CHANCELLOR'S DOCKET NO. 72

THE UNIVERSITY OF TEXAS SYSTEM
Office of the Chancellor

May 15, 1974

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 June 14, 1974. 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-6)
The University of Texas at Austin
(Pages A-1 through A-68)
The University of Texas at Dallas
(Pages D-1 through D-171)
The University of Texas at El Paso
(Pages EP-1 through EP-6)
The University of Texas of the Permian Basin
(Pages PB-1 through PB-3)
The University of Texas at San Antonio
(Pages SA-1 through SA-7)
The University of Texas Health Science Center at Dallas
(Pages HD-1 through HD-57)
The University of Texas Medical Branch at Galveston
(Pages G-1 through G-36)
The University of Texas Health Science Center at Houston
(Pages HH-1 through HH-18)
The University of Texas Health Science Center at San Antonio
(Pages HS-1 through HS-27)
The University of Texas System Cancer Center
(Pages CC-1 through CC-9)
The University of Texas System School of Nursing
(Pages N-1 through N-5)

On the following pages, C-2 through C-4, are U. T. System and Institutional items which I also recommend for the Board's ratification or approval, as appropriate, including my report of budget changes.

Sincerely,

Charles A. LeMaistre, M.D.
Chancellor

CAL/cp

C-1
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 June 14, 1974. The budget changes included
in these dockets have been approved by me and are herewith submitted as a
report to the Board of Regents.

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The University of Texas Health Science Center at Dallas
(Pages HD-1 through HD-57)
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(Pages G-1 through G-36)
The University of Texas Health Science Center at Houston
(Pages HH-1 through HH-18)
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(Pages CC-1 through CC-9)
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On the following pages, C-2 through C-4, are U. T. System and Institutional
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appropriate, including my report of budget changes.

Sincerely,

Charles A. LeMaistre, M.D.
Chancellor
Interagency Contract No. IAC (74-75)-0872 between the General Land Office and the Board of Regents of The University of Texas System to provide necessary staff in the General Land Office to gather and assemble information and data required by the Attorney General to proceed with the settlement of law suits involving 26 producers relative to "In Kind Settlement" and/or "Market Value" on University leases. This service will also include the necessary analysis of contracts made and entered into by the University Board for Lease and the 26 producers named in the suits. The amount of the contract is for $46,000 for the period May 1, 1974 through August 31, 1975.

1974-75 HOLIDAY SCHEDULE AND VACATION ALLOWANCE

Vernon's Revised Civil Statutes, Article 4591, provides for thirteen (13) specified holidays. During fiscal year 1974-75 two (2) of these specified holidays fall on Sunday and are not to be observed. In addition, the Appropriation Bill provides for two (2) additional working days at Christmas to be observed as holidays by employees of State agencies during fiscal year 1974-75. The resulting number of holidays to be observed by State employees for fiscal year 1974-75 is therefore thirteen (13).

The Appropriation Bill further provides ten and one-half (10½) working days of basic vacation allowance for employees of the State to be accrued on the basis of seven (7) hours per month, but also indicates that State institutions of higher education may rearrange holidays and reallocate any portion thereof to vacation allowance. Accordingly, in conformity with past practice and your approval of the holiday schedule submitted below, one and one-half (1½) days of the State holidays provided will not be observed by the University but will be reallocated to vacation allowance in lieu thereof.

The results of the foregoing action will provide eleven and one-half (11½) holidays and a total of twelve (12) working days annual vacation leave for University employees for 1974-75. Vacation accrual will therefore be one (1) day per month of employment, which has been the practice for a number of years.

I recommend for the eleven and one-half (11½) holidays the following dates to be observed for fiscal year 1974-75:

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Holiday Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 2, 1974</td>
<td>Monday</td>
<td>Labor Day</td>
</tr>
<tr>
<td>November 28, 1974</td>
<td>Thursday</td>
<td>Thanksgiving Day</td>
</tr>
<tr>
<td>November 29, 1974</td>
<td>Friday</td>
<td>Thanksgiving Holiday</td>
</tr>
<tr>
<td>December 24, 1974</td>
<td>Tuesday</td>
<td>Christmas Holiday</td>
</tr>
<tr>
<td>December 25, 1974</td>
<td>Wednesday</td>
<td>Christmas Day</td>
</tr>
<tr>
<td>December 26, 1974</td>
<td>Thursday</td>
<td>Christmas Holiday</td>
</tr>
<tr>
<td>December 27, 1974</td>
<td>Friday</td>
<td>Christmas Holiday</td>
</tr>
<tr>
<td>January 1, 1975</td>
<td>Wednesday</td>
<td>New Years' Day</td>
</tr>
<tr>
<td>March 28, 1975</td>
<td>Friday Afternoon</td>
<td>Good Friday (One-half day)</td>
</tr>
<tr>
<td>May 26, 1975</td>
<td>Monday</td>
<td>Memorial Day</td>
</tr>
<tr>
<td>July 4, 1975</td>
<td>Friday</td>
<td>Independence Day</td>
</tr>
<tr>
<td>August 27, 1975</td>
<td>Wednesday</td>
<td>Lyndon Baines Johnson's Birthday</td>
</tr>
</tbody>
</table>

The Appropriation Bill also provides that State employees with long term service shall accrue vacation in accordance with the following schedule:

<table>
<thead>
<tr>
<th>Employees With Total State Employment of:</th>
<th>Hours Accrued</th>
<th>Days Accrued</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fifteen (15) years but less than twenty (20) years</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Twenty (20) years and over</td>
<td>14</td>
<td>21</td>
</tr>
</tbody>
</table>

Therefore, with the addition of the one and one-half (1½) days mentioned above, University employees who have completed fifteen (15) years State employment shall be entitled to sixteen and one-half (16½) working days, and employees who have completed twenty (20) years State employment shall be entitled to twenty-two and one-half (22½) working days annual leave for 1974-75.

