, inductive and canonical correlation; analysis of variance, analysis of complex variance, non-normal and non-parametric statistics forms. Emphasis on research design. Domey.

Selected Topics in Biostatistics

3 semester hours

Prerequisite: Advanced Biostatistics, or consent of instructors
Lectures only

Advanced statistical methods as applied to design and interpretation of experiments. Staff.

Membrane Biophysics

3 semester hours

For course description, see p. 000.

Mathematical Physiology

3 semester hours

For course description, see p. 000.

Physiology of Nerve and Muscle

3 semester hours

For course description, see p. 000.

Selected Topics in Cell Physiology

2 semester hours

Prerequisite: Principles of Physiology I and II, or consent of instructors

Lectures only

Current views of cellular control mechanisms, including membrane phenomena and organelle function. Staff.

Molecular Photobiology

3 semester hours

Prerequisite: General Biochemistry or consent of instructor Lectures only

Effects of ultraviolet and visible light upon cells, viruses, nucleic acids, and proteins; reactivation phenomena and their implications in molecular biology. Histr.

Principles of Health Physics

3 semester hours

Prerequisites: Nuclear Physics and Chemistry I and II, or consent of instructor

Lectures only

Basic fundamentals of protection against both ionizing and non-ionizing radiation. Principles of radiation measurements and instrumentation.

Laws and regulations concerning exposure to radiation, concept of permissible dose and determination of maximum permissible dose; dosimetry of external radiation fields and internal emitters.

Calculation of shielding requirements and protective measures. Waggener.

Medical Radiation Physics I and II

8 semester hours

Prerequisites: Nuclear Physics and Chemistry I and II, or consent of instructor

Lectures with weekly laboratory - 2 semesters, 4 semester hours each

Measurement and characterization of ionizing and radiation fields.

Dosimetry of ionizing radiation. Characterization and measurement of

radiation distributions in vivo from external beams, implants, internal applicators and internal isotopes. Waggener.

Advanced Medical Radiation Physics I and II 6 semester hours

Prerequisite: Medical Radiation Physics I and II, or consent of instructor

Lectures and seminars - 2 semesters, 3 semester hours each

A systematic study of the source material used in medical radiation

physics and health physics. The publications of the National Council on

Radiation Protection (NCRP), International Commission on Radiation

Protection (ICRP), and International Commission on Radiological Units

(ICRU) are particularly covered. Waggener.

Radiation Instrumentation

3 semester hours

Prerequisites: Nuclear Physics and Chemistry I and II, or consent of instructor

2 hours lecture, I hour laboratory per week
Radiation detectors; ionization, scintillation and solid-state devices.
Modular instrumentation units, elements of pulse circuits, multichannel
analyzers; X-ray generators, cyclotrons, neutron piles. Celitans.

Biophysical Electronics

3 semester hours

Lectures with occasional laboratory

Review of basic electronic circuitry and modern electronic

instrumentation for biophysical research; various modern biomedical and
electrochemical transducers; ultrasonics and detectors; introduction to
basic electromagnetism and applications to biophysical research,
including NMR, ESR, Ramon, TR, UV, microwave and optical spectroscopy
systems and techniques. Yoo.

Prerequisite: General physics or consent of instructor

Analog and Digital Electronics

3 semester hours

Prerequisite: General physics, or consent of instructor Lectures and laboratories

HS-318

Circuit theories for network analysis; modern solid-state IC's and miniaturization; operational amplifiers; analog multiplexers and interfacing problems; analog and digital on-line operations; digital logic; A/D and D/A conversion techniques; mini- and micro-computers; digital multiplexers; software for digital interfacing and multiprogramming; evaluation and search methods for quality electric components and system; analog and digital computer systems and their interfacing techniques. Yoo.

Analog Simulation

3 semester hours

Prerequisite: Consent of instructor

2 hours lecture, 1 hour laboratory per week

Analog computer programming, including iterative techniques and

application of the analog computer to simulation of biological systems.

Hiatt.

Biological Control Systems

3 semester hours

Prerequisite: Analog simulation, or consent of instructors
Lectures only

Overview of multivariable biosystem theories, state variable equations, and matrix representations; biosystem analysis using Laplace transformation, impulse and systems functions; Liapunov's direct methods for biosystem stability determination and various modified Liapunov's stability theorem; instability problems of nonlinear thermodynamic systems; basics of biological models and the simulations; distributive electrical circuit modeling; various examples of biosystem and physiological networks including neuromuscular networks; biorhythms, cancer and cardiovascular controls. You and Hiatt.

Scientific Computer Programming

3 semester hours

Prerequisite: Calculus, or consent of instructor

2 hours of lecture, 1 hour laboratory per week

Fortran and its use in the solution of scientific problems with emphasis on numerical methods. Stafford.

4067

Experimental and Developmental Surgical

3 semester hours

Methods of Animal Models

For course description, see p. 000.

Supplementary Courses. These courses are offered primarily to students in programs other than Biophysics; however, students in the Biophysics program may take some of these courses if they are deficient in those areas.

Mathematical Preparation for Biology

3 semester hours

Prerequisite: College Algebra

Lectures only

Powers and logarithms; dimensions; graphical interpretation of data; exponential processes; transport phenomena; diffusion and sedimentation; systems theory; mathematical models and their uses. Hiatt and Celitans.

Physical Chemistry I and II

6 semester hours

Prerequisites: General physics and calculus, or consent of instructor

Lectures only - 2 semesters, 3 semester hours each Thermodynamics; chemical equilibria; electrochemistry; surface chemistry; chemical kinetics; irreversible processes; quantum chemistry; spectroscopy, statistical mechanics, theory of kinetics and photochemistry; crystal structure and other structural methods; nuclear and radiation chemistry. Celitans.

Modern Physics

3 semester hours

Prerequisites: General physics and calculus, or consent of instructor

Lectures only

A one-semester survey course covering the topics of: special relativity; duality of particles and waves; elementary particles and statistical physics; introductory quantum mechanics in atomic and nuclear physics. Celitans.

Isotopes in Biology and Medicine

3 semester hours

Prerequisite: General Physics, or consent of instructors Lectures with occasional laboratory Radiation detection methods; statistics; assay isotopes, preparation of tagged compounds, use of isotopes in animals, use of isotopes in

humans; radiation protection. Staff.

Biology and Experimental Methods

3 semester hours

of Animal Models

Prerequisite: Consent of instructors

Maximum number of students: 12

2 lectures and one 2-hour laboratory per week

Comparative structure and function of commonly used laboratory animal models; experiments involving animals; forensic responsibilities of investigators; animal experimental design. Preference will be given to students admitted to Graduate Programs. Fremming, Lynd and Young.

Experimental and Developmental Surgical 3 semester hours

Methods of Animal Models

Prerequisite: Consent of instructors

2 lectures and one 3-hour laboratory per week

Fundamentals of experimental surgery; principles of developmental research procedures; methods of viable organ and tissue preparations. Fremming, Lynd and Young.

Introductory Biostatistics

3 semester hours

Prerequisite: Consent of instructor

Lectures and application problems

Descriptive statistics and applications. Emphasis of this course is upon applications to biological problems: normal curve tendency and variability, probability, confidence intervals, central tendency and variability, skewness and kurtosis, and transformations. Comparative statistics and tests of hypothesis with applications: introduction to design of experiments, tests of hypothesis, assumptions, F tests,

distributions, comparisons of measures of central tendency and variability, correlation and introduction to bioassay and probit analysis. <u>Domey</u>.

PROGRAM IN MICROBIOLOGY

Objectives of Graduate Work

The graduate program has been designed to provide broad coverage of the role of microbiology and immunology in the present-day biomedical world and in fundamental areas of biology before specialization. The objective of the training is to develop students as competent scientists with the proficiency in one particular area of microbiology or immunology that will qualify the individual for a professional career in teaching, research or scientific administration.

Programs of Graduate Work

The Department offers wide-ranging opportunities for graduate work. The areas of specialization include medical bacteriology, virology, mycology, parasitology, and immunology. On-going research extends from purely basic problems with focus at the molecular level to clinical investigations involving animals and humans. The programs are designed to give ample opportunity for learning and demonstration of independent initiative. In addition to the active program for training graduate students, the Department is responsible for teaching of both medical and dental students. Some of the staff are deeply involved in the professional direction of diagnostic work for clinic and hospital patients. The research problems are both clinically-oriented and fundamental investigations in microbiology and immunology. This combination contributes to the development and successful operation of an effective, modern department.

Physical Facilities

The Department occupies about 9,000 square feet of space; some 7,500 provide 12 well-equipped research laboratories and an electron microscopy suite including complete darkroom facilities with high resolution electron microscope, vacuum evaporator, Nikon comparator, microtome and knife maker. Major equipment includes a Model E analytical centrifuge, ultracentrifuges, numerous spectrophotometers, liquid scintillation counters, Ribi cell fractionator, high voltage electrophoresis equipment,

lyophilizer and Warburg respirometer. Adequate facilities are available for growth of large quantities of bacteria, fungi and viruses; cold rooms provide space both for experimental work at reduced temperatures and for storage; limited space in ultra low temperature freezers and liquid nitrogen banks is available to staff and students.

Faculty

Chairman, Committee on Graduate Studies - Alexis Shelokov Graduate Advisor - Joe A. Bass

Professor J. Bradley Aust**

Mechanisms of tumorigenesis, host defense, and therapy, including immunosurveillance, immunotherapy, and chemotherapy.

Professor Joe A. Bass

Mechanisms of bacterial pathogenicity; host response to bacterial infection; nosocomial and opportunistic infections.

Professor William T. Kniker**

Immunopathology: in vivo and in vitro mechanisms of
 immunologically induced diseases; detection and
 characterization of immune reactants; mediators of
 inflammation; pharmacologic blocking of mediator systems.
 The biologic significance of vascular basement membranes and
 their soluble products. Isolation and characterization of
 group and strain specific microbial antigens.

Professor Evelyn L. Oginsky

Physiology and metabolism of bacteria.

Professor Robert H. Persellin**

Naturally occurring regulators of inflammation; modifiers of lysosome permeability.

Professor Alexis Shelokov, Chairman, Department of Microbiology

Etiology and pathogenesis of viral diseases; viral vaccines;

epidemiology and control of infectious diseases, tropical

infectious diseases; arthropod-borne viruses; epidemic

hemorrhagic fevers.

Professor Kendall O. Smith

Latent and masked viruses; the possible role of viruses in cancer and viral immunology; chronic degenerative diseases in humans.

Professor Robert L. Taylor

Medical mycology - the immunogens of pathogenic fungi and their role in humoral and cell-mediated responses in experimental models. Broad aspects of the laboratory diagnosis and epidemiology of mycoses. Ecology of pathogenic fungi.

Associate Professor Charles J. Gauntt

Mechanisms of induction of myocarditis in mice by coxsackieviruses; blochemistry and biology of replication of rhinoviruses and group B arboviruses; mechanisms of induction of interferon in cells in tissue culture.

Associate Professor Ronald E. Paque

Subcellular components in delayed hypersensitivity, tumor immunology, chemically defined antigens, and molecular biology of delayed responses.

Associate Professor Barbara A. Sanford

Pathogenic bacteriology and tumor immunology.

Associate Professor Daniel E. Thor*

Cellular immunology and the production of mediator substances.

Clinical and basic immunology and in vitro models of cell-mediated immunity. Carcinogens and cell-associated antigens of tumor immunity. Applied immunology in clinical infectious disease and pathology.

Assistant Professor Jerry J. Eller**

The pathogenesis and immunology of myxovirus infections, particularly surface immunity.

Assistant Professor John T. Harrington, Jr. **

Cell-mediated immunity in neoplasia and autoimmune disease.

Assistant Professor Stephen J. Mattingly

Physiology of bacteria associated with dental caries.

Assistant Professor Eric E.M. Moody

Molecular genetics - the regulation of DNA replication,
recombination and repair systems. The evaluation and
epidemiology of transmissible plasmids with special
emphasis on transferable antibiotic resistance factors.

Mechanisms of antibiotic resistance in Neisseria gonorrhoeae.
Genetics of mammalian cells.

Assistant Professor Frederick A. Rommel**

Investigation of action of complement, invertebrate immunity and marine toxins.

Instructor Noel R. Funderburk**

Clinical microbiology, with special interest in anaerobic bacteriology.

Instructor James H. Jorgensen**

Clinical microbiology; pathogenic bacteriology, with special interest in gram-negative endotoxemia.

Instructor Virginia L. Thomas

Host-parasite relations in bacterial infections.

Instructor Melvin D. Trousdale

Electron microscopy: rapid identification of certain clinically important viruses. Studies on the ultrastructure and morphogenesis of the group B arboviruses.

- * Staff member with major appointment in the Department of Microbiology and a joint appointment in another department.
- ** Staff member with joint appointment in Department of Microbiology and major appointment in another department.

Specific Degree Requirements

Special emphasis is placed on flexibility in graduate degree programs in microbiology and immunology so they may relate to the interests, purposes and needs of the individual students. Opportunity is provided to develop deep insight into the fundamental principles and advanced theories of the disciplines through course work, independent study and participation in discussion groups. In general, three to four years are required to complete a doctoral program.

Candidates for admission to the Microbiology Program should possess a broad general education including a B.S. or B.A. degree in science from an accredited institution. Adequate subject preparation includes satisfactory completion of the following undergraduate courses:

Biology: Two years of general biology, zoology and/or botany, including general microbiology, and one advanced microbiology course.

Chemistry: Two years. One year of general chemistry and one year of organic chemistry or biochemistry.

Physics: One year of general physics.

Mathematics: A minimum of one semester of calculus.

Past academic performance should be of sufficiently high quality to warrant further progress in scholarly activity. Potential for future academic and career success as well as for leadership will be considered.

For the <u>Master of Arts degree</u> a minimum of 30 semester hours including the research for the thesis is required. Of these, from six to nine hours of work at graduate level in another area or areas comprise the minor field. Admission of applicants for the Ph.D. degree is given priority over applicants for the M.A. degree.

For the <u>Doctor of Philosophy degree</u> no specific number of semester hours has been set, although mastery of a well-chosen and meaningful program of graduate courses is required. The basis on which the degree is awarded is the candidate's demonstration of acquired skills and knowledge in the selected field of specialization and ability to do independent work in the area. The Committee on Graduate Studies will guide the program of study and recommend a student for candidacy for the

Ph.D. degree on the basis of a qualifying examination and performance in graduate courses.

Following admission to candidacy, a carefully selected Supervising

Committee reviews the student's choice of research problem for the

dissertation and proposals for its solution. Upon completion of the

dissertation and its acceptance by the Committee, the Final Oral

Examination on the dissertation and closely related areas is scheduled.

Participation in graduate courses will be largely restricted to those individuals who are enrolled in a graduate program. Special students with the necessary prerequisites may register for credit in courses by obtaining the approval of both the instructor and the graduate advisor. Under certain circumstances, a limited number of visitors may be allowed to participate in a segment of a course but regular attendance will not be permitted. Graduate students and members of the faculty may be admitted to classes as auditors through consent of the instructor.

Graduate Courses

The course offerings in the Graduate Program are contingent upon adequate student enrollment.

Medical Microbiology

3 or 4 semester hours

Prerequisite: Consent of instructors

Lectures only - 3 semester hours; lectures, tutorials and laboratory - 4 semester hours.

Emphasis on medical aspects of immunology, virology, bacteriology, mycology and parasitology. The first year medical school course will serve as an integral part of the course and the base for additional study. Staff.

Microbial Physiology

3 semester hours

Prerequisites: General or Medical Microbiology and General Biochemistry

Lectures only

Bacterial cell envelopes; extracellular and cell-surface enzymes; membrane transport; endogenous metabolism; bacterial growth; biosynthesis and degradation of small molecules; energy metabolism; diversity in bacterial physiology. Oginsky and Mattingly.

Microbial Genetics

3 semester hours

Prerequisites: General or Medical Microbiology, General Biochemistry (or elementary genetics) and consent of instructor

Lectures, conferences and laboratory

Study of genetics of microbial organisms including biosynthesis of macromolecules, mechanisms of transfer of genetic information, mutation and mutagenesis and regulatory mechanisms. Moody.

Pathogenic Bacteriology

3 semester hours

Prerequisite: General or Medical Microbiology

Lectures only

Concerned primarily with bacterial diseases in man, with particular emphasis on mechanisms by which bacteria produce disease as well as host-parasite interactions. \underline{Bass} .

Introduction to Virology

4 semester hours

Prerequisites: General Biology, General or Medical Microbiology,

General Biochemistry and consent of instructor

Lectures and laboratory

Lectures: Basic non-medical general virology with emphasis on molecular and cellular biology and animal viruses (physical and chemical properties, biology of multiplication, effects on host cells, genetics, interferon). Laboratory: Experimental work to emphasize the basic properties of viruses and their interactions with host cells. Smith.

Introduction to Immunology

3 semester hours

Prerequisite: Consent of instructor

Lectures only

Study of immune-response - both cellular and antibody-mediated immune

reactions: (1) anatomy and physiology of the immune response; (2) initiation of antibody formation; (3) control of antibody formation; (4) unresponsiveness; (5) antigen-antibody union; (6) antigen-antibody reaction; (7) lymphocyte activation and mediators; (8) transplantation immunology; (9) complement; (10) antibody-mediated immunopathology; (11) tumor immunology; (12) cell-mediated immunopathology. Paque.

Parasitic Protozoology and Helminthology

3 semester hours

Prerequisite: Medical Microbiology

Lectures and laboratory

Study of the biology of the parasites and methods of identification, as well as epidemiology, prevention and control of parasitic diseases.

Staff.