The foregoing holiday schedule and vacation allowance is recommended for your approval to apply to The University of Texas System Administration and to any component institution in The University of Texas System that does not request a schedule specifically different.

C-2
THE UNIVERSITY OF TEXAS SYSTEM ADMINISTRATION

REPORT OF AMENDMENTS TO THE 1973-74 OPERATING BUDGET

BOARD OF REGENTS MEETING - JUNE 14, 1974

Source of Funds - Departmental Appropriations
(Unless Otherwise Specified)

Office of the Board of Regents

1. Appoint Jacqulyn S. Goodwin as Professional Indexer effective April 9, 1974 at an annual salary rate of $6,000. Miss Goodwin will be employed one-half time through May 31 and full-time beginning June 1. Source of Funds: System Administration Unallocated Account. (RBC# D-92, D-93, D-98, D-99)

Office of the Chancellor

2. Resign James W. Wagener as Assistant to the Chancellor for Academic Affairs at an annual salary rate of $30,000 effective May 31, 1974. Dr. Wagener is transferring to the San Antonio Health Science Center. (RBC# D-95)

Board for Lease of University Lands

3. Transfer $15,000 from the Available Fund Unallocated Operating Account to an account for the Interagency Agreement-General Land Office to provide funds through August 31, 1974 for this agreement as reported in the Contract section of this docket. (RBC# D-97)

University Lands - Geology

4. Transfer $500 from Classified Salaries to Administrative Salaries to provide funding for the salary increase granted Mr. Zimmerman on March 1. (RBC# D-95)

University Lands - Oil Field Supervision and Geophysical Exploration and University Lands - Surface Leasing

5. Transfer $500 from Travel to Administrative Salaries to provide funding for the salary increase granted Mr. Carr on March 1. (RBC# D-89, D-90)

Law Office of The University of Texas System

6. Transfer $4,000 from Travel to Maintenance and Operation and Equipment to provide funds needed for library books and for office operating expenses in excess of original budget estimates. (RBC# D-94)

Central Medical Applications Division

7. Resign Billy B. Rankin, Director at an annual salary rate of $22,200, effective June 15, 1974. (RBC# D-96)
1. U. T. Austin - Transfer of Funds from East Campus Parking Lots (Project No. 102-274) to Relocation of Clark Field (Project No. 102-221).

During the development of the plans and specifications for the relocation of Clark Field and the concurrent planning studies for East campus parking facilities there was a recognized interface and adjacency condition between the two projects which prevented development of the detailed design of landscaping for certain areas in the vicinity of the new Clark Field. To meet the critical timing for the relocation of Clark Field (both baseball program and use of the original site), certain landscape development known to be required was removed from the Clark Field project and was to be included in the East Campus parking lots project. The Board at their meeting September 14, 1973 awarded the construction contract for the Clark Field baseball facility to J. C. Evans Construction Company, Inc., for $1,966,747 and work is in progress.

Since the total East Campus parking lots needs and siting are not resolved and some portion may of necessity, be deferred, it is recommended that certain landscape development in the southeast portion of the Clark Field site (vicinity of Comal and 19th Streets) be undertaken to provide a completed project when the facility is ready for use. The portion of landscape development is to include plantings, sodding and irrigation system at an estimated total project cost for this work of $28,000.

Currently, the fiscal records show no available funds in the Clark Field facility (Project No. 102-221) for this work, while per the above discussion, East Campus Parking Lots (Project No. 102-274) has a free balance in the allotment account of $1,172,630. Since this and other landscape work was planned from the latter project, it is recommended this source of funds be used. If this request is approved it may be to the System Administration's advantage to have this landscape work accomplished either by change order to the Evans contract or separate bidding.

It is recommended that authorization be given to:

a. Proceed with the described landscape work for the Clark Field facility either by change order and increase in price in Evans contract or by separate bidding.

b. Transfer funds as follows:

From: Allotment Account
Project No. 102-274
East Campus Parking Lots

To: Allotment Account (or Evans Contract Account)
Project No. 102-221
Relocation of Clark Field

$28,000
May 7, 1974

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

Dear Chancellor LeMaistre:

The docket for the June 14, 1974, meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.

Sincerely,

W. H. Nedderman
President
GIFTS

The following gifts have been received by The University of Texas at Arlington. I recommend acceptance and that the thanks and appreciation of the Board be sent the donor by the Secretary.

<table>
<thead>
<tr>
<th>Donor</th>
<th>Purpose</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Texas Power &amp; Light Company*</td>
<td>Power Research</td>
<td>$7,000.00</td>
</tr>
<tr>
<td>P. O. Box 6331, Dallas, Texas 75222</td>
<td>Electrical Engineering</td>
<td></td>
</tr>
</tbody>
</table>

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.

NON-FEDERAL PROJECTS

1. Grant from Texas Electric Service Company in support of graduate student William R. Tommey's research proposal to establish a cross-section of the ichthyofauna of Monticello Reservoir to provide an index of existing populations. The grant is for the period May 1, 1974 through December 31, 1975, and is in the amount of $13,486.77. The project will be supervised by Dr. Thomas R. Hellier, Jr., Biology Department.

2. Grant from Texas Electric Service Company in support of student Jerry L. Bird's proposal to determine the relations of zooplankton of water stratification due to density differences resulting from thermal effluents. The grant is for the period June 1, 1974 through December 31, 1975, and is in the amount of $6,466.70. The project will be supervised by Dr. Thomas R. Hellier, Jr., Biology Department.

3. Agreement between the Graduate School of Social Work of The University of Texas at Arlington and the U. S. Department of Health, Education and Welfare, Office of Human Development, Dallas, Texas for the field placement of one social work graduate student. This arrangement shall remain in effect indefinitely, subject to annual review and revision.

*No letter of transmittal received from donor.
NON-FEDERAL PROJECTS

4. Agreement between the Community Planning and Design Center of The University of Texas at Arlington and the Relocation Consultants of Fort Worth, Texas, for a Population Profile and a Housing Study for the City of Garland, Texas. The total amount of the contract shall not exceed $8,050. The contract is for the period March 1, 1974 through May 31, 1974.

5. Agreement between the Crossroads Center of the Graduate School of Social Work of The University of Texas at Arlington and the City of Dallas, Texas, whereby the City of Dallas will provide 975 square feet of space for the housing of this Center, without charge. This agreement is dated September 1, 1973, and will terminate May 31, 1974.

6. Renewal by letter of agreement contract between the Graduate School of Social Work of The University of Texas at Arlington and State Department of Public Welfare. The amount of the contract is $431,030, and is for the period September 1, 1973 through August 31, 1974.
1. Grant GS-42895, Proposal No. P4S0440 between The University of Texas at Arlington and the National Science Foundation for support of project entitled "Prehistoric Research at Hayonim Terrace, Israel" under the direction of Don O. Henry, Department of Sociology. The grant is for $12,300. The grant is effective June 1, 1974, and, unless otherwise amended, will expire on November 30, 1975. The full amount of this award will be expended in Tarrant County, Texas.

2. Grant GK-42156, Proposal No. P4K0941 between The University of Texas at Arlington and the National Science Foundation for support of project entitled "Research Initiation - Practical Methods of Suspension Optimization" under the director of David A. Hullender, Department of Mechanical Engineering. The grant is for $17,000. The grant is effective April 1, 1974, and, unless otherwise amended, will expire on March 31, 1976. The full amount of this award will be expended in Tarrant County, Texas.
LIBERAL ARTS

Department of Government

1. Transfer of Funds:
   From: Wages $1000.
   To: Maintenance and Operation $1000.
   For: To provide funds to cover unexpected expenditures in the
        maintenance and operation area of the department.
        (RBC #367)

Department of Psychology

2. Transfer of Funds:
   From: Capital Outlay $815.
          Maintenance and Operation $270.
   To: Graduate Research Assistants $900.
        Wages $185.
   For: To provide funds to assist in preparing and developing laboratory
        during the summer session.
        (RBC #366)

Department of Sociology

3. Transfer of Funds:
   From: Unallocated Departmental Operations-Computer Services $500.
   To: Computer Services $500.
   For: To provide additional funds for computer charges to the
        department through the use of the Computer Center.
        (RBC #365)

COMPUTER DEVELOPMENT AND TRAINING

4. Transfer of Funds:
   From: Unallocated Departmental Operations-Computer Services $5000.
   To: Computer Services $5000.
   For: To provide additional funds to adequately service the users and
        to develop the software that is needed.
        (RBC #361)

AUXILIARY ENTERPRISES

Intramurals

5. Transfer of Funds:
   From: Maintenance and Operation $300.
   To: Travel $300.
   For: To provide funds for personnel to attend the National Intramural
        (RBC #368)
Student Activities - General

6. Transfer of Funds:
   From: Maintenance and Operation $250.
   To: Travel $250.
   For: To provide additional funds to cover travel for the Debate Team.
   (RBC #364)

SERVICE AND REVOLVING FUNDS

Printing and Publications

7. Transfer of Funds:
   From: Estimated Income $35,000.
   To: Maintenance and Operation $35,000.
   For: To provide additional funds needed by the department to cover increased operations of the department. Funds are for the purchase of supplies that will not be purchased unless to be resold.
   (RBC #362)