Pathogenic Fungi

3 semester hours

Prerequisite: Consent of instructor

Lectures and laboratory

Study of the fungi which cause disease in man and animals with emphasis on diagnosis, epidemiology and public health significance. <u>Taylor</u>.

Clinical and Diagnostic Microbiology

2 semester hours credit

for each section

Prerequisite: Consent of instructor

Methods and techniques for laboratory diagnosis of diseases caused by microbial agents.

- 1. Bacteriology
- 2. Virology
- 3. Parasitology <u>Jorgensen</u>.

Advanced Virology

Individual sections may be taken for credit

1. Oncogenic Viruses

3 semester hours

Lectures only

Current concepts and research in the area of oncogenic viruses.

Studies would cover the historical developments in this field as well as the biology, immunology and biochemical characteristics of selected "model" agents. Smith.

2. Slow and Latent Viruses

3 semester hours

Lectures only

Study of recent developments with emphasis on human diseases. Smith.

3. Molecular Basis of Animal Virology 2 semester hours
Prerequisites: Introduction to Virology, General Biochemistry

Lectures only

Current concepts in the biochemistry of viral replication and cellular response to infection. Gauntt.

Advanced Immunology

Individual sections may be taken for credit.

and consent of instructor

1. Experimental Immunology and 4 semester hours

Immunopathology

Prerequisite: Introduction to Immunology or consent of instructor

Lectures and laboratory

Experimental methods used in vitro and in vivo for study of the antibody-mediated and the lymphocyte-mediated systems of immunity. Where possible, in vitro correlates will be compared with in vivo examples of the various immunologic mechanisms and associated immunopathologic conditions. Thor.

2. Immunobiology

3 semester hours

Prerequisite: Introduction to Immunology or consent of instructor

Lectures only

Phylogeny and ontogeny of the immune response; immunobiology of lymphocytes, plasma cells and macrophages; immunosuppression, immunologic reconstitution and immunopathology; inflammation,

immunity and infection; immunologic and clinical aspects of delayed type hypersensitivity; cell-mediated immunity to infection, tumors and transplantation; disorders of the immune system and immunodeficiency diseases. Thor.

3. Immunochemistry

3 semester hours

Prerequisites: General Biochemistry and Introduction to
Immunology or consent of instructor

Lectures only

Immunogenicity and antigenicity; antibody formation, structure and function; complement activity; enzymatic reactions; immunogenetics; physico-chemical studies of immunoglobulins. Thor.

Advanced Microbial Genetics

4 semester hours

Prerequisites: Microbial Genetics and consent of instructor

Lectures, conferences and laboratory

In-depth study of selected areas of microbial genetics. Presentation and discussion of current literature in these areas. Development of

proficiency in the techniques of microbial and molecular genetics.

Moody.

Techniques in Microbiology

Credit to be arranged

Prerequisite: Consent of instructors

Any number of sections may be taken for credit, but no section may be repeated for credit.

Principles and application of key techniques employed in microbiology and immunology.

- 1. Cell and organ culture
- 2. Purification methodology
- 3. Electron microscopy and ultrastructure
- 4. Fluorescence microscopy and spectroscopy
- 5. Use of radioisotopes
- 6. Radioimmunodiffusion
- 7. Viral diagnostic procedures

- 8. Immunologic techniques
- 9. Ultracentrifugation

Staff.

Clinical Epidemiology and

Credit to be arranged

Preventive Medicine

Prerequisites: Medical Microbiology and consent of instructor Up to 56 hours lectures and conferences

Principles of epidemiology and disease prevention with emphasis on chronic and infectious diseases. Shelokov.

Special Problems

Credit to be arranged

Prerequisite: Consent of instructors

Course provides an opportunity for the student to engage in a special research project or to develop a proficiency in the use of certain laboratory methods. Staff.

Seminar

1 semester hour

Presentation and discussion of original and published research work by students and staff and occasionally by outside scientists. All students enrolled in Graduate Program in Microbiology are required to attend. Staff.

Special Topics

Credit to be arranged

Students will select a topic and develop a bibliography of the pertinent literature. Staff.

<u>Supervised Teaching</u>

Credit to be arranged

Prerequisite: Consent of chairman of department

Teaching under the close supervision of instructors as laboratory

assistants and as leaders in tutorial or review sessions. The more

advanced students may present formal lectures in the classrooms or lead

discussions in the laboratory. Staff.

Research

Credit to be arranged

Independent, original research under the direction of a faculty advisor.

May be conducted in bacteriology, virology, mycology, parasitology and immunology.

Thesis

Credit to be arranged

Registration for at least 1 semester is required of M.A. candidates.

<u>Dissertation</u>

Credit to be arranged

Registration for at least 2 semesters is required of Ph.D. candidates.

PROGRAM IN PHARMACOLOGY

Objectives of Graduate Work

The graduate program in Pharmacology is designed to provide the student with the academic, technical and experimental background to qualify as a professional pharmacologist. "A pharmacologist is one who is devoted to the discovery, testing and perfecting of drugs and the study of the way in which they act" (A Career in Pharmacology, ASPET). The objective of the training program is to give the student the broad background in the basic medical sciences (anatomy, biochemistry, physiology and pharmacology) necessary for his or her success in academic and experimental pharmacology. In addition, the student will receive in-depth training and experience in one or more particular areas of pharmacology. The training program will qualify the student to pursue a career in teaching and research in medical school or other health science professional schools, or to enter into a full-time research or administrative position in the drug industry or in the service of the Federal Government.

Programs of Graduate Work

The Department of Pharmacology has the responsibility for teaching medical, dental and graduate students the elements of medical and clinical pharmacology as well as the current medical and social problems of drug abuse. Efforts are continually made to improve the teaching of pharmacology by developing new and innovative techniques.

The foundation for the above teaching activities is provided by an active research program in many areas of pharmacology. These include research at the molecular and cellular levels, as well as whole animal and organ study areas of pharmacology. Active investigations underway include the autonomic nervous system, the central nervous system and the cardiovascular system. Approaches used in these studies are physiological, chemical, biochemical, behavioral and biophysical.

Graduate students as well as medical and dental students are offered a variety of approaches for learning and developing independent initiative HS-335

and ability.

Physical Facilities

Facilities for graduate instruction and research include approximately 8,000 square feet of laboratory and office space in the Department of Pharmacology. A graduate student area is provided with individual study cubicles.

Equipment available for research is sufficient for pursuance of almost any pharmacological investigation. This includes atomic absorption, fluorometric, ultraviolet and visible spectrophotometers; an ultracentrifuge; a flame photometer; balances (both preparatory and analytical); electrophysiological recording equipment; PDP8 computer and all the necessary accessories. A recent addition is a mass spectrograph gas chromatography system.

Within the department and available for use in graduate education are well over 1,000 books and journals. New books are added continously. In addition, most major journals of physiology and pharmacology are received on a subscription basis. The department also subscribes to Current Contents and Excerpta Medica abstracts in Pharmacology and Endocrinology.

Faculty

Chairman, Committee on Graduate Studies - Arthur H. Briggs Graduate Advisor - Ronald D. Huffman

Professor Vernon S. Bishop

Neural control of the circulation and the cardiovascular responses to various stresses.

Professor Arthur H. Briggs, Chairman, Department of Pharmacology

The experimental basis of essential hypertension; the

investigations of the relaxing system in skeletal, cardiac

and smooth muscles; the cardiovascular effects of drugs of

abuse.

Professor William B. Stavinoha

Neurochemistry of the cholinergic system and biochemical toxicology.

Professor Charles A. Walton***

Extrapolation of pharmacological principles into clinical teaching methods and patient medication systems.

Professor Howard L. Zauder**

The pharmacology of anesthetic agents.

Associate Professor Oliver Carrier, Jr.

The cardiovascular system: the role of electrolytes, especially calcium, in vascular and cardiac muscle function and how they are influenced by drugs.

Associate Professor Ronald D. Huffman

Neuropharmacology with emphasis on electrophysiologic and pharmacologic investigation of synaptic transmission,

Associate Professor Miguel A. Medina

The neurochemistry of biogenic amines; brain histamine; brain intermediary metabolism, drug interaction and drug metabolism.

Associate Professor Jack E. Wallace**

Analytical and clinical toxicology; drug metabolism; instrumental methods of analysis; biochemical pathology.

Assistant Professor Kenneth Blum

The effects of drugs of abuse, particularly alcohol and morphine, on the brain. The underlying causes of drug dependence and research dealing with biochemical correlation of behavior.

Assistant Professor Leslie P. Felpel

Neuropharmacology of the central nervous system; synaptic transmission.

Assistant Professor Barrie J. Hodgson**

The pharmacology of smooth muscle of the reproductive tract. The mechanisms of gamete transport through the mammalian oviduct and its manipulation by pharmacological agents.

Assistant Professor David Jones**

The neuropharmacology of cyclic nucleotides and anesthetic agents.

Assistant Professor D. Fred Peterson

Neural control of the cardiovascular system normally and under stress.

Assistant Professor David H. Ross

Molecular pharmacology of drug-receptor interactions; neurochemical correlates of drug abuse and affective disorders.

Assistant Professor Carol Grace Smith

Endocrine pharmacology; chemotherapy of neoplastic diseases of the prostate gland.

** Staff member with joint appointment in the Department of

Pharmacology and major appointment in another department

**** Staff member with joint appointment in the Department of Pharmacology

and major appointment at The University of Texas at Austin.

Specific Degree Requirements

Special emphasis is placed on flexibility in the graduate degree program in Pharmacology so it may relate to the interests, purposes and needs of individual students. Opportunity is provided to develop deep insight into the fundamental principles and advanced theories of the discipline through course work, independent study and participation in discussion groups. In general, four years are required to complete a doctoral program.

Applicants for admission must have a B.A. or B.S. degree and must have completed the following undergraduate courses:

Biology: One year of General Biology

Chemistry: One year of Organic Chemistry

Physics: One year of General Physics

Mathematics: One year of Calculus

For the Master of Arts degree, a minimum of 30 semester hours including the research for the thesis is required. Of these, from six to nine hours of work at the graduate level in another area will comprise the minor field. A thesis and final thesis examination are required for the

Master's degree in this program.

For the Doctor of Philosophy degree, there is no specific number of semester hours required for the attainment of this degree; however, mastery of a well-chosen and meaningful program of graduate courses is required. All graduate students working for the Ph.D. degree will be required to take the following introductory courses:

- 1. General Biochemistry
- 2. Principles of Physiology
- 3. Neuroscience
- 4. Microscopic Anatomy

These courses are considered to be background courses and provide the basic foundation for the advanced pharmacology courses.

In addition to the above courses, all Ph.D. students will be required to take the four advanced pharmacology courses (Advanced Pharmacology I-IV), Medical Pharmacology and at least one elective course of the student's choice. Statistics through analysis of variance and regression analysis is also required.

The basis on which the degree is awarded is the candidate's demonstration of acquired skills and knowledge in the selected field of specialization and the ability to do independent work in the area. The Committee on Graduate Studies will guide the program of study and make a recommendation for candidacy for the Ph.D. degree on the basis of a preliminary examination (written and oral) and performance in graduate courses. The preliminary examination will not be given until the student has completed the required courses listed above and has met any additional departmental requirements.

Following admission to candidacy by the Graduate Executive Committee, a carefully selected Supervising Committee reviews the student's choice of research problem for the dissertation and proposals for its solution.

Upon completion of the dissertation and its acceptance by the Committee, the Final Oral Examination on the dissertation is scheduled.

Craduate Courses

Advanced Pharmacology I-IV and Medical Pharmacology are required of all

students in the Pharmacology doctoral degree program. Other required courses include General Biochemistry, Microscopic Anatomy, Neuroscience, Principles of Physiology, and Statistics (analysis of variance and regression analysis).

Advanced Pharmacology I

4 semester hours

Prerequisite: Organic chemistry

3 hours lecture, 4 hours laboratory per week.

Principles of drug action; molecular mechanisms of drug action; drug-receptor interactions; absorption, distribution and elimination of drugs; time course of drug action; dose-response relationships; chemotherapeutic agents. Fall semester every year. Staff.

Advanced Pharmacology II

4 semester hours

Prerequisite: Neuroscience

3 hours lecture, 4 hours laboratory per week.

Action of drugs upon the nervous system; neuropharmacological and psychopharmacological drugs and their actions. Spring semester 1974 and every even year therafter. Huffman, Blum, Felpel, and Ross.

Advanced Pharmacology III

5 semester hours

Prerequisites: General Biochemistry or Cell and Molecular Biology, and Advanced Pharmacology I

4 hours lecture, 4 hours laboratory per week.

Biochemical and toxicological mechanisms of drug action; endocrine pharmacology. Fall semester 1974 and every even year thereafter.

Medina, Stavinoha and Smith.

Advanced Pharmacology IV

4 semester hours

Prerequisite: Principles of Physiology

3 hours lecture, 4 hours laboratory per week.

Action of drugs on the autonomic nervous system; cardiovascular and renal action of drugs. Spring semester 1975 and every odd year thereafter.

Bishop, Carrier and Peterson.

Medical Pharmacology_

4 semester hours

Prerequisites: A good understanding of mammalian physiology and consent of instructors

2 semesters

2 hours lecture per week.

This course consists of lectures and discussions covering the full spectrum of Nedical Pharmacology. All classes of druge which are of interest to the medical profession are studied. The medical school course will serve as the nucleus of this course and form the basis for further study. Fall and Spring semesters every year. Staff.

Analytical Toxicology

2 semester hours

Prerequisite: Consent of instructor

1 hour lecture, 4 hours laboratory per week.

Lectures and laboratory exercises designed to provide the student with an extensive knowledge of procedures and methods utilized to quantitatively determine drugs and toxic agents in biologic specimens and pharmaceutical dosage forms. Wallace.

Clinical Pharmacology

4 semester hours

Prerequisite: Consent of instructor

3 hours lecture, 6 hours in wards per week.

Patients in the hospital wards will be presented and discussed by the students. This will include therapeutic and toxic manifestations of drugs. Briggs.

Biophysical Pharmacology

4 semester hours

Prerequisite: Consent of instructor

3 hours lecture, 4 hours laboratory per week.

This course is designed to acquaint the student with biophysical techniques and concepts (radioisotopes, electronics, mathematical analysis, etc.) as they apply to pharmacology. Bishop.

Pharmacological Literature Evaluation

1 semester hour

Prerequisite: Consent of instructor

Students in this course analyze and critically evaluate current research literature in all areas of pharmacology. Staff.

Pharmacology Techniques

Credit to be arranged

Prerequisite: Consent of instructors

1 hour lecture, 8 hours laboratory per week.

Student will participate in short research projects in particular areas of pharmacology in order to learn the various techniques used. Staff.

Seminar

1 semester hour

The staff and students will conduct seminars on recent advances and research in pharmacology.

Special Topics in Pharmacology

Credit to be arranged

Research

Credit to be arranged

Independent, original research under the direction of a faculty advisor.

<u>Thesis</u>

Credit to be arranged

Registration for at least 1 semester is required of M.A. candidates.

Dissertation

Credit to be arranged

Registration for at least 2 semesters is required of Ph.D. candidates.

THE DOCTOR OF PHARMACY (PHARM.D.) PROGRAM:

AN ADVANCED PROFESSIONAL DEGREE PROGRAM

The Pharmacology Department, through the Dean of the Graduate School of Biomedical Sciences, is responsible to the University Administration for this institution's Doctor of Pharmacy (Pharm.D.) Program, an advanced professional degree program which is jointly administered by UTHSCSA and the College of Pharmacy, The University of Texas at Austin. A member of the Pharmacology faculty holds a joint appointment as Assistant Dean, College of Pharmacy, and provides immediate administrative supervision of the program.

The coordination of the Clinical Pharmacy academics with other teaching activities of the Pharmacology Department provides unique enrichment opportunities for the several groups of students which this department teaches. An integration of Clinical Pharmacy Faculty and students in the total scope of departmental programs expands research, teaching and service capabilities of everyone involved.

Purpose of the Pharm.D. Program

Multiple technical, social and economic factors, challenging the ingenuity of all health professions to respond to growing service demands, must necessarily influence the types of skills and knowledge which the curricula of professional schools attempt to develop. The functional role of the pharmacist must be redefined if future pharmacy practitioners are to assume that profession's share of the load in meeting society's expectations for safe, effective and economical use of drugs; alteration in the professional curriculum is the logical starting point in this process.

The fundamental purpose of this program is to provide a combined academic and patient service experience for selected pharmacists and pharmacy students whose abilities and career aspirations suggest significant promise for innovative contributions to professional practice. Upon the graduates will rest the primary responsibility for functionally defining the role which pharmacists may play in the delivery of quality health care in the years ahead.

Academics

Capitalizing on the strengths of their preclinical science work in medicinal chemistry, biopharmaceutics, pharmacology and related disciplines, the Pharm.D. candidates will spend approximately one calendar year in medical and pharmacy doctoral courses to insure proficiency in human physiology, pathophysiology, pharmacotherapeutics, applied biopharmaceutics, clinical literature utilization, and closely related academic experiences. Review, repetition and reinforcement of scientific principles fundamental to the student's clinical effectiveness are provided in a subsequent year of rotating clinical assignments in general medicine, pediatrics, ambulatory services, drug information support, and some clinical specialty areas.

Faculty

Director, Pharm.D. Program - Charles A. Walton

Professor Charles A. Walton

Assistant Professor Ronald P. Evens

Assistant Professor David W. Hawkins

Assistant Professor Robert G. Leonard

Assistant Professor Louis C. Littlefield

Assistant Professor Frank R. Radzai

Clinical Practicum

Satisfactory completion of the clinical rotations, not unlike the graduate student's completed course work and preliminary examinations, qualifies the Pharm.D. candidate for a doctoral competency challenge assignment. Rather than research proficiency, however, Pharm.D. candidates must demonstrate to the satisfaction of their major professor and supervisory committee their ability to perform competently in a sustained assignment in which they will provide uniquely sophisticated clinical services. The degree is conferred on the basis of demonstrated clinical competence rather than academic credits completed.

Academic Resources

Being an academic program jointly administered by two universities, The University of Texas Pharm.D. Program provides learning resources from the Austin Campus and from the Health Science Center at San Antonio. Resident pharmacy faculty at San Antonio consists of six full-time members as the Pharm.D. Program enters its first year, each accepting only two entering candidates each July, adding two each year until each faculty member achieves and maintains a total of six students.

Clinical Resources

The University of Texas Health Science Center at San Antonio utilizes the clinical facilities of several affiliated patient care institutions. Principal among these are the Audie L. Murphy Memorial Veterans

Hospital and the Bexar County Hospital District, the latter consisting of a 400-bed acute care patient facility as well as multiple ambulant patient care facilities. Several medical facilities of local Army and Air Force installations are also affiliated with The University of Texas Health Science Center at San Antonio. The Pharmacology Department, UTHSCSA, maintains a clinical research program in which Pharm.D. candidates will be involved to a significant extent.

Detailed Information on the Pharm.D. Program

The catalogue of the College of Pharmacy, The University of Texas at Austin, contains detailed information on the Pharm.D. Program. Further information can be obtained by writing: Chairman, Joint Pharm.D. Committee, Department of Pharmacology, UTHSCSA, 7703 Floyd Curl Drive, San Antonio, Texas 78284.

PROGRAM IN PHYSIOLOGY

Objectives of Graduate Work

The Graduate Program in Physiology is designed to provide students with the academic, experimental and technical skills to enable them to successfully pursue careers in teaching and research. The purpose of this program is to produce professional physiologists who are qualified to conduct independent research and to train students in physiology and the health sciences.

Programs of Graduate Work

Programs leading to the degrees of Doctor of Philosophy and Master of Arts are offered. The major emphasis is towards the Doctor of Philosophy degree. To achieve the overall purpose of the program, training is given at a number of levels. In their first two years, students take formal courses in broad areas of physiology, as well as in cognate areas such as biochemistry, biophysics and pharmacology. This training is designed to provide a strong general knowledge of physiological sciences. In addition, during this time students participate in the research program of each faculty laboratory. This experience familiarizes the student with current techniques and instruments in use in physiological research, as well as aiding in the selection of an original research problem. In the final two years, the student chooses an area of interest and pursues advanced study and research in this area culminating in a dissertation which represents an original contribution to physiology. To gain experience in teaching, advanced graduate students are involved in lecturing and conference supervision in the medical, dental, and nursing physiology courses under the supervision and evaluation of the responsible faculty.

Physical Facilities

The Department of Physiology has research laboratories and other facilities for the training of graduate students. Each faculty member has a research laboratory containing most of thenecessary equipment for his or her research. In addition, the Department has a common equipment room

for major analytical equipment shared by the faculty. Major equipment which is available for the program includes: preparative ultracentrfuges; amino acid analyzer; liquid scintillation spectrometer; visible, ultraviolet and infrared spectrophotometers: spectrofluorometer; electron microscope; cell electrophoresis apparatus; two complete electrophysiological systems with micromanipulators; etc. Additional laboratory space will become available upon completion of the new Dental School in September, 1975.

Faculty

Chairman, Committee on Graduate Studies - Byung P. Yu Graduate Advisor - Byung P. Yu

Professor J. H. U. Brown, Coordinator of Southwest Research
Consortium

Control systems analysis; endocrine physiology.

Professor Edward J. Masoro, Chairman, Department of Physiology
Metabolic regulation.

Professor Carl J. Pauerstein**

Reproductive physiology; preimplantation phenomena.

Associate Professor Charles Levinson

Cellular metabolism; ion transport.

Associate Professor Byung P. Yu

Biological membrane structure and function.

Assistant Professor Barbara Brooks

Neuropsychology of vision.

Assistant Professor Paul Hegstad

Thyroid hormones in growth and development.

Assistant Professor Richard King

Pulmonary physiology; surface phenomena.

Assistant Professor Roger J. M. McCarter

Muscle function; mechanics and energetics.

Assistant Professor Terry M. Mikiten

Physiology of excitable tissues; synaptic transmission.

Assistant Professor A. P. Shepherd HS-348 Cardiovascular physiology; microcirculation.

Assistant Professor Thomas C. Smith

Cellular physiology; membrane function.

Instructor Carlton A. Eddy**

Reproductive physiology; tubal physiology.

Instructor Duane Proppe

Cardiovascular physiology; control of peripheral circulation.

** Staff member with joint appointment in Department of Physiology and major appointment in another department.

Specific Degree Requirements

Applicants for admission to the program must have earned a B.S. or B.A. degree in a scientific discipline from an accredited university or college. In addition, students will be expected to have completed the following undergraduate courses:

Biology: One year of General Biology

Chemistry: Organic Chemistry and Physical Chemistry

Physics: One year of General Physics

Mathematics: Differential and Integral Calculus

Qualified students who have deficiencies in these areas may be admitted to the graduate program with the stipulation that the deficiencies must be removed during the first year of graduate study.

For the <u>Master of Arts degree</u>, candidates must fulfill the general requirements for the degree at The University of Texas Health Science Center at San Antonio, and, in addition, must submit an acceptable thesis describing an original investigation in physiology.

For the <u>Doctor of Philosophy degree</u>, the program of study will be tailored to the needs of the individual student. All students must successfully complete certain required courses as soon as possible after admission to the program. During this period (usually the first year of study) the student will be under the aegis of the Committee on Graduate Studies. Also in the first year, the student will spend approximately

four weeks in each of several faculty laboratories participating in on-going research. Toward the end of this year the student should associate with a faculty advisor who will guide his or her further academic preparation.

At the end of the first year, the Committee on Graduate Studies will review the performance of each student. In the case of marginal performance, students may be required to take an oral examination covering the required courses of the program. Successful completion of this examination will permit continuance into advanced study. At this time the student in consultation with the faculty advisor will propose a guidance committee for approval by the Committee on Graduate Studies. The guidance committee will be responsible for planning and overseeing the student's progress in advanced courses. When the guidance committee is satisfied that the student is adequately prepared to undertake dissertation research it will request permission from the Committee on Graduate Studies to administer qualifying examinations for admission to candidacy. An average time for taking qualifying examinations would be about two and a half years after admission into the program. The student will be admitted to candidacy for the degree of Doctor of Philosophy by demonstrating the acquisition of comprehensive knowledge of physiology, through successful completion of written and oral qualifying examinations. Students will also be expected to demonstrate proficiency in at least one cognate area, which may be biochemistry, biophysics, pharmacology, or another suitable field.

Candidates for the degree of Doctor of Philosophy must submit and defend an acceptable dissertation describing a research project whose results represent an original contribution to the field of physiology.

All students in the M.A. and Ph.D. programs must take the required offerings of the department as well as General Biochemistry, Introduction to Biostatistics, and a course concerning computer technology or utilization. There are no foreign language requirements for graduate study in physiology.

Graduate Courses

The course offerings in the Graduate Program in Physiology are contingent upon adequate student enrollment.

Required Courses

Cellular Physiology

3 semester hours

Prerequisite: Consent of instructors

Physiologic mechanisms common to all living cells with emphasis on those of the vertebrate. Smith and Levinson.

Neurophysiology

3 semester hours

Prerequisite: Consent of instructors

Functions and properties of the peripheral and central nervous systems. Mikiten and Brooks.

Principles of Physiology I and II

6 semester hours

Prerequisites: Cellular Physiology, Neuroscience or consent of instructors

2 semesters - 3 semester hours each

A study of the basic concepts of physiology with particular emphasis on a systematic exposition of mammalian physiology. Staff.

History of Physiology

3 semester hours

Prerequisite: Consent of instructors

Lecture course surbeying the development of major concepts of physiology from their inception to the present. \underline{Staff} .

Seminar

1 semester hour

Prerequisite: Consent of instructors

Literature reports and group discussions by students and staff. Staff.

Supervised_Teaching

Credit to be arranged

Prerequisite: Consent of instructors

Presentation of lectures and supervision of conferences under the direction of instructors. \underline{Staff} .

Research

Credit to be arranged

Independent, original research under the direction of a faculty advisor.

Thesis

Credit to be arranged

Registration for at least 1 semester is required of M.A. candidates.

Dissertation_

Credit to be arranged

Registration for at least 2 semesters is required of Ph.D. candidates.

Elective Courses

Students in the Graduate Program in Physiology should select from the following list those courses relevant to their area of specialization. Most of these elective courses should be taken only after the required formal courses listed above have been completed.

Cardiovascular Physiology

3 semester hours

Prerequisite: Consent of instructors

Hemodynamic principles; cardiovascular regulation and vasomotor control; special circulation; methodology of cardiovascular research.

Shepherd and Proppe.

Respiratory Physiology

3 semester hours

Prerequisite: Consent of instructor

Pumonary mechanics and tissue utilization; acid-base balance; control of respiration; modern techniques in respiratory physiology. King.

Renal Physiology and Electrolyte Metabolism 3 semester hours

Prerequisite: Consent of instructors

Classical and contemporary principles of renal physiology and related aspects of body fluid and electrolyte metabolism. Masoro and Levinson.

Castrointestinal Physiology

3 semester hours

Prerequisite: Consent of instructors

Motility of the digestive tract; secretory mechanisms of the digestive glands; digestion and absorption of nutrients. Masoro and Smith.

Reproductive Physiology

3 semester hours

Prerequisite: Consent of instructors

Reproductive processes; their anatomic-physiologic basis, mechanism, function, and control. Eddy and Pauerstein.

Endocrine Physiology

3 semester hours

Prerequisite: Consent of instructors

Study of hormones and the regulation of target organ function in integrated biological systems. Brown and Hegstad.

Physiology of Muscle_

3 semester hours

Prerequisite: Consent of instructor

Structure, function and regulation of muscle activity with emphasis on the energetics of the contraction-relaxation cycle. McCarter.

Physiology of Nerve and Muscle

3 semester hours

Prerequisite: Consent of instructors

Historical concepts and contemporary views of neural systems as well as mechanisms of muscle and nerve functions. Mikiten and McCarter.

Sensory Physiology

3 semester hours

Prerequisite: Consent of instructor

Physiology of the mammalian sense organs. Brooks.

Molecular Basis of Hormone Action

3 semester hours

Prerequisite: Consent of instructors

Mechanisms by which hormones regulate protein synthesis, gene transcription and cell division. Brown and Hegstad.

Membrane Biophysics

3 semester hours

Biochemical Aspects of Membrane Structure 3 semester hours

Prerequisite: Consent of instructor

Broad survey of chemical compositions and components of membranes and the mature of associations of protein-lipid complexes with respect to their molecular architecture and organization. Yu.

Techniques in Biological Membrane

3 semester hours

Preparation

Prerequisite: Consent of instructor

Theory and laboratory techniques in the basic physico-biochemical methods of isolation and characterization of membranes from various biological sources. Lecture and laboratory. Yu.

Physiological Chemistry of Lipids

3 semester hours

Prerequisite: Consent of instructor

Regulation of lipid metabolism and the role of lipids in cellular and organ systems function. Masoro.

Regulation of Metabolism

3 semester hours

Prerequisite: Consent of instructor

Survey of metabolic regulatory mechanisms in the intact mammal and the regulation of major aspects of metabolism. <u>Masoro</u>.

Mathematical Physiology

3 semester hours

Prerequisite: Consent of instructor

Techniques of the mathematical approach to descriptions of physiological processes. Fundamental concepts of the calculus and differential equations will be developed and applied to data analysis. Smith.

Selected Topics in Physiology

3 semester hours

Prerequisite: Consent of instructors

Current views of physiological control mechanisms, membrane phenomena and organelle function. Staff.

STUDENT ORGANIZATION

The Graduate Student Association

The Graduate Student Association strives primarily to make the graduate students at the Health Science Center a unified body despite the diversity of backgrounds and educational interests. Unlike the other professional classes at the Health Science Center, the graduate students often find themselves immersed within their own disciplines with little opportunity to engage in interdisciplinary communication. The Association, comprised of people in various fields of learning, attempts to bring them together in an open exchange of ideas and knowledge through intellectual and social interaction. The secondary function of the Association is the representation of the students to the administrative body of the institution in the various areas of general welfare, interest and problems.

FINANCIAL INFORMATION

Since registration is not complete until tuition and fees are fully paid a student should be prepared to make these payments during scheduled registration for each semester. Both tuition and fees are subject to change according to the actions of the Texas State Legislature and the Board of Regents.

Tu	-;	* -	÷	00	*
1 U	ı	١.	1	ou	

Number	Nonres1dents						
of Hours	Residents	U.S.	Foreign				
Taken	of Texas	Citizens	Students				
15	\$60.00	\$600.00	\$210.00				
14	\$56.00	\$560.00	\$200.00				
13	\$52.00	\$520.00	\$200,00				
12	\$50.00	\$480.00	\$200.00				
11	\$50.00	\$440.00	\$200.00				
10	\$50.00	\$400.00	\$200.00				
9	\$50.00	\$360.00	\$200.00				
8	\$50.00	\$320.00	\$200.00				
7	\$50.00	\$280.00	\$200.00				
6	\$50.00	\$240.00	\$200.00				
5	\$50.00	\$200.00	\$200.00				
ا لم	\$50.00	\$160.00	\$200.00				
3	\$50.00	\$120.00	\$200.00				
2	\$50.00	\$ 80.00	\$200.00				
1	\$50.00	\$ 40.00	\$200.00				

^{*} Tuition for thesis and dissertation credit only in those instances where such credit is the <u>final credit hour</u> requirement for the degree in progress, is \$12.00 for residents of Texas and \$50.00 for nonresidents (U.S. citizens and foreign students).

The fee for $\underline{\text{in}}$ absentia registration is \$15.00 for residents of Texas and \$18.50 for nonresidents (U.S. citizens and foreign students).

Residency

The student is responsible for registering under the proper residence classification. The pertinent rules and regulations governing residence status as set forth by the Legislature can be found on page _____ of this catalogue. Any student whose legal residence is not clearly established may have a University opinion by requesting a copy of The University of Texas Legal Residence Questionnaire from the Office of the Registrar.

Fees

Laboratory fees commensurate with those paid by dental or medical students must be paid by graduate students when taking courses designed for the curriculum of either of the two professional schools. For one course the fee will be \$8.00; the amount assessed for the year will not exceed \$32.00.

A microscope rental fee prorated on a monthly basis and not to exceed \$60.00 per year must be paid by graduate students registered for a course designed for the dental or medical curriculum if a microscope is required for that course. Maintenance is provided by the school.

The student activity fee is \$2.50 per semester credit hour and not to exceed \$30.00 per semester. The fee is to help cover the costs of students' outpatient hospital charges in the Student Health Service.

(See Student Realth Services, page _____). As authorized by the State Legislature and approved by the Board of Regents, every student is required to pay the student activity fee.

An identification fee of \$2.00, payable upon registration, is for a name tag and for a student identification card. Lost items, which must be replaced, cost \$1.00 each.

The parking fee is \$3.00 a year and includes one decal. Additional decals for a second or replacement vehicle are \$1.00 each per year. The \$1.58

fee for a motorcycle is \$1.50 per year.

A graduation fee of \$25.00 covering the cost of the diploma, rental of cap, gown and hood and all other related expenses is paid at the time of registration for the semester or summer session in which the student plans to graduate.

A microfilming fee of \$25.00, covering the cost of microfilming the doctoral dissertation and publication of abstract of manuscrpt in Dissertation Abstracts International, is paid at the time of registration for the semester or summer session in which the student plans to graduate.

An <u>audit fee</u> of \$5.00 per course is charged for auditing one or more courses by an individual who is not registered for credit in other courses, and who is a regularly enrolled student or employee of The University of Texas Health Science Center at San Antonio. The fee charged is \$10.00 per course for all other individuals.

Other Expenses

Hospitalization

Students are required to enroll in the Blue Cross Hospital Services Plan designed for students at The University of Texas Health Science Center at San Antonio or show evidence of enrollment in another hospitalization plan with equal or greater provisions. A student may enroll his or her spouse and/or children at additional cost. The current annual costs for this plan are \$39.72 for student only; \$100.80 for student and one dependent; \$109.80 for student and two or more dependents. Inpatient hospital charges not reimbursed by hospitalization insurance are the responsibility of the student.

Living arrangements are made by each individual student. Although there is no Health Science Center housing for students, the Financial Aid Office maintains a listing of houses and apartments and will assist students whenever possible. Students should arrange for living accommodations well in advance of matriculation. A cafeteria is

available in the Bexar County Hospital.

Summary of Tuition and Fees

Tuition - Texas resident student enrolled for	
12 or less semester hours a semester	\$ 50.00
Tuition - nonresident (U.S. citizens) enrolled for	
12 hours (\$40.00 per hour) a semester	\$480.00
Tuition - nonresident (foreign students) enrolled	
for 14 or less semester hours a semester	\$200.00
Audit Fee	\$ 5.00
Student Activity Fee	\$ 2.50/semester
•	
,	hour
Hospitalization insurance (minimum) a year	hour \$ 39.72
Hospitalization insurance (minimum) a year	\$ 39.72
Hospitalization insurance (minimum) a year Graduation Fee	\$ 39.72 \$ 25.00
Hospitalization insurance (minimum) a year Graduation Fee Microfilming Fee	\$ 39.72 \$ 25.00 \$ 25.00

Refund of Tuition and Fees

Regular Session

A student who officially withdraws from the Graduate School will receive a refund of tuition and fees as follows:

	Refunds
During first week of classwork	70%
During second week of classwork	60%
During third week of classwork	40%
During fourth week of classwork	20%
During fifth week of classwork	00%
and thereafter	

Summer Session

Refunds will be made as follows:

				Refunds
First	three	class	days	70%

HS-36**⊅**

fourth, fifth or sixth class day

60%

Thereafter

00%

In no case shall the total refund exceed 70% of tuition and fees.