OTHER FISCAL ITEMS

SCHEDULE OF ADDITIONAL (OR CHANGES IN) FUNDING OF CONSTRUCTION PROJECTS

<table>
<thead>
<tr>
<th>Project No.</th>
<th>Project Title</th>
<th>Source of Funds</th>
<th>TO (New or Additional Appropriation)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>301-259</td>
<td>Preston Hall and Ransom Hall</td>
<td>CFB</td>
<td></td>
<td>$460,400</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CTB</td>
<td></td>
<td>$479,600</td>
</tr>
<tr>
<td>301-297</td>
<td>Engineering Laboratory Building</td>
<td>CFB</td>
<td></td>
<td>$2,870,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CTB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>301-299</td>
<td>Remodeling Business-Life Sciences Building</td>
<td>CFB</td>
<td></td>
<td>$700,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CTB</td>
<td></td>
<td>$100,000</td>
</tr>
<tr>
<td>301-255</td>
<td>Business Administration Building</td>
<td>ATP</td>
<td></td>
<td>$800,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IOP</td>
<td></td>
<td>$1,850,000</td>
</tr>
</tbody>
</table>

Legend:
CTB - Constitutional Tax Bonds
CFB - Combined Fee Bonds
ATP - Advalorem Tax Proceeds
IOP - Interest on Bond Proceeds
THE UNIVERSITY OF TEXAS AT AUSTIN
Office of the President
May 8, 1974

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

Dear Chancellor LeMaistre:

The docket for the June 14, 1974 meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.

Sincerely yours,

Stephen H. Spurr
President
THE UNIVERSITY OF TEXAS AT AUSTIN

INDEX

June 14, 1974

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Travel for Faculty and Staff------------------ A-9

Use of Faculty Authored Textbooks------------ A-17
GIFTS TO THE UNIVERSITY OF TEXAS AT AUSTIN

The following gifts have been received. I recommend acceptance and that the thanks and appreciation of the Board be sent the donors by the Secretary.