Refunds will be prepared within 30 days and mailed to the student's forwarding address in the files of the Registrar.

Exemption from Fees

Texas Ex-servicemen may, as directed by the State Legislature, be exempted from certain required fees but not deposits when meeting these criteria: (1) has resided in Texas for a period of not less than twelve months before the date of registration; (2) was a "bona fide" legal resident of the state at the time of entering service; (3) served in the armed forces or in certain auxiliary services in World War I, World War II, the Korean conflict, or the Cold War; (4) was honorably discharged therefrom (except those discharged because of being over the age of thirty-eight or because of personal request); (5) is not eligible for education benefits provided for veterans by the United States Government. Exemption from payment of certain fees also extends to children of members of the armed forces killed in action or dies while in the service of World War II, or the Korean conflict, or the Cold War and to orphans of members of the Texas National Guard and the Texas Air National Guard killed since January 1, 1946 while on active duty. Application for this exemption should be made to the Registrar.

Children of Certain Disabled Public Employees, i.e., children of certain firemen, peace officers, employees of the Texas Department of Corrections, and game wardens who in the line of duty have suffered injury resulting in death or disability, are exempt from payment of tuition and laboratory fees, by an act of the 59th Legislature. For specific information relative to this provision, contact the Commissioner of Higher Education, Sam Houston State Office Building, Austin, Texas 78701.

High School Graduates of State Orphanages of Texas, who are citizens of Texas, are exempt from certain required fees but not from deposits, by an act of the 51st Legislature. After application for admission has been approved, the candidate should request a scholarship card from the Financial Aid Administrator.

The Texas Rehabilitation Commission offers assistance for tuition and non-refundable fees to students who have certain disabling conditions provided their vocational objectives have been approved by a TRC Counselor. Examples of such conditions are orthopaedic deformities, emotional disorders, diabetes, epilepsy, heart conditions, etc. Other services are also available to assist the handicapped student to become employable. Application for such service should be made at:

Texas Rehabilitation Commission 212-B Stumberg Room 300 San Antonio, Texas 78204

Quantity-of-Work Rule

Full-time graduate students may be paid annual salaries from institution funds when funds are available. Student stipends funded from Federal sources are governed by Federal regulations.

There may be circumstances under which part-time graduate students desire gainful employment within the Health Science Center (or full-time employees desire to pursue part-time graduate studies), and the following guidelines should apply:

Within funds available, part-time graduate students who are gainfully employed part-time within the Health Science Center in addition to pursuing graduate studies may be paid prorated rates within salary scales of job classification for which they are qualified and/or to which they are assigned. This procedure is permitted primarily to allow gainful part-time employment in an area unrelated to the student's formal academic program.

The Committee on Graduate Studies should be consulted in advance when a part-time student desires part-time employment within the student's own supervising department, or when the student is employed in a work situation that exists whereby the employment will be of direct benefit in meeting the graduate degree requirements. The committee should then recommend an appropriate part-time rate of pay consistent with the objectives of the graduate program in general with due consideration to the pay rates of other graduate students.

Departments requesting employment of a part-time graduate student outside the supervising department (and in an area unrelated to the student's academic program) should determine the number of hours for which the student is registered prior to contacting the Personnel Office regarding appointment of such students. This will enable the Personnel Office staff to provide proper salary rate information.

Maximum Hours

Per Week Permitted	Graduate Hours
to Work	Registered for
0 - 0.00%	15 - 100,00%
. 3 - 7.50%	14 - 91.66%
6 - 15.00%	13 - 83.33%
10 - 25.00%	12 - 75,00%
13 - 32.50%	11 - 66.66%
16 - 40.00%	10 - 58.33%
20 - 50.00%	9 - 50.00%
23 - 57.50%	8 - 41.66%
26 - 65.00%	7 - 33.33%
30 - 75,00%	6 - 25.00%
33 - 82.50%	5 - 16.66%
36 - 90,00%	4 - 8.33%
40*-100,00%	3 - 0.00%
40*-100.00%	2 - 0.00%
40*-100.00%	1 - 0.00%

*Present policy permits an employee to enroll in a 3 semester hour course without reduction in pay.

Assistantships

Various teaching and research assistantships are available. Prospective students should submit applications directly to the Graduate Advisor of the program in which they propose to do graduate study. Students rendering one-half time service in teaching assistantships or research assistantships pay tuition at the resident rate.

Scholarships

Eligibility is based primarily on financial need, but scholastic accomplishments and career potential are considered making the awards. The scholarships vary in amount. Both United States citizens and foreign nationals may apply for these awards. Applications should be submitted to the Financial Aid Administrator, Office of Student Services, The University of Texas Health Science Center at San Antonio.

Loan Funds

Graduate Programs of The University of Texas Health Science Center at San Antonio have limited funds available for loans. Complete information and application forms may be obtained from the Financial Aid Administrator, Room 306L. These loan programs include but are not limited to the following:

Short-Term and Emergency Loan Programs

The Student Short-Term Loan Fund

The Student Emergency Loan Fund

Long Term Loans

National Direct St udent Loan Program

The Hinson-Hazelwood College Student Loan Program

Federally Insured Loan Program (Funds obtained from banks and other lending institutions)

The Minnie Stevens Piper Foundation Student Loan Program

RESIDENCE STATUS

Pertinent rules and regulations governing residence status pursuant to Title 3, Texas Education Code, effective July 16, 1974 are quoted below. Under these regulations, the term "residence" means "domiciled" and the term "resided in" means "domiciled in". Interested students should consult the Registrar for further information.

Minors

Statute: Section 54.052 (b) An individual, under twenty-one (21) years of age, who is living away from his family, and whose family resides in another state or has not resided in Texas for the 12-month period immediately preceding the date of registration shall be classified as a nonresident student;

Section 54.052 (c) An individual eighteen (18) years of age or under whose family has not resided in Texas for the 12-month period immediately preceding the date of registration shall be classified as a nonresident student regardless of whether he has become the legal ward of residents of Texas or has been adopted by residents of Texas while he is attending an educational institution in Texas, or within a 12-month period before his attendance, or under circumstances indicating that the guardianship or adoption was for the purpose of obtaining status as a resident student;

Section 54.055 An individual 18 years of age or under whose parents were formerly residents of Texas is entitled to pay the resident tuition fee following the parents' change of legal residence to another state, as long as the individual remains continuously enrolled in a regular session in a state-supported institution of higher education.

Residence of Individuals Over Eighteen

Statute: Section 54.052 (d) An individual eighteen (18) years of age or over who has come from outside Texas and who is gainfully employed in Texas, for a 12-month period immediately preceding registration

in an educational institution shall be classified as a resident student as long as he continues to maintain a layal residence in Texas; and

Section 54.053 (e) An individual eighteen (18) years of age or over who resides out of the state or who has come from outside.

Texas and who registers in an educational institution before having resided in Texas for a 12-month period shall be classified as a nonresident student.

Section 54.054 A nonresident student classification is presumed to be correct as long as the residence of the individual in the state is primarily for the purpose of attending an educational institution. After residing in Texas for at least twelve (12) months, a nonresident student may be reclassified as a resident student as provided in the rules and regulations adopted by the Coordinating Board, Texas College and University System. Any individual reclassified as a resident student is entitled to pay the tuition fee for a resident of Texas at any subsequent registration as long as he continues to maintain his legal residence in Texas.

Married Students

Statute: Section 54.056 A nonresident who marries and remains married to a resident of Texas, classified as such under this Act at the time of the marriage and at the time the nonresident registers, is entitled to pay the resident twition fee regardless of the length of time he has lived in Texas, and any student who is a resident of Texas who marries a nonresident is entitled to pay the resident tuition fee as long as he does not adopt the legal residence of the spouse in another state.

Military Personnel and Veterans

Statute: Section 54.058 (a) Wilitary personnel are classified as provided by this section in the following manner:

- (b) An officer, enlisted man or woman, selectee or draftee of the Army, Army Reserve, Army National Guard, Air National Guard, Texas State Guard, Air Force, Air Force Reserve, Havy, Havy Heserve, Marine Corps, Marine Corps Reserve, Coast Guard, or Coast Guard Reserve of the United States, who is assigned to duty in Teras is entitled to register himself, his spouse, and their children in a state institution of higher education by paying the tuition fee and other fees or charges required of Texas residents, without regard to the length of time he has been assigned to duty or resided within the state. However, out-of-state Army National Guard or Air National Guard members attending training with Texas Army or Air National Guard members under National Guard Bureau reculations may not be exempted from nonresident tuition by virtue of that training status nor may out-of-state Army, Air Force, Wavy, Varine Corps, or Coast Guard Reserves training with units in Texas under similar regulations be exempted from nonresident tuition by virtue of such training status. It is the intent of the legislature that only those members of the Army or Air National Guard, Texas State Guard, or other reserve forces mentioned above be exempted from the nonresident tuition fee and other fees and charges only when they become members of Texas units of the military organizations mentioned above.
- (c) As long as they reside continuously in Texas, the spouse and children of a member of the Armed Forces of the United States who has been assigned to duty elsewhere irmediately following assignment to duty in Texas are entitled to pay the tuition fees and other fees or charges provided for Texas residents.
- (e) A Texas institution of higher education may charge to the United States Government the nonresident tuition fee for a veteran enrolled under the provisions of a Federal law or regulation authorizing educational or training benefits for veterans;

- (f) The spouse and children of a member of the Armed Forces of the United States who dies or is killed are entitled to pay the resident tuition fee, if the wife and children become residents of Texas within 60 days of the date of death; and
- (g) If a member of the Armed Forces of the United States is stationed outside Texas and his spouse and children establish residence in Texas, by residing in Texas and by filing with the Texas institution of higher education at which they plan to register a letter of intent to establish residence in Texas, the institution of higher education shall permit the spouse and children to pay the tuition, fees, and other charges provided for Texas residents without regard to length of time that they have resided within the State.

Employees of Institutions of Higher Education Other Than Students

Statute: Section 54.059 A teacher, professor, or other employees of a Texas institution of higher education is entitled to register himself, his spouse, and their children in a state institution of higher education by paying the tuition fee and other fees or charges required for Texas residents without regard to the length of time he has resided in Texas. A teacher, professor, or other employee of a Texas institution of higher education is any person employed at least one-half time on a regular monthly salary basis by a state institution of higher education.

Student Employees

Statute: Section 54.051 (o) 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 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.

Competitive Scholarships

Statute: Section 54.051 (p) A nonresident student holding a competitive scholarship of at least \$200 for the academic year or summer for which he is enrolled 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 residents, for the scholarship and that the scholarship must be awarded by a scholarship committee officially recognized by the administration of the institution of higher education.

Citizens of Any Country Other Than the United States of America

Statute: Section 54.057 An alien who is living in this country under a visa permitting permanent residence or who has filed with the proper Federal immigration authorities a declaration of intention to become a citizen has the same privilege of qualifying for resident status for fee purposes under this Act as has a citizen of the United States. A resident alien residing in a junior college district located immediately adjacent to Texas boundary lines shall be charged the resident tuition by that junior college.

Reciprocity Clause Applicable to Junior Colleges

Statute: Section 54.060 The nonresident tuition fee prescribed in this Act 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 immediately adjacent to the state in which the nonresident student resides. The nonresident student described in this Subsection 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.

Student Responsibilities

The responsibility of registering under the proper residence classification is that of the student, and if there is any question of right to classification as a resident of Texas, it is his or her obligation, 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.

Every student who is classified as a resident student but who becomes a nonresident at any time by virtue of a change of legal residence by his or her own action or by the person controlling his or her domicile is required to notify the proper administrative officials of this institution at once.

<u>Penalties</u>

Statute: Section 54.053 The governing board of each institution required by this Act to charge a nonresident tuition or registration fee is subject to the rules, regulations, and interpretations issued by the Coordinating Board, Texas College and University System, for the administration of the nonresident tuition provisions of this Act.

The rules, regulations, and interpretations promulgated by the Coordinating Board shall be furnished to the presidents or administrative heads of all Texas public senior and junior colleges and universities.

Section 54.061 The governing board of an institution of higher education may assess and collect from each nonresident student who fails to comply with the rules and regulations of the boards concerning nonresident fees a penalty not to exceed \$10 a semester.

DOCTOR OF PHILOSOPHY

June 7, 1971

James Murphy Pharmacology

Joel Singer Anatomy

June 5, 1972

Gerald O. Carrier Pharmacology

Helga A. Jurevics Pharmacology

Barbara L. Pegram Pharmacology

August 26, 1972

Elizabeth P. Bowie Anatomy

May 26, 1973

James R. Jeter, Jr. Anatomy

Joseph T. Newman Microbiology

Virginia L. Thomas Microbiology

August 24, 1973

Ateef Ahmed Qureshi Microbiology

June 1, 1974

George E. Barnes Pharmacology

Merrill B. Kardon Pharmacology

Louis B. Levy Biophysics

August 23, 1974

David E. Blask Anatomy

David J. Jones Pharmacology

Jane A. Teherani Biochemistry MASTER OF ARTS

May 26, 1973

Yolan Marinez Biochemistry

William McDavid Biophysics GRADUATE SCHOOL OF BIOMEDICAL SCIENCES FACULTY

(To be added; not attached for Docket.)



THE UNIVERSITY OF TEXAS SYSTEM CANCER CENTER

AT 21

Texas Medical Center Houston, Texas 77025

April 7, 1975

Chancellor Charles A. LeMaistre The University of Texas System 601 Colorado Street Austin, Texas 78701

Dear Chancellor LeMaistre:

The docket for the April 28, 1975 meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.

Sincerely yours,

RLC:sd

THE UNIVERSITY OF TEXAS SYSTEM CANCER CENTER

DOCKET

BOARD OF REGENTS MEETING APRIL 28, 1975

DAL

GIFTS: The following gifts have been received and are submitted for formal approval of the Board of Regents.

Donor		Purpose and Explanation	Amount		
1.	Lutheran Hospital Foundation %Richard H. Jesse, M.D. President Board of Directors 6910 Fannin Houston, Texas 77025	Expansion of M.D. Anderson Hospital. Third Installment on pledge of \$548,600.00.	\$50,000.00*		
2.	East Texas Bank % Mr. Emory D. Mahan President Post Office Box 5818 Longview, Texas 75601	Expansion of M.D. Anderson Hospital in memory of Mr. J. R. Dunaway.	5,000.00		
3.	Schlumberger Foundation %Capt. Clifton Iverson, U.S.N. Retired Executive Secretary Post Office Box 2557 Houston, Texas 77001	Expansion of M.D. Anderson Hospital. For payment pledged October 1973.	50,000.00		
4.	Baker & Taylor Drilling Co. %Max E. Banks 712 First National Bank Bldg. Post Office Box 2748 Amarillo, Texas 79105	Gift for Gynecology Services	25,000.00		
5• √	Mrs. Mary Skipper Post Office Box 2466 Longview, Texas 75601	Expansion of M.D. Anderson Hospital-Air Flow Room.	25,000.00		

*No letter of transmittal

QUARTERLY REPORT OF GIFTS OF LESS THAN \$5,000.00

M. D. Anderson

The quarterly report of gifts of less than \$5,000.00 for the period ending February 28, 1975 is available for reference.

INCREASE IN HOSPITAL ROOM RATES

M. D. Anderson

Due to increased hospital costs, effective May 1, 1975 it will be necessary to increase the daily room rates for M. D. Anderson Hospital as itemized below. These revised rates were recommended by the Business Manager and approved by the Vice President for Business and Hospital Affairs, the President of the System Cancer Center, and the Deputy Chancellor for Administration. They have also been submitted to Group Hospital Services, Inc. (Blue Cross-Blue Shield) for formal approval of that agency.

Type of Room	Present Rate	Recommended Rate
Three and four Bed Rooms Semi-Private Rooms Private Rooms Private Rooms Private Rooms (2-West) Pediatric Rooms	\$49.00 55.00 62.00 67.00 82.50 55.00	\$55.00 63.00 71.00 77.00 95.00 63.00

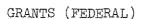
INCREASE IN ANDERSON-MAYFAIR ROOM RATES

These revised rates were recommended by the Business Manager and approved by the Vice President for Business and Hospital Affairs and the Deputy Chancellor for Administration.

Type of Accommodation	Present Rate	Recommended Rate
Small one-bedroom apartment	\$265	\$300
Regular one-bedroom apartment	330	370
Small two-bedroom apartment	450	500
Regular two-bedroom apartment	500	565
Regular three-bedroom apartment	670	755



THE UNIVERSITY OF TEXAS SYSTEM CANCER CENTER





BOARD OF REGENTS MEETING APRIL 28, 1975

The following Grants have been awarded and are submitted for formal approval of the Board of Regents.

M. D. Anderson

1. Agency: Department of Health, Education and Welfare

National Cancer Institute

Grant No.: 5 PO2 CA 06294-14 CAP

Project Title: Extension of Radiotherapy Research

Principal Investigator: Gilbert H. Fletcher, M.D.