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

<table>
<thead>
<tr>
<th>DONOR</th>
<th>PURPOSE AND CONDITIONS</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Alcoa Foundation</td>
<td>College of Engineering</td>
<td>$6,250.00</td>
</tr>
<tr>
<td>Earl L. Gadbery</td>
<td>Fellowship in the Department of Mechanical Engineering</td>
<td></td>
</tr>
<tr>
<td>Vice President</td>
<td>of $1,750 plus unrestricted grant</td>
<td></td>
</tr>
<tr>
<td>Alcoa Building</td>
<td>of $750 for the University;</td>
<td></td>
</tr>
<tr>
<td>Pittsburgh, Pennsylvania</td>
<td>and five scholarships of $750 each for 1974-75</td>
<td></td>
</tr>
<tr>
<td>15219</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 American Institute of Architects</td>
<td>School of Architecture</td>
<td>5,200.00</td>
</tr>
<tr>
<td>W. G. Wolverton, Controller</td>
<td>AIA/ASC Independent Study Award for a student in the</td>
<td></td>
</tr>
<tr>
<td>1735 New York Avenue, N.W.</td>
<td>School of Architecture for</td>
<td></td>
</tr>
<tr>
<td>Washington, D. C. 20006</td>
<td>1974</td>
<td></td>
</tr>
<tr>
<td>3 *American Psychological Association</td>
<td>College of Social and Behavioral Sciences</td>
<td>12,000.00</td>
</tr>
<tr>
<td>1200 17th Street, N.W.</td>
<td>Contribution to Department of Psychology to cover expenses</td>
<td></td>
</tr>
<tr>
<td>Washington, D. C. 20036</td>
<td>of editing the Journal of Contemporary Psychology, Dr. Janet Spence, editor</td>
<td></td>
</tr>
<tr>
<td>4 R. C. Baker Foundation</td>
<td>College of Engineering</td>
<td>13,200.00</td>
</tr>
<tr>
<td>A. Grace, Assistant Secretary</td>
<td>Funds for 1973-74 to provide</td>
<td></td>
</tr>
<tr>
<td>P. O. Box 54992, Terminal Annex</td>
<td>two scholarships in Mechanical Engineering, two scholarships</td>
<td></td>
</tr>
<tr>
<td>Los Angeles, California 90054</td>
<td>in Petroleum Engineering, two fellowships in Mechanical Engineering, and two fellowships in Petroleum Engineering</td>
<td></td>
</tr>
<tr>
<td>5 *Clayton Foundation for Research</td>
<td>Clayton Foundation Biochemical Institute</td>
<td>10,000.00</td>
</tr>
<tr>
<td>1621 Bank of the Southwest Building</td>
<td>Quarterly contribution toward cost of coordinating curriculum</td>
<td></td>
</tr>
<tr>
<td>Houston, Texas 77002</td>
<td>of students performing services for the Biochemical Institute</td>
<td></td>
</tr>
<tr>
<td>DONOR</td>
<td>PURPOSE AND CONDITIONS</td>
<td>AMOUNT</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------</td>
<td>--------</td>
</tr>
</tbody>
</table>
| 6 Mr. and Mrs. L. B. Ezell  
Towne Oaks, Apt. 220-V  
500 East Anderson Lane  
Austin, Texas 78752 | College of Business  
Administration  
Contribution to be added to the Ellen McAngus Ezell Scholarship Fund in the Department of Accounting | $5,000.00 |
| 7 Faith Foundation  
W. H. Hodges  
P. O. Box 7  
Houston, Texas 77001 | College of Natural Sciences  
Contribution to the Division of Biological Sciences to be used in support of research in the Cell Research Institute by Dr. W. Gordon Whaley | 30,000.00 |
| 8 Tom J. Fatjo, Jr.  
1603 Fannin Bank Building  
Houston, Texas 77025 | Intercollegiate Athletics  
Contribution of 770 shares of Browning-Ferris Industries stock to be used in support of the athletic program | 9,240.00** |
| 9 *Fondation Nationale pour l'Enseignement de la Gestion des Entreprises  
155 Boulevard Haussmann  
Paris, France | College of Business  
Administration  
Continuation of support for the program of business education for a group of French educators | 32,067.37 |
| 10 *Gulf Oil Foundation  
A. Lewis, Jr., President  
Gulf Building  
Pittsburgh, Pennsylvania 15230 | U. T. Austin  
Miscellaneous contributions to match gifts previously made to the University by Gulf Oil Company employees | 12,200.00 |
| 11 *Gulf Research and Development Company  
J. H. Henderson  
P. O. Box 36506  
Houston, Texas 77036 | College of Engineering  
Contribution to the Department of Petroleum Engineering in support of the Rock Mechanics Research Program | 7,500.00 |
| 12 Halliburton Services  
W. T. Malone, Manager  
Chemical Research and Development Department  
P. O. Drawer 1431  
Duncan, Oklahoma 73533 | College of Engineering  
Contribution to the Department of Petroleum Engineering in support of the Rock Mechanics Research Program | 15,000.00 |
| 13 Mobil Foundation, Inc.  
Walter E. MacDonald  
Regional Director  
Middle East  
Mobil Oil Corporation  
150 East 42nd Street  
New York, New York 10017 | Division of General and Comparative Studies  
Contribution to be used in support of the work of the Center for Middle Eastern Studies | 5,000.00 |
<table>
<thead>
<tr>
<th>DONOR</th>
<th>PURPOSE AND CONDITIONS</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 Mobil Foundation, Inc. Louis Castelli General Manager Exploration Services Center Mobil Oil Corporation P. O. Box 900 Dallas, Texas 75221</td>
<td>Contribution in support of the Industrial Associates Program of the Engineering Foundation</td>
<td>10,000.00</td>
</tr>
<tr>
<td>15 Mobil Foundation, Inc. Earl B. Whitcraft Secretary 150 East 42nd Street New York, New York 10017</td>
<td>Miscellaneous contributions: $500 to President's Associates; College of Business Administration: $1,000 unrestricted grant; $500 to the Petroleum Land Management Program; $3,000 to Community Business Advisory Service program; $500 matching gift under aid-to-education program; College of Engineering: $500 matching gift to be added to the W. A. Cunningham Professorship Fund; $500 unrestricted grant to Department of Mechanical Engineering; $242 matching gifts; College of Natural Sciences: Department of Geological Sciences, $2,000 for the minority scholarship program and $1,000 for the department as unrestricted grant</td>
<td>9,742.00</td>
</tr>
<tr>
<td>16 Mobil Research and Development Corporation P. O. Box 900 Dallas, Texas 75221</td>
<td>Contribution to the Department of Petroleum Engineering in support of the Rock Mechanics Research Program</td>
<td>15,000.00</td>
</tr>
<tr>
<td>17 Prestressed Concrete Institute W. Burr Bennett, Jr. Executive Director 20 North Wacker Drive Chicago, Illinois 60606</td>
<td>Contribution to the Department of Civil Engineering of $2,000 to provide a student scholarship for research, and contribution of $4,980 to the Bureau of Engineering Research, both to be used in the program of research in prestressed concrete</td>
<td>6,980.00</td>
</tr>
<tr>
<td>18 Sid W. Richardson Foundation Valleau Wilkie, Jr. Executive Vice President Fort Worth National Bank Building Fort Worth, Texas 76102</td>
<td>Contribution to the Bureau of Economic Geology to be used for an eight-month Gulf Coast Barrier Island study</td>
<td>5,500.00</td>
</tr>
<tr>
<td>DONOR</td>
<td>PURPOSE AND CONDITIONS</td>
<td>AMOUNT</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------</td>
<td>--------</td>
</tr>
</tbody>
</table>
| 19 Tenneco Oil Company  
G. H. Meason, President  
P. O. Box 2511  
Houston, Texas 77001 | College of Engineering  
Contribution in support of the Industrial Associates Program of the Engineering Foundation | $10,000.00 |
| 20 Tenneco Oil Company  
M. W. Braden, Jr.  
Chief Engineer  
P. O. Box 2511  
Houston, Texas 77001 | College of Engineering  
Contribution to the Department of Petroleum Engineering in support of the Rock Mechanics Research Program | $15,000.00 |
| 21 *Texaco Inc.  
Maurice F. Granville  
Chairman of the Board  
135 East 42nd Street  
New York, New York 10017 | College of Engineering  
Contribution in support of the Industrial Associates Program of the Engineering Foundation | $10,000.00 |
| 22 Texas Commerce Bank  
National Association  
Eugene B. Voss, Vice President and Trust Officer  
P. O. Box 2558  
Houston, Texas 77001 | College of Business Administration  
First payment on pledge of $50,000 for the Graduate School of Business Student-Faculty Excellence Fund | $5,000.00 |
| 23 Wesley West  
Faith Foundation  
P. O. Box 7  
Houston, Texas 77001 | College of Natural Sciences  
Contribution to the Division of Biological Sciences to be used for the Cell Research Institute by Dr. W. Gordon Whaley | $10,000.00 |