New Funds: \$825,223

Current Budget Period: March 1, 1975 through February 29, 1976

Total Project Period: March 1, 1974 through February 28, 1979

Description: For continuation of additional research projects

in the clinical area and laboratory.

County of Expenditure: Harris

2. Agency: Department of Health, Education and Welfare

National Cancer Institute

Grant No.: 5 RO1 CA 15250-02 COM

Project Title: Decision making for Patients with Acute Leukemia

Principal Investigator: Edmund A. Gehan, Ph.D.

New Funds: \$119,100

Current Budget Period: March 1, 1975 through February 29, 1976

Total Project Period: March 1, 1974 through February 28, 1977

Description: The major objective is to develop a methodology

of decision making for patients with acute leukemia.

County of Expenditure: Harris

3. Agency: Department of Health, Education and Welfare

National Cancer Institute

Grant No.: 5 RO1 CA 14986-02 ET

Project Title: Inhibitors of Normal and Malignant Lymphoid Tissue

Principal Investigator: Evan M. Hersh, M.D.

New Funds \$44,607

Current Budget Period: March 1, 1975 through February 29, 1976

Total Project Period: March 1, 1974 through February 28, 1977

Description: The objectives of the project are to understand

the mechanism of proliferation within the lymphoid

system during immune responses.

County of Expenditure: Harris

4. Agency: Department of Health, Education and Welfare

National Institute of Arthritis, Metabolism

and Digestive Diseases

Grant No.: 5 RO1 AM 09155-11 HEM

Project Title: Bone Marrow Kinetics

Principal Investigator: Raymond Alexanian, M.D.

New Funds: \$24,415

Current Budget Period: April 1, 1975 through March 31, 1976

Total Project Period: April 1, 1974 through March 31, 1977

Description: To define a rational basis for the use of androgens

in the treatment of human beings with severe anemia due to bone marrow failure, and of erythropoietin concentrates in patients with anemia due to renal

disease.

County of Expenditure: Harris

5. Agency: Department of Health, Education and Welfare

National Cancer Institute

Grant No.: 5 PO2 CA 05831-14 CAP

Project Title: Cancer Clinical Research

Principal Investigator: R. Lee Clark, M.D.

New Funds: \$693,419

Current Budget Period: December 1, 1974 through November 30, 1975

Total Project Period: December 1, 1970 through November 30, 1975

Description: For the development of new and more effective

methods of treating patients, to determine possible relationship of viruses to the development and propagation of selected human cancers, to study the cancer host and effects of various

treatments of the host's genetic make up.

County of Expenditure: Harris

THE UNIVERSITY OF TEXAS SYSTEM CANCER CENTER

AMENDMENTS TO THE 1974-75 OPERATING BUDGET

BOARD OF REGENTS MEETING APRIL 28, 1975



M. D. Anderson

General Administration

Business Office

Data Processing

1. Appointment
 Paul K. Perkins
 Computer Programmer II - Classified
 Full-time rate of \$10,656 per annum
 Effective February 17, 1975
 Source of funds - General Budget - Reserve for Classified Salaries
 (RBC 257)

2. Appointment
Patricia M. Harmon
Accounting Clerk II - Classified
Full-time rate of \$7,140 per annum
Effective February 4, 1975
Source of funds - General Budget - Reserve for Classified Salaries
(RBC 251)

3. Appointment
Charles W. Baldridge
Computer Programmer II - Classified
Full-time rate of \$13,452 per annum
Effective February 10, 1975
Source of funds - General Budget - Reserve for Classified Salaries
(RBC 253)

Personnel

4. Change in title and salary
Leon E. McClure
Assistant Personnel Manager
Full-time rate of \$16,000 per annum
Effective January 1, 1975
Source of funds - General Budget - Reserve for Professional Salaries
(RBC 248)

The Tumor Institute

Medical Staff

Medicine

5. Separation
Israel Schuleman, M.D. - without tenure
Clinical Associate Neurologist
20% time rate of \$6,000 per annum (Full-time rate of \$30,000 per annum)
Effective January 12, 1975
Source of funds - Dr. Schuleman has been paid from Department of Medicine
(General Funds)
(RBC 246)

The Tumor Institute

Medical Staff

Medicine

6. Appointment

Tulio A. Sulbaran, M.D. - without tenure Senior Resident in Medicine (part-time) 1/8 time rate of \$4,800 per annum Effective February 17, 1975 through June 30, 1975 Source of funds - General Budget - Reserve for Professional Salaries (RBC 259)

Clinical Chemistry and Laboratory Medicine

7. Change in title and salary Carmen Flores

Assistant Clinical Laboratory Manager Full-time rate of \$15,000 per annum

Effective January 1, 1975

Source of funds - General Budget - Reserve for Professional Salaries (RBC 245)

8. Change in source of funds

Jose M. Trujillo, M.D. - without tenure Pathologist and Professor of Pathology

Full-time rate of \$32,000 per annum

Effective January 1, 1975

Source of funds - From Clinical Chemistry and Laboratory Medicine (General Funds) payable at the 64% time rate of \$20,500 per annum and Grant NIH-5-RO1-CA12687 payable at the 36% time rate of \$11,500 per annum (Full Time Rate \$32,000) to Clinical Chemistry and Laboratory Medicine (General Funds). The source of funds for this action is the budgeted position for Dr. Trujillo and the Reserve for Professional Salaries. (RBC 254)

Diagnostic Radiology

9. Resignation

Hector Medellin, M.D. - without tenure
Associate Radiologist and Associate Professor of Radiology
Full-time rate of \$28,000 per annum
Effective at the Close of Business February 3, 1975
Source of funds - Dr. Medellin has been paid form Diagnostic Radiology
(General Funds)
(RBC 252)

10. Appointment

Mauhammed T. Beydoun, M.D. - without tenure
Assistant Radiologist and Assistant Professor of Radiology
Full-time rate of \$20,000 per annum
Effective February 1, 1975
Source of funds - General Budget - Reserve for Professional Salaries
(RBC 258)

Rehabilitation Medicine

11. Appointment

Rose L. Cabrera
Secretary I - Classified
Full-time rate of \$6,036 per annum
Effective February 10, 1975
Source of funds - General Budget - Reserve for Classified Salaries
(RBC 255)

Research

Biochemistry

12. Appointment
Carmella J. Hansen
Secretary I - Classified
Full-time rate of \$6,240 per annum
Effective January 27, 1975
Source of funds - General Budget - Reserve for Classified Salaries
(RBC 247)

Research Physics

13. Appointment
Frances D. Driskell
Secretary III - Classified
Full-time rate of \$9,336 per annum
Effective September 1, 1974
Source of funds - General Budget - Reserve for Classified Salaries
(RBC 260)

Experimental Medicine

Nuclear Medicine

14. Appointment
Tsu-Chieh E. Wang
Radiological Physics Technician II - Classified
Full-time rate of \$9,648 per annum
Effective January 20, 1975
Source of funds - General Budget - Reserve for Classified Salaries
(RBC 261)

Developmental Therapeutics

Change in source of funds

Jeffrey A. Gottlieb, M.D. - without tenure

Associate Internist and Associate Professor of Medicine

Full-time rate of \$30,000 per annum

Effective January 1, 1975

Source of funds - From the 63% time rate of \$19,000 per annum payable

from Grant NIH-5-R10-CA-03754 and the 37% time rate of \$11,000 per annum

(Total Salary - \$30,000) payable from Contract NO1-CM-43801 to the 63%

time rate of \$19,000 per annum payable from Developmental Therapeutics

(General Funds) and the 37% time rate of \$11,000 per annum (Total Salary - \$30,000) payable from Contract NO1-CM-43801. The source of funds for this action is the reserve for Professional Salaries and available contract funds.

(RBC 243)

Virology

Reappointment

James L. East, Ph.D. - without tenure

Assistant Virologist and Assistant Professor of Virology

Full-time rate of \$20,000 per annum

Effective January 1, 1975

Source of funds - Grant NIH-5-SO1-RR-5511

(RBC 237)

Reappointment
James C. Chan, Ph.D. - without tenure
Assistant Virologist and Assistant Professor of Virology
Full-time rate of \$18,500 per annum
Effective January 1, 1975
Source of funds - Grant NIH-5-SO1-RR-5511
(RBC 238)

The Tumor Institute

Research

Virology

18. Reappointment

Mahlon F. Miller II, Ph.D. - without tenure Assistant Virologist and Assistant Professor of Virology Full-time rate of \$17,500 per annum Effective January 1, 1975 Source of funds - Grant NIH-5-SO1-RR-5511 (RBC 236)

19. Reappointment

Jerzy A. Georgiades, Ph.D. - without tenure Assistant Virologist and Assistant Professor of Virology Full-time rate of \$15,500 per annum Effective January 1, 1975 Source of funds - Grant NIH-5-S01-RR-5511 (RBC 235)

Patient Care Activities

Appointments

20. Appointment

Bessie M. Hopkins Clerk II - Classified Full-time rate of \$4,944 per annum Effective September 1, 1974 Source of funds - General Budget - Reserve for Classified Salaries (RBC 239)

21. Appointment

Mary L. Brady
Senior Administrative Clerk - Classified
Full-time rate of \$7,140 per annum
Effective September 1, 1974
Source of funds - General Budget - Reserve for Classified Salaries
(RBC 240)

22. Appointment

Yolanda Millien
Administrative Clerk - Classified
Full-time rate of \$6,036 per annum
Effective September 9, 1974
Source of funds - General Budget - Reserve for Classified Salaries
(RBC 241)

Respiratory Therapy

23. Appointment

Mary J. Stevens Clerk-Typist I - Classified Full-time rate of \$5,496 per annum Effective February 1, 1975 Source of funds - General Budget - Reserve for Classified Salaries (RBC 250)

Medical Records

24. Appointment

Jeanette J. Boyd

Administrative Assistant - Classified

Full-time rate of \$9,972 per annum

Effective September 1, 1974

Source of funds - General Budget - Reserve for Classified Salaries

(RBC 262)

Pharmacy

25. Appointment

Charles N. Gathman

Intern in Hospital Pharmacy

Full-time rate of \$8,400 per annum

Effective February 1, 1975

Source of funds - General Budget - Reserve for Professional Salaries

(RBC 242)

General Services

Development Office

26. Resignation

Frances B. Calkins

Assistant for Development

67% time rate of \$9,383 per annum (Full-time rate of \$14,068 per annum)

Effective at the Close of Business February 28, 1975

Source of funds - Mrs. Calkins has been paid from Development Office

(General Funds)

(RBC 249)

Physical Plant

27. Appointment

Harry W. Tyrrell, Jr.

Assistant Physical Plant Supervisor

Full-time rate of \$18,500 per annum

Effective February 10, 1975

Source of funds - General Budget - Reserve for Professional Salaries

(RBC 256)

OTHER FISCAL ITEMS

	Schedule of Additional or Changes in Funding of Construction Projects							
Project	Project Title	Source From	of Funds To	Amount				
703-78	Expansions at M. D. Anderson Hospital		Private Gifts	\$ 281,707.00				



OFFICE OF THE PRESIDENT

THE UNIVERSITY OF TEXAS SYSTEM SCHOOL OF NURSING AUSTIN, TEXAS 78712

March 28, 1975

Chancellor Charles A. LeMaistre
The University of Texas System
601 Colorado Street
Austin, Texas 78701

Dear Chancellor LeMaistre:

The docket for the April 28, 1975 meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.

Sincerely,

Marilyn D. Willman

Thorner of Tillman

President

THE UNIVERSITY OF TEXAS SYSTEM SCHOOL OF NURSING

Austin - El Paso - Fort Worth - Galveston - Houston - San Antonio

April 28, 1975

CLINICAL AND ADJUNCT FACULTY APPOINTMENTS

FEBRUARY 1, 1975 THROUGH MAY 31, 1975

Austin Nursing School

Adjunct Associate Professor -- without salary, without tenure

1. LaVerne Gallman, Ed.D.

MARCH 1, 1975 THROUGH MAY 31, 1975

Houston Nursing School

Clinical Assistant Professor -- without salary, without tenure

- 1. Betty Hadden, R.N., M.Ed.
- 2. Evelyn C. Calhoun
- 3. Fay B. Peyton, R.N., M.Ed.

Clinical Instructor -- without salary, without tenure

1. Betty Cody, R.N.

THE UNIVERSITY OF TEXAS SYSTEM SCHOOL OF NURSING

Austin - El Paso - Fort Worth - Galveston - Houston - San Antonio

April 28, 1975

RECOMMENDED AMENDMENTS TO THE 1974-75 BUDGET

System Nursing School

1 0		of Funds: Capitation Grant Other Expenses - El Paso Other Expenses - Galveston Other Expenses - San Antonio Total	\$ 44,925.00 17,255.00 86,613.00 \$148,793.00
	To:	Capitation Grant Other Expenses	\$148,793.00
	For:	To adjust Capitation Grant NU-01360-03. (RBC# N-366)	
2.	Transfer	of Funds:	
	From:	Allocation from Coordinating Board	\$293,189.00
	To:	Austin Nursing School	
		Summer Session Teaching Salaries El Paso Nursing School	\$ 15,000.00
		Summer Session Teaching Salaries	15,000.00
		Maintenance, Operation and Equipment Fort Worth Nursing School	44,925.00
		Teaching Salaries	7,040.00
		Summer Session Teaching Salaries	15,000.00
		Classified Salaries Galveston Nursing School	5,448.00
		Summer Session Teaching Salaries	15,000.00
		Maintenance, Operation and Equipment Houston Nursing School	17,255.00
		Teaching Salaries	41,908.00
		Summer Session Teaching Salaries San Antonio Nursing School	15,000.00
		Summer Session Teaching Salaries	15,000.00
		Maintenance, Operation and Equipment	86,613.00
		Total	\$293,189.00

To allocate funds received from the Coordinating Board which were in excess of the amount budgeted. (RBC# N-368)

Austin Nursing School

To:

3. Transfer of Funds:

From: Teaching Salaries \$7,673.00

Classified Salaries 7,673.00

To provide funds for an Office Supervisor For: and a part-time Receptionist. (RBC# N-367)

4. Appoint Janene L. Jeffery, Assistant Instructor, (non-tenure), at a 9 months rate of \$9,000 for the period February 24, 1975 through May 16, 1975. Source of Funds: Teaching Salaries. (RBC# N-373)

THE UNIVERSITY OF TEXAS SYSTEM SCHOOL OF NURSING

Austin - El Paso - Fort Worth - Galveston - Houston - San Antonio

April 28, 1975

RECOMMENDED AMENDMENTS TO THE 1974-75 BUDGET (Continued)

Galveston Nursing School

5. Appoint Martha E. McKenna, Assistant Instructor (non-tenure), at a 9 months rate of \$9,000 for the period February 1, 1975 through May 31, 1975. Source of Funds: Teaching Salaries. (RBC# N-327)

Houston Nursing School

6. Appoint Elsa S. Meyer, Instructor (non-tenure), at a 9 months rate of \$12,535 for the period February 1, 1975 through May 31, 1975. Source of Funds: Teaching Salaries. (RBC# N-371)

San Antonio Nursing School

- 7. Appoint Sarah A. Adams, Assistant Instructor (non-tenure), 85% time, at a 9 months rate of \$9,500 for the period January 9, 1975 through May 31, 1975. Source of Funds: Teaching Salaries. (RBC# N-360)
- 8. Appoint Dorothy M. Knight, Assistant Instructor (non-tenure), 85% time, at a 9 months rate of \$9,500 for the period January 9, 1975 to May 31, 1975. Source of Funds: Teaching Salaries. (RBC# N-362)
- 9. Appoint Dana H. Wertenberger, Assistant Instructor (non-tenure), 85% time, at a 9 months rate of \$9,500 for the period January 9, 1975 through May 31, 1975. Source of Funds: Teaching Salaries. (RBC# N-364)
- 10. Appoint Gayle A. Lyons, Assistant Instructor (non-tenure), 65% time, at a 9 months rate of \$9,500 for the period February 24, 1975 through May 31, 1975. Source of Funds: Teaching Salaries. (RBC# N-375)



THE UNIVERSITY OF TEXAS

SYSTEM SCHOOL OF NURSING

1975 SUMMER SESSION TEACHING BUDGET

TABLE OF CONTENTS

THE UNIVERSITY OF TEXAS SYSTEM SCHOOL OF NURSING

1975 SUMMER SESSION TEACHING BUDGET

																	Page No.
Teaching Budget Allocation	a	o	۰	۰	۰	۰	•	•	•	٥	٥	•	۰	۰	۰	٠	N-7
Austin Nursing School	o.	۵	ð	٥	٠	5	•	o	۰	۵	٠	٠	٥	٥	٥	٥	N-8
El Paso Nursing School	۰			43	٠	۰	•	0	•	۵	۰	•		٠	٠	÷	N - 9
Fort Worth Nursing School .	۰	5		÷	٥	•	ø	٠	a	۰	•	•	•	٠	æ	5	N-10
Galveston Nursing School .	٥		o	٥	٠	۰	o	٥	۵	ð	•	۰	۰	٠	٠	æ	N-11
Houston Nursing School	۰	۰	a	•	۰		۰	۰	٠	٥	o	٠	•	٠	6	۰	N-12
San Antonio Nursing School	۰	۰	٠	G	٥	٥	٠	۰	•	٥	0	٥	٠	۰	٥		N-13

THE UNIVERSITY OF TEXAS SYSTEM SCHOOL OF NURSING

1975 SUMMER SESSION TEACHING BUDGET ALLOCATION

SCHOOL.	Summer Session Teaching Salary BUDGET	Transfer from Teaching SALARIES	Allocation for Salary INCREASES	Summer Session Teaching Salary Adjusted BUDGET
Austin Nursing School El Paso Nursing School Fort Worth Nursing School Galveston Nursing School Houston Nursing School San Antonio Nursing School	\$15,500 15,500 15,500 15,500 15,500 15,500	\$11,100 3,125 4,300 6,117 2,908 17,800	\$ 2,438 1,544 1,791 1,947 1,659 2,999	\$ 29,038 20,169 21,591 23,564 20,067 36,299
Tota1	\$93,000	\$45,350	<u>\$12,378</u>	\$150,728

Pages 4138 – 4143 are intentionally left blank (Noted: June 16, 2010)

4144

30

LAND AND INVESTMENT REPORT

Meeting of April 28, 1975

INDEX	ζ		PAGE I REPORT
		I. PERMANENT UNIVERSITY FUND	
Α.	INVES'	FMENT MATTERS - MONTH ENDED JANUARY 31, 1975	
	1.	Report on Securities Transactions	2
	2.	Cash Statement - Permanent Fund and Available Fund	7
в.	INVES'	IMENT MATTERS - MONTH ENDED FEBRUARY 28, 1975	
	1.	Report on Securities Transactions	9
	2.	Cash Statement - Permanent Fund and Available Fund	14
		II. TRUST AND SPECIAL FUNDS	
Α.	INVES'	FMENT MATTERS - MONTH ENDED JANUARY 31, 1975	
	1.	Report on Securities Transactions	16
	2.	Securities Transactions Detail	20
В.	INVES'	IMENT MATTERS - MONTH ENDED FEBRUARY 28, 1975	
	1.	Report on Securities Transactions	25

2. Securities Transactions Detail

LAND AND INVESTMENT REPORT

For Monch Ended January 31, 1975

1. 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, 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 1/31/74	BOOK YIELD 1/31/74	BOOK VALUE 1/31/75	BOOK YIELD 1/31/75
DEBT SECURITIES:				
U. S. Government Obligations Treasury Bonds Various Government	 \$ 81,760,282.43	5.06%	\$ 87,938,551.05	5.39%
Guaranteed Bonds FHA Mortgages	37,066,804.55 13,534,350.38	6.78 <u>7.01</u>	81,549,033.49 12,517,662.30	7.90 <u>7.01</u>
TOTAL - U. S. Government Obligations	132,361,437.36	5.74	182,005,246.84	6.63
Other Government Agencies (Non-Guaranteed)	0		1,000,000.00	9.10
Corporate Bonds	240,817,281.93	4.99	263,921,891.35	5,42
TOTAL - DEBT SECURITIES	373,178,719.29	5.26	446,927,138.19	5.92
EQUITY SECURITIES:				
Convertible Debentures Convertible Preferred Stocks Common Stocks	10,097,290.00 6,342,900.64 255,886,742.60	5.42 3.80 4.87	9,037,290.00 6,342,900.64 254,320,598.86	5.50 3.80 5.14
TOTAL - EQUITY SECURITIES	272,326,933.24	4.87	269,700,789.50	5.12
TOTAL - LONG TERM INVESTMENTS	645,505,652.53	5.09	716,627,927.69	5.62
2. 4. 7 V 20 C A 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	043,303,032.33	5,00	14090219721307	J 4 V 22
CASH & EQUIVALENT: Short Term U. S. Government				
Obligations Short Term Government	22,199,149.29	6.46	7,134,341.74	8.66
Agencies (Non-Guaranteed) Commercial Paper	-0- 21,845,000.00	9.13	2,034,436.25 18,996,000.00	9.14 7.95
Investment Transactions Accounts Receivable Cash	3,000.00 58,356.10		-0- 1,715,984.15	
TOTAL - CASH & EQUIVALENT	44,105,505.39	7.77	29,880,762.14	7.74
TOTAL - SECURITIES, CASH & EQUIVALENT	\$689,611,157,92*	5 s 2 5 %	\$746,508,689.83*	5 . 70%
Indicated Annual Income	\$ 36,273,546.00		\$ 42,550,995.00	

^{*}Includes Cumulative Total Realized Net Profit to 1/31/74 of \$39,175,777.58; to 1/31/75 of \$41,734,174.56

SUMMARY OF TRANSACTIONS (January, 1975)

Purchases:	Cost		Yield at Cost
U. S. Government Obligations Guaranteed	\$2,109,050.99		8.36%
Corporate Bonds	1,978,600.00		10.00
Common Stocks	238,285.95		3.78
TOTAL PURCHASES	\$4,325,936.94		8.65%
Sales:	Proceeds	Gain or (Loss)	Yield at Sale Price
Common Stocks (TOTAL SALES)	\$ 366,330.28	(\$122,977.56)	7.37%
Bond Maturities and Prepayments: U. S. Government Obligations			
Guaranteed Farmers Home Notes GNMA Pools FHA Mortgages	\$ 20,017.10 78,562.62 17,249.92	\$ 100.78 2,524.59 -0-	
TOTAL - U. S. Government Obligations	115,829.64	2,625.37	
Corporate Bonds	20,000.00	100.09	
Net Commercial Paper	38,000.00	union () where	
TOTAL BOND MATURITIES AND PREPAYMENTS	<u>\$ 173,829.64</u>	\$ 2,725.46	

BOND EXCHANGES

	increase in
Par Exchanged	Annual Income
\$251,000	\$722.06

PERMANENT UNIVERSITY FUND BOOK VALUE

December 31, 1974 Balance		\$740,254,438.70
Additions (January, 1975) Realized Net Gain or (Loss) on Security Transactions	(\$ 3.20,252,10)	
From General Land Office	6,374,503.23	6,254,251.13
January 31, 1975 Balance		\$746,508,689.83

INVESTMENTS ACQUIRED (January, 1975)

	(January, 1975)			
Par Value or No. Shares	Description U. S. GOVERNMENT OBLIGATIONS (Guarantee	Price	Total Net Cost	Yield at Cost
\$ 87,505.99	Various Long Term Marcus Daly Memoriai Hospital Corp. (Hill-Burton Loan) 8-1/4% 1st Mtge. Promissory Note, due 1/24/99			
80,065.00	(Eleventh drawdown on total purchase of \$1,716,119.00) Cochise County Hospital Association (Hill-Burton Loan) 9.60% Note,	100.00	\$ 87,505.99	8.25%
2,000,000.00	due 1/1/2000 Export-Import Bank of the United	100.00	80,065.00	9,60
	States 6.45% Debentures, due 2/1/78	97.07	1,941,480.00	7.55
	TOTAL - U. S. Government Obligations (Guaranteed)		\$2,109,050.99	<u>8.36%</u>
	CORPORATE BONDS:			
2,000,000	Beatrice Foods Co. 9-7/8% Promissory Notes, due 1/15/95	98.93	\$1,978,600.00	10.00%
1,500 Shs.	COMMON STOCKS: International Business Machines Corp.	158.86	\$ 238,285.95	3.78%
	BONDS EXCHANGED IN:			
\$251,000	See Bond Exchange Schedule for Detail		\$ 229,806.29	4.84%

INVESTMENTS DISPOSED OF (January, 1975)

	(Januar	y, 1975)			
Par Value or No. Shares	Description	Price	Total Net Proceeds	Gain or (Loss)	
NO. Shares	BOND MATURITIES AND PREPAYME				
	U. S. GOVERNMENT OBLIGATIONS	Guaran	teed):		
\$ 13,370.71	Various Long Term Farmers Home Administration 5-3/4% Insured Notes, due 6/30/2001	100.00	\$ 13,370.71	\$ 273.13	
6,646.39	Farmers Home Administration 5-3/4% Insured Notes,				
78,562.62	due 6/29/2001 GNMA Pass-Throughs,	100.00	6,646.39 78,562.62	(172.35) 2,524.59	
	Various Pools TOTAL - Various Long Term	1.00.00	98,579.72	2,625.37	
17,249.92	FHA Mortgages Principal Payments	100.00	17,249.92	A	
	TOTAL - U. S. Govt. Obligat: (Guaranteed)	ions	\$115,829.64	\$ 2,625.37	
20,000	CORPORATE BONDS: The Dow Chemical Company 4-1/2% Notes, due 1/15/90	100.00	<u>\$ 20,000.00</u>	\$ 100.09	
	SALES				Yield at Sale
	COMMON STOCKS;				Price
, <u>-</u>	W. T. Grant Co. 4-3/4% Conv. Sub. Debs., due 4/15/96 American Home Products Corp. Common Stock	16.91 29.87	\$ 67,625.00 298,705.28	(\$332,375.00) 209,397.44	28.09%
	TOTAL - Common Stocks	27.07		(\$122,977.56)	7.37%
\$251,000	BONDS EXCHANGED OUT See Bond Exchange Schedule for Detail		\$242,898.45	www.gogoto.co.co.co.co.co.co.co.co.co.co.co.co.co	
	NET DECREASE IN COMMERCIAL	PAPER	\$ 38,000.00		
	COMMERCIAL PAPER HOLDINGS, Ford Motor Credit Co. General Motors Acceptance Co. J. C. Penney Financial Corp. Montgomery Ward Credit Corp. Sears Roebuck Acceptance Co.	Gorp.		Book Val \$ 3,972,000 1,075,000 6,450,000 1,300,000 6,199,000 \$18,996,000	0.00 0.00 0.00 0.00

PERMANENT UNIVERSITY FUND

BOND EXCHANGES (January, 1975)

	DESC	RIPTION	BOOK VALUE	YIELD YIELD RE	en.
PAR VALUE	ISSUE EXCHANGED	ISSUE RECEIVED	ISSUE ISSUE EXCHANGED RECEIVED	TN- IN- BO	OOK CELD
		Corporate Bonds for Corp	orate Bonds		
\$ 251,000	Pacific Gas & Elec. Co.	New York Tel. Co.	\$ 242,898.45 \$ 229,806.29		. 84%
	4-1/2% 1st & Ref. Mtge., 4-1/4% Ref. Mtge., due 6/1/96 due 1/1/2000	<u> </u>	<u>\$722.06</u> (Total Inc	77.	
				Improveme	

^{*}Total Income Improvement represents improvement with takeout (payup) considered at current investment rates.

CASH STATEMENT January 31, 1975

i	Permanent Fund	Available Fund
RECEIPTS:		
From General Land Office	\$6,374,503.23	
From Disposition of Securities:		
U. S. Government Obligations GNMA Principal Payments FHA Mortgages Various Guaranteed Bonds	78,562.62 17,249.92 20,017.10	
Corporate Bonds	20,000.00	
Convertible Debentures	67,625.00	
Common Stocks	298,705.28	
Commercial Paper	38,000.00	
Interest Collected:		
U. S. Government Obligations GNMA Interest Payments FHA Mortgages Various Guaranteed Bonds		\$ 140,811.27 68,568.52 249,212.14
Corporate Bonds		1,298,848.04
Convertible Debentures		92,329.19
Commercial Paper		169,409.54
Dividends Collected:		
Common and Preferred Stocks		1,196,175.75
Amortization of Premium	5,982.21	
Bonds Exchanged Out - Net Receipts	13,092.16	
TOTAL RECEIPTS	6,933,737.52	\$3,215,354.45
Cash on Hand 1/1/75	(862,915.49)	
TOTAL RECEIPTS AND CASH	\$6,070,822.03	

CASH STATEMENT January 31, 1975 (Continued)

	Permanent Fund	Available Fund
DISBURSEMENTS:		
Securities Acquired:		
U. S. Government Obligations Various Guaranteed Bonds	\$2,109,050.99	
Corporate Bonds	1,978,600.00	
Common Stocks	238,285.95	
Amortization of Discount	28,900.94	
To Clear Out Available Fund		\$3,215,354.45
TOTAL DISBURSEMENTS	4,354,837.88	\$3,215,354.45
Cash on Hand 1/31/75	1,715,984.15	
TOTAL DISBURSEMENTS AND CASH	\$6,070,822.03	

For Month Ended February 28, 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 February, 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 2/28/74	BOOK YIELD 2/28/74	BOOK VALUE 2/28/75	BOOK YIELD 2/28/75
DEBT SECURITIES:				An examinate and examination of the second o
U. S. Government Obligations- Treasury Bonds Various Government	\$ 79,437,784.61	4.94%	\$ 88,017,458.74	5.40%
Guaranteed Bonds FHA Mortgages	38,689,550.39 13,450,769.93	6.83 <u>7.01</u>	85,924,628.94 12,512,151.01	7.89 7.01
TOTAL - U. S. Government Obligations	131,578,104.93	<u>5.71</u>	186,454,238.69	6.65
Other Government Agencies (Non-Guaranteed)	~~ () -w-	made lame control managed principles and and	1,000,000.00	9.10
Corporate Bonds	240,848,086.12	4.99	268,152,699.09	5.45
TOTAL - DEBT SECURITIES	372,426,191.05	5.24	455,606,937.78	5.95
EQUITY SECURITIES: Convertible Debentures Convertible Preferred Stocks Common Stocks	10,097,290.00 6,342,900.64 256,110,104.39	5.42 3.80 4.89	7,097,290.00 6,342,900.64 252,036,136.82	5.71 3.80 5.14
TOTAL - EQUITY SECURITIES	272,550,295.03	4.88	265,476,327.46	5.12
TOTAL - LONG TERM INVESTMENTS	644,976,486.08	5.09	721,083,265.24	5.64
CASH & EQUIVALENT: Short Term U. S. Government	24 474 207 54	6. 96	/ (CE 20C 05	0 17
Obligations Short Term Corporate Bonds Commercial Paper Investment Transactions	24,676,297.56 -0- 24,097,000.00	6.86 <u>8.45</u>	4,665,296.05 1,603,575.00 22,262,000.00	8.47 8.29 <u>7.25</u>
Accounts Receivable Accounts Payable Cash	-0- 1,095.00 (<u>122,771.44</u>)		1,260,509.32 -0- 267,075.96	
TOTAL - CASH & EQUIVALENT	48,651,621.12	7.66	30,058,456.33	7.13
TOTAL - SECURITIES, CASH & EQUIVALENT	\$693,628,107.20*	5.27%	\$751,141,721.57*	5.70%
Indicated Annual Income	\$ 36,554,201.00		\$ 42,815,078.00	

^{*}Includes Cumulative Total Realized Net Profit to 2/28/74 of \$39,176,765.53; to 2/28/75 of \$41,443,796.48

SUMMARY OF TRANSACTIONS (February, 1975)

Purchases:	Cost		Yield at Cost
U. S. Government Obligations Guaranteed	\$ 4,677,473.85		7.54%
Corporate Bonds	5,801,823.00		8.18
Net Commercial Paper	3,266,000.00		
TOTAL PURCHASES	\$13,745,296.85		
	Proceeds	Gain or (Loss)	Yield at Sale Price
Sales:			
Common Stocks (TOTAL SALES)	\$ 3,936,855.73	(\$287,606.31)	5.51%
Bond Maturities and Prepayments:			
U. S. Government Obligations Direct	\$ 2,500,000.00	-0-	
Guaranteed— Farmers Home Notes GNMA Pools FHA Mortgages Other	125,082.18 179,873.90 18,208.14 3,000.00	\$ 2,381.40 (5,140.80) -0- (12.37)	
TOTAL - U. S. Government Obligations	2,826,164.22	(_2,771.77)	
Other Government Agencies Non-Guaranteed	2,034,436.25	-0-	
TOTAL BOND MATURITIES AND PREPAYMENTS	\$ 4,860,600.47	(<u>\$ 2,771.77</u>)	

PERMANENT UNIVERSITY FUND BOOK VALUE

January 31, 1975 Balance		\$746,508,689.83
Additions (February, 1975) Realized Net Gain or (Loss)		
on Security Transactions	(\$ 290,378.08)	
From General Land Office	4,923,409.82	4,633,031.74
February 28, 1975 Balance		\$751,141,721.57

\$22,262,000.00

INVESTMENTS ACQUIRED (February, 1975)

Par Value	Description U. S. GOVERNMENT OBLIGATIONS (Guarante	Price	Total Net Cost	Yield at Cost
\$3,602,380.87 998,096.17 131,172.04	Various Long Term Farmers Home Administration 7-1/4% Insured Notes, due 5/12/78 Farmers Home Administration 6.55% Insured Notes, due 12/29/77 Marcus Daly Memorial Hospital Corp. (Hill-Burton Loan) 8-1/4% 1st Mtge. Promissory Note, due 1/24/99	99.016 98.125	\$3,566,919.94 979,381.87	7.59% 7.28
	(Twelfth drawdown on total purchase of \$1,716,119.00)	100.00	131,172.04	8.25
	TOTAL - U. S. Government Obligations (Guaranteed)		\$4,677,473.85	<u>7.54%</u>
	CORPORATE BONDS:			
3,000,000 1,430,000	Ford Motor Credit Co. 8-7/8% Medium Term Notes, due 2/15/78 Ford Motor Credit Co. 8%	100.00	\$3,000,000.00	8.875%
500,000	Medium Term Notes, due 3/15/77 Southern California Edison Co. 3-1/8% 1st & Ref. Mtge.,	100.00	1,430,000.00	8.00
500,000	due 8/15/76 Commonwealth Edison Co. 8% 1st Mtge., due 10/1/75	94.618	473,090.00 503,575.00	7.00 6.75
410,000	General Electric Co. 3-1/2% Debs., due 5/1/76	96.38	395,158.00	6.75
	TOTAL - Corporate Bonds		\$5,801,823.00	8.18%
	NET INCREASE IN COMMERCIAL PAPER		\$3,266,000.00	
	COMMERCIAL PAPER HOLDINGS, 2/28/75: General Motors Acceptance Corp. J. C. Penney Financial Corp. Montgomery Ward Credit Corp. Sears Roebuck Acceptance Corp.		Book Va \$ 4,113,00 6,450,00 5,000,00 6,699,00	0.00 0.00 0.00