The following nonmonetary gifts have also been received:

<table>
<thead>
<tr>
<th>DONOR</th>
<th>PURPOSE AND CONDITIONS</th>
<th>AMOUNT</th>
</tr>
</thead>
</table>
| 24 *Mrs. Maurine Amis  
606 West 17th, Apt. 208  
Austin, Texas 78701 | Humanities Research Center  
Gift of the first two volumes of *The Texas Quarterly* for the Library | 35.00** |
| 25 *Merle Armitage  
P. O. Box 1076  
Yucca Valley, California 92284 | Humanities Research Center  
Gift of eleven collages by Mr. Armitage, framed and glass-covered, to be added to the Iconography Collection | 7,000.00** |
| 26 *Mrs. T. Berry Brazelton  
2005 Austin Avenue  
Waco, Texas 76701 | Humanities Research Center  
Contribution to the Library of a collection of 219 letters written by Churchill J. Brazelton during his service in Europe during World War II while serving on General Eisenhower's staff | 1,500.00** |
<table>
<thead>
<tr>
<th>DONOR</th>
<th>PURPOSE AND CONDITIONS</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 W. H. Crain 2511 San Gabriel Austin, Texas 78705</td>
<td>Humanities Research Center Contribution to the Hoblitzelle Theatre Arts Library of three Craig woodcuts and a Mucha poster of Sarah Bernhardt</td>
<td>$1,144.25**</td>
</tr>
<tr>
<td>28 Robert Darrouzet St. Mary's University Charles Francis Hall 2700 Cincinnati Avenue San Antonio, Texas 78284</td>
<td>Humanities Research Center Gift of an oil portrait of T. E. Lawrence, painted by Robert Darrouzet, for the Iconography Collection</td>
<td>300.00**</td>
</tr>
<tr>
<td>29 *R. E. G. Davies Douglas Aircraft Company 3855 Lakewood Boulevard Long Beach, California 90801</td>
<td>Humanities Research Center Gift of approximately 100 items relating to aviation, including Air Force and commercial airline technical reports, Civil Aeronautics Board reports, and NASA publications for the History of Aviation Collection</td>
<td>300.00**</td>
</tr>
<tr>
<td>30 *Mrs. Domenica C. Donnolo 1018 78th Street Brooklyn, New York 11228</td>
<td>Humanities Research Center Contribution of approximately 400 pieces of sheet music dating from the 1910's through the 1940's</td>
<td>1,250.00**</td>
</tr>
<tr>
<td>31 Duncan Emrich 2029 Connecticut Avenue, N.W. Washington, D.C. 20008</td>
<td>Humanities Research Center Gift of a Byzantine seal once used to seal and authenticate Greek documents, to be added to the Library collections</td>
<td>1,000.00**</td>
</tr>
<tr>
<td>32 Devon Francis 185 Old Tarrytown Road White Plains, New York 10603</td>
<td>Humanities Research Center Contribution to the History of Aviation Collection of the manuscript and page proofs of his book, Mr. Piper and His Cubs</td>
<td>500.00**</td>
</tr>
<tr>
<td>33 *Alfred A. Knopf Purchase, New York 10577</td>
<td>Humanities Research Center Two gifts to the Library: a collection of 25 cartons of correspondence relating to Knopf publications of many leading authors, $21,500; and a collection of more than 50 foreign editions of Knopf publications, $950</td>
<td>22,450.00**</td>
</tr>
<tr>
<td>34 *Carlton Lake 393 Heath Street Chestnut Hill, Massachusetts 02167</td>
<td>Humanities Research Center Gift of a collection of personal correspondence from Jean and Valentine Hugo; also notebooks, diaries, scrapbooks, sketches, etc.</td>
<td>18,500.00**</td>
</tr>
<tr>
<td>Donor</td>
<td>Purpose and Conditions</td>
<td>Amount</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Paul Rogers</td>
<td>Humanities Research Center Gift of a book to the Library</td>
<td>$25.00**</td>
</tr>
<tr>
<td>Gwen Stone</td>
<td>U. T. Austin Gift of sculpture by Gwen Stone entitled &quot;Rasmusen Facade&quot; to be added to the University Art Collections</td>
<td>7,500.00**</td>
</tr>
<tr>
<td>Carl Spears Swanson</td>
<td>Humanities Research Center Contribution to the Library of a facsimile copy of a medieval manuscript of Dante's <em>Divine Comedy</em> published in Frankfurt in 1939</td>
<td>100.00**</td>
</tr>
<tr>
<td>W. Thomas Taylor</td>
<td>Humanities Research Center Contribution to the Library of a carbon copy of a typed letter sent by H. L. Mencken to Professor J. Gelder of Newark, New Jersey, which was signed by Mr. Mencken</td>
<td>100.00**</td>
</tr>
</tbody>
</table>
TRAVEL FOR FACULTY AND STAFF: The following trips are reported in accordance with Section 12 of the Budget Rules and Procedures for 1973-74 when expenses are paid from funds not specifically designated for travel; and in accordance with Section 13.38 of Chapter III of Part Two of the Rules and Regulations of the Board of Regents for the Government of The University of Texas at Austin when the absence is for a longer period than twenty-nine days.