INVESTMENTS DISPOSED OF (February, 1975)

Par Value or No. Shares	Description	Price	Total Net Proceeds	Gain or (Loss)
	BOND MATURITIES AND PREPAYM	ENTS		
	U. S. GOVERNMENT OBLIGATION	S (Direc	t and Guarantee	<u>d</u>):
\$2,500,000	Direct U. S. 5-3/4% Treasury Note, due 2/15/75	100.00	\$2,500,000.00	\$
3,000	Various Long Term (Guarante Merchant Marine Bonds,	ed)		
2,222	653 Leasing Co., 7.85% SF Bonds, due 10/31/89	100.00	3,000.00	(12.37)
2,197.52	Farmers Home Administration 8-5/8% Insured Notes,			
11,374.05	due 7/31/85 Farmers Home Administration	100.00	2,197.52	41.50
29,020.89	7-1/2% Insured Notes, due 3/21/88 Farmers Home Administration	100.00	11,374.05	1,348.79
27,020,05	5-3/4% Insured Notes, due 6/29/2001	100.00	29,020.89	(752.53)
58,064.49	Farmers Home Administration 5-3/4% Insured Notes,			1 106 11
24,425.23	<pre>due 6/30/2001 Farmers Home Administration 6% Insured Notes,</pre>	100.00	58,064.49	1,186.11
179,873.90	due 12/14/91 GNMA Pass-Throughs,	100.00	24,425.23	557.53
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Various Pools	100.00	179,873.90	(_5,140.80)
	TOTAL - Various Long Term (Guaranteed)		307,956.08	(_2,771.77)
18,208.14	FHA Mortgages (Guaranteed) Principal Payments	100.00	18,208.14	
	TOTAL - U. S. Govt. Obligat (Direct and Guarant		\$2,826,164.22	(\$ 2,771.77)
	OTHER GOVERNMENT AGENCIES (Non-Guar	anteed)	
2,100,000	Short Term FNMA 8.85% Discount Note, due 2/4/75	96.878	\$ \$2,034,436.25	\$

INVESTMENTS DISPOSED OF (Continued) (February, 1975)

Par Value or			Total Net	Gain or	Yield at Sale
No. Shares	Description	Price	Proceeds	(Loss)	Price
	SALES				
	COMMON STOCKS:				
13,100	Addressograph-Multigraph				
67 200	Corp. Common Stock	5,83	\$ 76,307.94	(\$ 580,564.90)	-0-
61,200	American Home Products				
F 000	Corp. Common Stock	35.64	2,181,186.62	1,634,622.68	2.47%
5,000	American Telephone &				
	Telegraph Co. Common Stock	50,33	357 ((0.00	10 107 0/	, mg ,
10,900	Caterpillar Tractor Co.	30,33	251,660.29	10,197.04	6.76
1.0,000	Common Stock	61.18	666,834.98	372,314.40	2.94
5,000	First Chicago Corp.	01.10	000,004,50	3/2,314.40	2,34
3,000	Common Stock	18.07	90,344.29	17,587.27	4.98
125	Household Finance Corp.	20.01	50,574,25	1.19001821	4.20
	Common Stock	17.41	2,176,21	(1,358.20)	5.74
25,000	Virginia Electric & Power		, o , a.z.	1,330.20)	J. 7 -
	Co. Common Stock	11.87	296,710.40	(172,039.60)	9.94
\$1,940,000	W. T. Grant Co. 4-3/4%		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(-/-y/	
p.v.	Conv. Sub. Debs.,				
	due 4/15/96	19.16	371,635.00	(1,568,365.00)	24.79
	TOTAL - Common Stocks		\$3,936,855.73	(\$ 287,606.31)	5.51%

CASH STATEMENT February 28, 1975

	Permanent Fund	Available Fund
RECEIPTS:		
From General Land Office	\$ 4,923,409.82	
From Disposition of Securities:		
U. S. Government Obligations Treasury Securities GNMA Principal Payments FHA Mortgages Various Guaranteed Bonds	2,500,000.00 179,873.90 18,208.14 128,082.18	
Other Government Agencies	2,034,436.25	
Convertible Debentures	371,635.00	
Common Stocks	3,565,220.73	
Interest Collected:		
U. S. Government Obligations Treasury Securities GNMA Interest Payments FHA Mortgages Various Guaranteed Bonds		\$2,044,060.13 140,374.19 83,709.04 863,765.63
Other Government Agencies		65,563.75
Corporate Bonds		784,921.60
Convertible Debentures		71,760.14
Commercial Paper		89,182.04
Dividends Collected:		
Common Stocks		422,445.79
Amortization of Premium	1,750.40	
TOTAL RECEIPTS	13,722,616.42	\$4,565,782.31
Cash on Hand 2/1/75	1,715,984.15	
TOTAL RECEIPTS AND CASH	\$15,438,600.57	

CASH STATEMENT February 28, 1975 (Continued)

	Permanent Fund	Available Fund
DISBURSEMENTS:		
Securities Acquired:		
U. S. Government Obligations Various Guaranteed Bonds	\$ 4,677,473.85	
Corporate Bonds	5,801,823.00	
Commercial Paper	3,266,000.00	
Amortization of Discount	165,718.44	
To Clear Out Available Fund		\$4,565,782.31
TOTAL DISBURSEMENTS	13,911,015.29	\$4,565,782.31
Cash and Receivables 2/28/75:		
Cash on Hand	267,075.96	
Accounts Receivable	1,260,509.32	
TOTAL CASH AND RECEIVABLES	1,527,585.28	
TOTAL DISBURSEMENTS, CASH AND RECEIVABLES	\$15,438,600.57	

For Month Ended January 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 January, 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 U. S. GOVERNMENT OBLIGATIONS (Guaranteed): See Bond Purchase Schedule for Detail	Total Net Cost	Yield at Cost
\$ 45,000	U.T. System - General Tuition Revenue Bonds, Series 1971, 1972 & 1972A - Reserve Fund	\$ 39,017.70	7.70%
55,000	U.T. Austin - Combined Fee Revenue Bonds, Series 1970, 1971, 1972 & 1973 -	·	
5,000	Reserve Fund U.T. El Paso - Combined Fee Revenue Bonds,	47,688.30	7.70
295,000	Series 1970, 1971 & 1973 - Reserve Fund U.T. Arlington - Combined Fee Revenue	4,335.30	7.70
	Bonds, Series 1971, 1971A, 1973 & 1973A - Reserve Fund	255,782.70	7.70
	TOTAL - U. S. Government Obligations (Guaranteed)	346,824.00	7.70%
	COMMON STOCKS: See Stock Purchase Schedule for Detail		
	Common Trust Fund The Charles F. and Agnes T. Wiebusch	20,550.66	3.766%
	Unitrust	2,230.30	3.766
	R. D. Woods Unitrust	9,080.52	3.766
	TOTAL - Common Stocks	31,861.48	3.766%
	TOTAL - BONDS AND STOCKS	\$378,685.48	
			•
	SHORT TERM PAPER:		
285,000	GMAC 9% Note, due 1/28/75	\$285,000.00	9.057%
32,000	(Common Trust Fund) J. C. Penney 9-3/8% Note, due 1/31/75 (Common Trust Fund - Undistributed	32,000.00	9.521
48,000	Receipts purchased from various accounts) GMAC 7-7/8% Note, due 2/28/75 (Common Trust Fund - Undistributed Receipts)	48,000.00	7.962

INVESTMENTS ACQUIRED (Continued) (January, 1975)

			Yield
<u>Par Value</u>	Description and Fund	Total Net Cost	<u>at Cost</u>
	SHORT TERM PAPER: (Continued)		
\$110,000	GMAC 7-5/8% Note, due 2/28/75 (\$59,400 - Common Trust Fund - Undistributed Receipts 27,700 - Student Property Deposit Scholarship Fund	\$110,000.00	7.697%
	15,000 - SAMS - Dr. Witten B. Russ Chair in Surgery 5,600 - Ronya and George Kozmetsky Endowment Fund 2,300 - Carl C. Maxey Unitrust)		
151,000	FMC 7-3/8% Note, due 2/28/75 (Cecil H. and Ida M. Green Chair - Marine Biomedical Institute)	151,000.00	7.439
100,000	FMC 7-3/8% Note, due 2/28/75 (\$35,000 - The Earnest Cockrell, Jr. Fund for College of Engineering Chairs	100,000.00	7.434
	35,000 - The Earnest Cockrell, Jr. Scholarship Fund 12,500 - GMB - James Wade Rockwell Endowment Fund 17,500 - Common Trust Fund - Undistributed Receipts)		
146,000	FMC 6% Note, due 2/28/75 (\$75,000 - Common Trust Fund -	146,000.00	6.031
506,000	FMC 8-1/8% Note, due 2/28/75 (\$200,000 - Edward Larocque Tinker Visiting Professorship in Latin American Studies 10,000 - GMB - The Mary Huling Edens Lectureship in Medical Genetics 10,000 - GMB - Roy A. Stout Lectureship in Oral Surgery 286,000 - DMS - Dr. Lee Hudson-Robert R. Penn Chair in Surgery)	506,000.00	8.220
156,000	GMAC 7-3/4% Note, due 2/28/75 (UTD - Cecil H. and Ida M. Green Honors Chair in the Natural Sciences)	156,000.00	7.826
95,000	GMAC 7-3/4% Note, due 2/28/75 (Common Trust Fund - Undistributed Receipts)	95,000.00	7.833
5,000	FMC 7-1/4% Note, due 7/21/75 (Jack G. Taylor Endowment Fund)	5,000.00	7.524

INVESTMENTS DISPOSED OF (January, 1975)

Par Value	Description and Fund	Total Net Proceeds	Gain or (Loss)
	U. S. GOVERNMENT OBLIGATIONS (Guaranteed Bond Maturities and Prepayments):	
\$ 4,856.14 397.46	Common Trust Fund DMS - The William Buchapan Chair in	\$ 4,856.14	\$ 71.01
263.50	Internal Medicine Reserve for Possible Fire Losses -	397.46	13.55
535.89	Temporary Student Housing Units Texas Union Building Fund	263.50 535.89	3.00 44.96
1,445.53	Student Property Deposit Scholarship Fund	1,445.53	38.67
954.71	Student Property Deposit Scholarship Fund - Temporary	954.71	32.33
33,737.98	Retirement of Indebtedness Accounts	33,737.98	756.98
	TOTAL - U. S. Government Obligations (Guaranteed)	\$ 42,191.21	\$960.50
	COMMON STOCKS: See Stock Sales Schedule for Detail		
	Tom Slick Memorial Trust	\$ 0.80	
	DMS - Cancer Research Under the Direction of Dr. P. Montgomery	18.46	
	TOTAL - Stocks Sold (Except Gifts)	19.26	
	Stocks Received by Gift or Bequest—Chancellor's Council Unrestricted Account Development Board - Development Projects & Publications	2,831.86 845.04	
	The Eugene and Dora Bonham Memorial Fund	51,548.44	
	College of Business Administration Foundation - Various Donors	4,884.44	
	C. Aubrey Smith Professorship in	1,043.46	
	Accounting Engineering Foundation - T. U. Taylor Professorship; Engineering Foundation	·	
	Various Donors Professorship in Sedimentary Geology	440.01 1,834.94	
	C. L., Sr., Thekla, and Baron B. Klinck Emergency Loan Fund for Pharmacy	22,466.78	
	Pharmacy - Various Donors - Various Purposes	5,071.66	
	SAMS - Dr. Witten B. Russ Chair in Surgery	17,003.54	
	The University of Texas Health Science Center at Dallas The University of Texas System Cancer	3,370.94	
	Center Cecil H. and Ida M. Green Chair - Marine	20,509.41	
	Biomedical Institute	151,589.73	
	TOTAL - Stock Gifts Sold	283,440.25	
	TOTAL - All Common Stocks	\$283,459.51	

INVESTMENTS DISPOSED OF (Continued) (January, 1975)

Par Value	Description and Fund SHORT TERM PAPER:	Total Net Proceeds	Gain or (Loss)
\$ 2,358.41	City National Bank 6% CD, due 1/9/75 (Carl C. Maxey Unitrust)	\$ 2,358.41	-0
3,000	SRAC 8-7/8% Note, due 1/10/75 (\$2,000 - System Development Office - Projects & Publications 500 - C. J. Thomsen Gift 500 - Murray Case Sells Foundation Student Loan Fund)	3,000.00	-0-
16,000	FMC 9-1/2% Note, due 1/14/75 (Common Trust Fund)	16,000.00	-0
7,000	GMAC 9-1/2% Note, due 1/28/75 (Common Trust Fund)	7,000.00	-0-
32,000	J. C. Penney 9-3/8% Note, due 1/31/75 (Sold to Common Trust Fund - Undistributed Receipts as follows: \$20,600 - Common Trust Fund 2,300 - Charles F. and Agnes T. Wiebusch Unitrust 9,100 - R. D. Woods Unitrust)	32,000.00	-0-

THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND (January, 1975)

STOCK PURCHASES

	<u> </u>	TOOK TOROLLADIA			
NO. OF SHS.				COST	YTELD
PURCHASED	ISSUE		UNIT	TOTAL	AT COST
129 Shs.	International Business Machines Corp. Capi	tal Stock	159.307	\$ 20,550.66	3.766%
	BOND MATUR	RITIES AND PREPAYMENTS			
PAR VALUE	ISSUE		PROCEEDS	PROFIT OR	(LOSS)
\$4,856.14	Various GNMA Pass-Through Pools		\$4,856.14	<u>\$71.</u>	<u>01</u>
		AND AGNES T. WIEBUSCH U (January, 1975)	NITRUST		
	<u>.</u>	STOCK PURCHASES			
NO. OF SHS. PURCHASED	ISSUE		UNIT	TOTAL TOTAL	YIELD AT COST
14 Shs.	International Business Machines Corp. Capi	ital Stock	159.307	\$ 2,230.30	3.766%
		D. WOODS UNITRUST (January, 1975)			
	<u>.</u>	STOCK PURCHASES			
57 Shs.	Internacional Susiness Machines Corp. Capt	ítal Stock	159.307	\$ 9,080.52	3.766%

TOM SLICK MEMORIAL TRUST FOR THE UNIVERSITY OF TEXAS AT AUSTIN

(January, 1975)

STOCK RECEIVED

NO. OF SHS.

RECEIVED

6 Shs. Papercraft Corporation Common Stock

(Received in 3% stock dividend)

STOCK SALES

NO. OF

SHARES SOLD ISSUE

NET SALES PROCEEDS

12/100 Sh.

Papercraft Corporation Common Stock

ISSUE

\$ 0.80

CANCER RESEARCH UNDER THE DIRECTION OF DR. P. MONTGOMERY - DALLAS MEDICAL SCHOOL (January, 1975)

STOCK RECEIVED

NO. OF SHS.

RECEIVED

ISSUE

2 Shs.

Sun Oil Company Common Stock

(Received in 10% stock dividend)

STOCK SALES

NO. OF

SHARES SOLD

ISSUE

NET SALES PROCEEDS

3/10 Sh.

Sun Oil Company Common Stock

\$18.46

を見るか

BOND PURCHASES (January, 1975)

<u>PAR</u> VALUE	ISSUE	UNIT	COST TOTAL	YIELD AT COST
		OHII	TOTAL	AT COOK
	U. T. SYSTEM - GENERAL TUITION REVENUE BONDS, SERIES 19	71, <u>1972 & 1972</u> A -	RESERVE FUND	
\$ 45,000	GNMA 5.20% Participation Certificates, due 1/19/82	86.706	\$ 39,017.70	7.70%
	U. T. AUSTIN - COMBINED FEE REVENUE BONDS, SERIES 1970,	1 971, 1972 & 1 973	RESERVE FUND	
<u>\$ 55,000</u>	GNMA 5.20% Participation Certificates, due 1/19/82	86.706	\$ 47,688.30	7.70%
	•			
	U. T. EL PASO - COMBINED FEE REVENUE BONDS, SERIES 197	0, 1971 & 1973 - R	ESERVE FUND	
\$ 5,000	GNMA 5.20% Participation Certificates, due 1/19/82	86.706	\$ 4,335.30	7.70%
	U. T. ARLINGTON - COMBINED FEE REVENUE BONDS, SERIES 1971,	1971A, 1973 & 1973	A - RESERVE FUND	
\$295,000	GNMA 5.20% Participation Certificates, due 1/19/82	86.706	\$255,782.70	7.70%

STOCK SALES (January, 1975)

NO. OF SHARES SOLD	ISSUE	NET SALES PROCEEDS
	STOCKS RECEIVED BY CIFT OR BEQUEST:	
	CHANCELLOR'S COUNCIL UNRESTRICTED ACCOUNT	
30 Shs. 25 "	General American Oil Company of Texas Common Stock McDermott (J. Ray) & Co., Inc. Common Stock	\$1,140.74 1,691.12
		\$2,831.86
	DEVELOPMENT BOARD - DEVELOPMENT PROJECTS & PUBLICATIO	<u>NS</u>
30 Shs.	Houston Natural Gas Corporation Common Stock	\$845.04
	THE EUGENE AND DORA BONHAM MEMORIAL FUND	
200 Shs. 508 "	American Telephone & Telegraph Company \$4.00 Convertible Preferred Stock Pacific Power & Light Company Common Stock	\$ 9,846.80 8,763.00
1,520 "	Southern Union Gas Company Common Stock	32,938.64
		\$51,548.44
	COLLEGE OF BUSINESS ADMINISTRATION FOUNDATION - VARIOUS D	OONORS
75 Shs.	Eli Lilly & Company Common Stock	\$4,884.44
	C. AUBREY SMITH PROFESSORSHIP IN ACCOUNTING	
24 Shs.	Standard Oil Company of Indiana Common Stock	\$1,043.46
	ENGINEERING FOUNDATION - T. U. TAYLOR PROFESSORSHIE ENGINEERING FOUNDATION - VARIOUS DONORS	
15 Shs.	Crane Company Common Stock	\$440.01

STOCK SALES (Continued) (January, 1975)

		(January, 1975)	
NO. O SHARES		ISSUE	NET SALES PROCEEDS
		STOCKS RECEIVED BY GIFT OR BEQUEST: (Continued)	
		PROFESSORSHIP IN SEDIMENTARY CEOLOGY	
100	Shs.	Pennzoil Company Common Stock	\$1,834.94
		C. L., SR., THEKLA, AND BARON B. KLINCK EMERGENCY LOAN FUND E	OR PHARMACY
571	Shs.	Homestake Mining Company Common Stock	\$22,466.78
		PHARMACY - VARIOUS DONORS - VARIOUS PURPOSES	
		THANNACT - WARTOUS DONORS WARTOUS FURIOSED	
75	Shs.	Eli Lilly & Company Common Stock	\$5,071.66
		DR. WITTEN B. RUSS CHAIR IN SURGERY - SAN ANTONIO MEDICAL	SCHOOL
330	Shs.	Puget Sound Power & Light Company Common Stock	\$,6,687.53
900	11	San Diego Gas & Electric Company Common Stock	10,316.01
			\$17,003.54
		THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT DAI	LLAS
200	Shs.	Mary Kay Cosmetics, Inc. Common Stock	\$3,370.94
		THE UNIVERSITY OF TEXAS SYSTEM CANCER CENTER	
	Shs.	Cameron Iron Works, Inc. Common Stock	\$ 5,500.00
231	11	Exxon Corporation Capital Stock	15,009.41
			\$20,509.41
		CECIL H. AND IDA M. GREEN CHAIR - MARINE BIOMEDICAL INSTITUTE	AT GALVESTON
2,310	Shs.	Texas Instruments Incorporated Common Stock	\$151,589.73

For Month Ended February 28, 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 February, 1975. The Associate Deputy Chancellor for Investments, Trusts and Lands recommends approval by the Board of Regents of these transactions.