1. James H. Colvin, Vice President for Business Affairs, from June 5, 1974 through June 7, 1974, to Washington, D.C., to attend the 14th Annual Meeting of the Committee on Governmental Relations. Expenses in the approximate amount of $307.91 are to be paid from MO&E, Office of Vice President for Business Affairs.

2. Hugh A. Walls, Assistant Provost, from April 8, 1974 through April 10, 1974, to Boulder, Colorado, to attend a meeting on Exchange of Information with American Association of Universities. Expenses in the approximate amount of $186.00 are to be paid from Miscellaneous Administrative Expenses, Office of the President.

3. Francisco Arumi, Assistant Professor of Architecture, from March 28, 1974 through March 30, 1974, to Houston, Texas, to attend the Texas Society of Architects Conference on Architecture and Energy. Expenses in the approximate amount of $199.00 are to be paid from School of Architecture Development Fund.

4. Charles Burnette, Dean, School of Architecture, from April 24, 1974 through April 25, 1974, to New Orleans, Louisiana, to attend as chairman of the Teachers' Seminar for the Association of Collegiate Schools of Architecture. Expenses in the approximate amount of $170.00 are to be paid from School of Architecture Development Fund.

5. Asher Derman, Assistant Professor of Architecture, from April 24, 1974 through April 25, 1974, to New Orleans, Louisiana, to attend the Teachers' Seminar for the Association of Collegiate Schools of Architecture. Expenses in the approximate amount of $170.00 are to be paid from School of Architecture Development Fund.

6. Leslie M. Gallery, Assistant Professor of Architecture, from April 17, 1974 through April 21, 1974, to Eugene, Oregon, to attend the West Coast Women's Design Conference at the University of Oregon. Expenses in the approximate amount of $435.00 are to be paid, $280.00 from School of Architecture Travel and $155.00 from School of Architecture Development Fund.

7. Daniel E. Leary, Associate Professor of Architecture, from March 31, 1974 through April 6, 1974, to Montreal, Canada; Boston, Massachusetts; New York, New York, to visit McGill University, Harvard, MIT, Northeastern University, Columbia, and Pratt Institute to observe technical courses in Construction and Materials. Expenses in the approximate amount of $580.18 are to be paid from School of Architecture Academic Development Fund.
TRAVEL FOR FACULTY AND STAFF (Cont'd.):

8. Kelly R. McAdams, Assistant Professor of Architecture, from April 17, 1974 through April 19, 1974, to Madison, Wisconsin, to attend a conference on Systematic Approach to Working Drawings Development. Expenses in the approximate amount of $379.55 are to be paid, $299.55 from School of Architecture Travel and $80.00 from School of Architecture Development Fund.

9. Baerbel Becker-Cantarino, Assistant Professor of Germanic Languages, from April 25, 1974 through April 27, 1974, to Lexington, Kentucky, to present an invited paper at the Kentucky Foreign Language Conference sponsored by the University of Kentucky. Expenses in the approximate amount of $180.00 are to be paid from Department of Germanic Languages Academic Development Fund.

10. Douglas Browning, Chairman, Department of Philosophy, from April 11, 1974 through April 14, 1974, to Tampa, Florida, to represent the department at the meeting of the Southern Society for Philosophy and Psychology. Expenses in the approximate amount of $307.10 are to be paid from Department of Germanic Languages Academic Development Fund.

11. Charles Louis Ian Findley, Assistant Professor of Germanic Languages, from April 25, 1974 through April 27, 1974, to Lexington, Kentucky, to present an invited paper at the Kentucky Foreign Language Conference sponsored by the University of Kentucky. Expenses in the approximate amount of $180.00 are to be paid from the Department of Germanic Languages Academic Development Fund.

12. Svataeva P. Jakobson, Professor of Slavic Languages, March 23, 1974 only, to Houston, Texas, to attend the annual meeting of the Texas Chapter of the Association of Teachers of Slavic and East European Languages. Expenses in the approximate amount of $38.64 are to be paid from Department of Slavic Languages Academic Development Fund.

13. John S. Koletti, Associate Professor of Slavic Languages, from April 4, 1974 through April 6, 1974, to University Park, Pennsylvania, to present a paper at a meeting of the North East Modern Language Association and to interview candidates for the unfilled position of native speaker of Russian. Expenses in the approximate amount of $250.00 are to be paid from Department of Slavic Languages Academic Development Fund.

14. John P. Murphy, Assistant Professor of Philosophy, from April 25, 1974 through April 27, 1974, to St. Louis, Missouri, to attend the American Philosophical Association Western Division meeting and to recruit new faculty members for the Department of Philosophy. Expenses in the approximate amount of $130.55 are to be paid from Department of Philosophy Academic Development Fund.
TRAVEL FOR FACULTY AND STAFF (Cont'd.):

15. Alan I. Ross, Associate Professor of Slavic Languages, from March 8, 1974 through March 9, 1974, to Houston, Texas, to present a paper at the University of Houston and to consult the faculty about job possibilities for our graduate students. Expenses in the approximate amount of $74.17 are to be paid from Department of Philosophy Academic Development Fund.