COMPARISON SUMMARY OF ASSETS THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND

SECURITY	BOOK VALUE 2/28/74	BOOK YIELD 2/28/74	BOOK VALUE 2/28/75	BOOK YIELD 2/28/75
DEBT SECURITIES:				
U. S. Government Obligations Corporate Bonds	\$ 1,778,590.87 14,507,349.46	7.57% 7.37	\$ 1,923,062.01 18,537,719.84	7.75% 7.89
TOTAL - DEBT SECURITIES	16,285,940.33	7.40	20,460,781.85	7.88
EQUITY SECURITIES:				
Convertible Debentures Convertible Preferred Stocks Common Stocks	394,250.00 212,121.60 22,356,058.09	6.18 3.21 4.31	383,750.00 199,671.60 22,613,272.86	6.35 3.07 4.69
TOTAL - EQUITY SECURITIES	22,962,429.69	4.33	23,196,694.46	4.71
TOTAL - LONG TERM INVESTMENTS	39,248,370.02	5.60	43,657,476.31	6.20
CASH & EQUIVALENT:				
Short Term Notes Cash	3,056,600.00 8,901.34	8.24	3,184,300.00 79,058,23	7.84
TOTAL - CASH & EQUIVALENT	3,065,501.34		3,263,358.23	
TOTAL - COMMON TRUST FUND SECURITIES, CASH & EQUIVALENT	\$42,313,871.36	5.78%	\$46,920,834.54	6.30%
Total Market Value	\$41,010,404.23		\$40,619,358.26	
Market Unit Value	\$2.201731380		\$1.926	404324
Income per Unit - Current Quarter Annual Rate	0.032 0.131		0.036 0.146	
Yield on Market	5.98%		7.58%	

INVESTMENTS ACQUIRED (February, 1975)

Par Value	Description and Fund U. S. GOVERNMENT OBLIGATIONS (Guaranteed): See Bond Purchase Schedule for Detail	Total Net Cost	Yield at Cost
\$ 429,300	U.T. System - General Tuition Revenue Bonds, Series 1971, 1972 & 1972A - Reserve Fund	\$ 389,295.57	8.01%
35,000	U.T. Austin - Dormitory Revenue Bonds	•	
1,019,000	Fund, Series 1956 - Reserve Fund U.T. Austin - Combined Fee Revenue Bonds, Series 1970, 1971, 1972 & 1973 -	30,614.06	7.555
185,000	Reserve Fund U.T. Austin - Building Revenue Bonds,	893,016.56	7.527
183,338.57	Series 1974 & 1974A - Reserve Fund U.T.M.B Galveston - Endowment and	161,817.19	7.555
	Hospital Revenue Bonds, Series 1973 - Reserve Fund	168,213.14	8.170
	TOTAL - U. S. Government Obligations (Guaranteed) (TOTAL - LONG TERM INVESTMENTS)	\$1,642,956.52	7.711%
	SHORT TERM PAPER:		
190,600	FMC 6% Note, due 2/28/75 (\$ 17,800 - Common Trust Fund -	\$190,600.00	6.021%
15,000	FMC 7-3/8% Note, due 3/7/75 (Common Trust Fund)	15,000.00	7.386
36,900	GMAC 6-1/4% Note, due 5/30/75 (Molloy H. and Faye K. Miller Memorial Fund)	36,900.00	6.354

INVESTMENTS DISPOSED OF (February, 1975)

Par Value	Description and Fund	Total Net Proceeds	Gain or (Loss)	
	U. S. GOVERNMENT OBLIGATIONS (Guaran GNMA Prepayments			
	Common Trust Fund DMS - The William Buchanan Chair in	\$ 3,389.24	·	
149.61		1,552.44		
304.27 639.75	Temporary Student Housing Units Texas Union Building Fund Student Property Deposit Scholarship	149.61 304.27		
632.32	Fund Student Property Deposit Scholarship	639.75	6.94	
31,476.16	Fund - Temporary Retirement of Indebtedness Accounts	632.32 31,476.16		
214.89	See Bond Maturities and Prepayments U.T. System - General Tuition	Schedule for	Detail	
3.20	Revenue Bonds, Series 1971, 1972 & 1972A - Reserve Fund U.T. Austin - Building Revenue Bonds	214.89	6.56	
	Series 1969 - Utility Plant - Student Fee Revenue Bonds - Reserve Fund	3,20	0.16	
2.17	U.T. Austin - Combined Fee Revenue Bonds, Series 1970, 1971, 1972 & 1973 - Reserve Fund	2.17	0.11	
1.34	U.T. Austin - Married Student Apart- ment Bonds, Series 1971 - Reserve Fund		0.07	
15,786.00	U.T.M.B Galveston - Endowment and Hospital Revenue Bonds, Series 197	3 -	0.07	
	Reserve Fund	15,786.00	190.92	
	TOTAL - U. S. Government Obligations (Guaranteed)	\$ 54,151.39	<u>\$ 1,259.67</u>	
	COMMON STOCKS: See Stock Sales Schedule for Detail			Yield at Sale Price
	Common Trust Fund [TOTAL - Stocks Sold (Except Gifts)]	\$ 99,695.16	(<u>\$50,877.48</u>)	10.30%
	Stocks Received by Gift or BequestC. J. Thomsen Gift	33,206.40		
	The Eugene and Dora Bonham Memorial Fund DMS - Eugene McDermott Chair for the	14,600.00		
	Center for the Study of Human Growth and Development HMS - Jack L. Bangs Memorial Fund	156,865.23 5,919.54		
	HMS - Mrs. P. E. Turner Newborn Baby Nursery - Pediatrics The University of Texas System	59,195.46		
	Cancer Center	299,875.00		
	TOTAL - Stock Gifts Sold	569,661.63		
	TOTAL - All Common Stocks	\$669,356.79		

INVESTMENTS DISPOSED OF (Continued) (February, 1975)

wa 87 M	December and Fund	Total Net Proceeds	Gain or (Loss)
<u>Par Value</u>	Description and Fund SHORT TERM PAPER:	11000000	(130313)
	CARCASTA AND AND AND AND AND AND AND AND AND AN		
\$ 600	J. C. Penney 9-3/8% Note, due 2/7/75	\$ 600.00	-0-
77 /00	(Common Trust Fund)	71,400.00	-0-
71,400	GMAC 7-7/8% Note, due 2/28/75 (\$ 400 - Office of Investments, Trusts &	, 1, 400.00	v
	Lands - Suspense Account		
	71,000 - Common Trust Fund - Undistributed		
(0.000	Receipts)	63,000.00	-0-
63,000	GMAC 7-3/8% Note, due 2/28/75 (Common Trust Fund - Undistributed Receipts)	05,000.00	O
74,400	GMAC 7-5/8% Note, due 2/28/75	74,400.00	-0-
	(\$ 59,400 - Common Trust Fund - Undistributed		
	Receipts		
	15,000 - SAMS - Dr. Witten B. Russ Chair in Surgery)		
233,200	FMC 6% Note, due 2/28/75	233,200.00	-0-
	(\$ 49,800 - Common Trust Fund - Undistributed		
	Receipts		
	15,600 - AH - Anderson-Mayfair Mortgage Retirement Fund		
	10,000 - GMB - Jane W. and Roland K.		
	Blumberg Fund		
	156,800 - DMS - Eugene McDermott Chair		
	for the Center for the Study of Human Growth and Development		
	1,000 - Office of Investments, Trusts &		
	Lands - Suspense Account)		
151,000	FMC 7-3/8% Note, due 2/28/75	151,000.00	0
	(Ceril H. and Ida M. Green Chair - Marine		
100,000	Biomedical Institute) FMC 7-3/8% Note, due 2/28/75	100,000.00	-0-
200,000	(\$ 35,000 - The Earnest Cockrell, Jr. Fund	•	
	for College of Engineering		
	Chairs 35,000 - The Earnest Gockrell, Jr.		
	Scholarship Fund		
	12,500 - GMB - James Wade Rockwell		
	Endowment Fund		
	17,500 - Common Trust Fund - Undistributed Receipts)		
146,000	FMC 6% Note, due 2/28/75	146,000.00	-0-
·	(\$ 75,000 - Common Trust Fund - Undistributed		
	Receipts		
	51,500 - The Eugene and Dora Bonham Memorial Fund		
	2,500 - DMS - Estate of Elmer Ellard		
	Stalcup		
	17,000 - SAMS - Dr. Witten B. Russ Chair		
506,000	in Surgery) FMC 8-1/8% Note, due 2/28/75	506,000.00	~0~
500,000	(\$200,000 - Edward Larocque Tinker Visiting	, ,	
	Professorship in Latin American		
	Studies 10,000 - GMB - Mary Huling Edens Lecture-		
	ship in Medical Genetics		
	10,000 - GMB - Roy A. Stout Lectureship		
	in Oral Surgery		
	286,000 - DMS - Dr. Lee Hudson-Robert R. Penn Chair in Surgery)		
	tenn oner in oursely		

INVESTMENTS DISPOSED OF (Continued) (February, 1975)

Par Value	Description and Fund SHORT TERM PAPER: (Continued)	Total Net Proceeds	Gain or (Loss)
\$213,000	FMC 8-3/4% Note, due 2/28/75	\$213,000.00	-0-
156,000	(Common Trust Fund - Undistributed Receipts) GMAC 7-3/4% Note, due 2/28/75	156,000.00	-0-
130,000	(UTD - Cecil H. and Ida M. Green Honors		·
95,000	Chair in the Natural Sciences) GMAC 7-3/4% Note, due 2/28/75	95,000.00	-0-
	(Common Trust Fund - Undistributed Receipts)		

THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND (February, 1975)

STOCK SALES

				NEW COLORS IN
NO. OF SHARES SOLD	ISSUE	NET SALES PROCEEDS	PROFIT OR (LOSS)	YTELD AT SALE PRICE
5,240 Shs.	Baltimore Gas & Electric Company Common Stock	\$99,695.16	(<u>\$50,877.48</u>)	10.30%
PAR VALUE	BOND MATURITIES AND	PREPAYMENTS		
\$3,389.24	Various CNMA Pass-Through Pools	\$3,389.24	<u>\$21.59</u>	

THE LORAINE O'GORMAN GONZALEZ TRUST (February, 1975)

NO. OF SHS. RECEIVED	ISSUE	
292 Shs.	Rig Three Industries, Inc. Capital Stock	(Received in 3-for-2 stock split)

BOND PURCHASES (February, 1975)

PAR			COST	YIELD
VALUE	ISSUE	UNIT	TOTAL	AT COST
	U. T. SYSTEM - GENERAL TUITION REVENUE BONDS, SERIES	1971, 1972 & 1972	A - RESERVE FUND	
\$318,300	Farmers Home Administration 7-1/8% Insured Notes, due 12/29/87	91.750	\$292,040.25	8.17%
111,000	GNMA 5.20% Participation Certificates, due 1/19/82	87.617	97,255.32	7.53
\$429,300			\$389,295.57	8.01%
	U. T. AUSTIN - DORMITORY REVENUE BONDS FUND,	SERIES 1956 - RES	SERVE FUND	
\$35,000	GNMA 5.20% Participation Certificates, due 1/19/82	87.469	\$ 30,614.06	7.555%
	U. T. AUSTIN - COMBINED FEE REVENUE BONDS, SERIES 197	0, 1971, 1972 & 19	973 - RESERVE FUND	
\$1,019,000	GNMA 5.20% Participation Certificates, due 1/19/82	87.637	\$893,016.56	<u>7.527%</u>
	U. T. AUSTIN - BUILDING REVENUE BONDS, SERIES	1974 & 1974A - RES	SERVE FUND	
\$185,000	GNMA 5.20% Participation Certificates, due 1/19/82	87.469	\$161,817.19	7.555%
	U. T. M. B GALVESTON - ENDOWMENT AND HOSPITAL REVEN	NUE BONDS, SERIES	1973 - RESERVE FUND	
\$183,338.57	Farmers Home Administration 7-1/8% Insured Notes, due 12/29/87	91.750	<u>\$168,213.14</u>	8.170%

32

BOND MATURITIES AND PREPAYMENTS (February, 1975)

PAR VALUE	ISSUE	PROCEEDS	PROFIT OR (LOSS)
	U. T. SYSTEM - GENERAL TUITION REVENUE BONDS, SERIES 1971,	1972 & 1972A - RE	SERVE FUND
\$ 169.80 45.09	Farmers Home Administration $8-5/8\%$ Insured Notes, due $7/31/85$ Farmers Home Administration $7-7/8\%$ Insured Notes, due $6/30/81$	\$ 169.80 45.09	\$ 4.25 2.31
\$ 214.89		\$ 214.89	<u>\$ 6.56</u>
	U. T. AUSTIN - BUILDING REVENUE BONDS, SE UTILITY PLANT - STUDENT FEE REVENUE BONDS -		
<u>\$ 3.20</u>	Farmers Home Administration 7-7/8% Insured Notes, due 6/30/81	\$ 3.20	\$ 0.16
	U. T. AUSTIN - COMBINED FEE REVENUE BONDS, SERIES 1970, 1971	., 1972 & 1973 - R	ESERVE FUND
\$ 2,17	Farmers Home Administration 7-7/8% Insured Notes, due 6/30/81	\$ 2.17	<u>\$ 0.11</u>
	MARRIED STUDENT APARTMENT BONDS, SERIES 1971	- RESERVE FUND	
\$ 1.34	Farmers Home Administration 7-7/8% Insured Notes, due 6/30/81	<u>\$ 1.34</u>	\$ 0.07
	U. T. M. B GALVESTON - ENDOWMENT AND HOSPITAL REVENUE BONK	OS, SERIES 1973 -	RESERVE FUND
\$15,642.71	Farmers Home Administration 7-1/2% Insured Notes, Series P, due 3/21/88	\$15,642.71	\$189.02
143.29	Farmers Home Administration 7-1/2% Insured Notes, Series R, due 5/12/88	143.29	1.90
\$15,786.00		\$15,786.00	\$190.92

STOCK SALES (February, 1975)

NO. OF SHARES SOLD	ISSUE	NET SALES PROCEEDS
	STOCKS RECEIVED BY GIFT OR BEQUEST:	
400 Shs.	C. J. THOMSEN GIFT Texas Instruments Incorporated Common Stock	\$33,206.40
	THE EUGENE AND DORA BONHAM MEMORIAL FUND	
800 Shs.	Pacific Power & Light Company Common Stock	\$14,600.00
	DALLAS MEDICAL SCHOOL - EUGENE McDERMOTT CHAIR FOR THE CENTER FOR THE STUDY OF HUMAN GROWTH AND DEVELOPME	<u>ent</u>
2,257 Shs.	Texas Instruments Incorporated Common Stock	\$156,865.23
	HOUSTON MEDICAL SCHOOL - JACK L. BANGS MEMORIAL FUND	
77 Shs.	Exxon Corporation Capital Stock	\$5,919.54
	HOUSTON MEDICAL SCHOOL - MRS. P. E. TURNER NEWBORN BABY NURSERY -	-
770 Shs.	Exxon Corporation Capital Stock	\$59,195.46
	THE UNIVERSITY OF TEXAS SYSTEM CANCER CENTER	
2,500 Shs.	Halliburton Company Common Stock	\$299,875.00