16. Yolanda Solé, Assistant Professor of Spanish and Portuguese, from April 18, 1974 through April 20, 1974, to Flagstaff, Arizona, to present a paper at the Third Workshop in Southwestern Area Linguistics at the University of Arizona. Expenses in the approximate amount of $220.00 are to be paid from Department of Spanish and Portuguese Academic Development Fund.

17. Robert C. Solomon, Associate Professor of Philosophy, from April 24, 1974 through April 26, 1974, to St. Louis, Missouri, to present a paper at the Western Division meeting of the American Philosophical Association and to assist in securing positions for graduate students and interviewing prospective faculty members for the Department. Expenses in the approximate amount of $130.55 are to be paid from Department of Philosophy Academic Development Fund.

18. Herman H. Van Olphen, Assistant Professor of Oriental and African Languages and Literatures, from April 1, 1974 through April 8, 1974, to Boston, Massachusetts, to present a paper at the Conference on South Asia Library Resources, attend the Annual Conference for the Association for Asian Studies, and work on recruitment for Hindi position in the Department. Expenses in the approximate amount of $130.00 are to be paid from Department of Oriental and African Languages and Literatures Academic Development Fund.

19. Walter D. Wetzels, Associate Professor of Germanic Languages, from April 25, 1974 through April 27, 1974, to Lexington, Kentucky, to present an invited paper at the Kentucky Foreign Language Conference sponsored by the University of Kentucky. Expenses in the approximate amount of $180.00 are to be paid from Department of Germanic Languages Academic Development Fund.

20. William T. Eaton, Associate Professor of Mathematics, for March 21, 1974 only, to San Angelo, Texas, to present a lecture at San Angelo State College as part of the Mathematics Speakers Panel program. Expenses in the approximate amount of $55.00 are to be paid from Department of Mathematics Academic Development Fund.

21. William T. Eaton, Associate Professor of Mathematics, for March 20, 1974 only, to San Marcos, Texas, to present a lecture at Southwest Texas State University as part of the Mathematics Speakers Panel program. Expenses in the approximate amount of $13.00 are to be paid from Department of Mathematics Academic Development Fund.
TRAVEL FOR FACULTY AND STAFF (Cont'd.):

22. David S. Evans, Professor of Astronomy, from May 21, 1974 through August 25, 1974, to Geneva, Switzerland, to serve as visiting professor at the Geneva Observatory. No expense to the University.

23. Leonard Gillman, Professor of Mathematics, from March 12, 1974 through March 13, 1974, to Kingsville, Laredo, and Corpus Christi, Texas, to lecture at Texas A&I University, Laredo Junior College as part of the Mathematics Speakers Panel program. Expenses in the approximate amount of $130.00 are to be paid from Department of Mathematics Academic Development Fund.

24. Leonard Gillman, Professor of Mathematics, for March 20, 1974 only, to San Antonio, Texas, to lecture at St. Mary's University as part of the Mathematics Speakers Panel program. Expenses in the approximate amount of $30.00 are to be paid from Department of Mathematics Academic Development Fund.

25. Leonard Gillman, Professor of Mathematics, for March 26, 1974 only, to College Station, Texas, to give a lecture at Texas A&M University as part of the Mathematics Speakers Panel program. Expenses in the approximate amount of $25.00 are to be paid from Department of Mathematics Academic Development Fund.

26. Leonard Gillman, Professor of Mathematics, from April 8, 1974 through April 10, 1974, to Dallas, Keene, and Waco, Texas, to lecture at El Centro College in Dallas, Southwestern Union College in Keene, and Paul Quinn College in Waco as part of the Mathematics Speakers Panel program. Expenses in the approximate amount of $150.00 are to be paid from Department of Mathematics Academic Development Fund.

27. Leonard Gillman, Professor of Mathematics, from April 25, 1974 through April 27, 1974, to Lubbock, Texas and Golden, Colorado, to lecture at Texas Tech University in Lubbock and to the Mathematics Association of America meeting in Golden. Expenses in the approximate amount of $100.00 are to be paid from Department of Mathematics Academic Development Fund.

28. Robert E. Greenwood, Professor of Mathematics, for March 19, 1974 only, to Waco, Texas, to lecture at Baylor University as part of the Mathematics Speakers Panel program. Expenses in the approximate amount of $35.00 are to be paid from Department of Mathematics Academic Development Fund.

29. Robert E. Greenwood, Professor of Mathematics, from April 1, 1974 through April 2, 1974, to Huntsville, Texas, to lecture at Sam Houston State University as part of the Mathematics Speakers Panel program. Expenses in the approximate amount of $62.00 are to be paid from Department of Mathematics Academic Development Fund.
30. Robert Todd Gregory, Professor of Computer Sciences and Mathematics, Associate Director of the Center for Numerical Analysis, from May 15, 1974 through August 25, 1974, to Canberra and Sydney, Australia, to consult on matters related to mutual research at the Australian National Laboratory in Canberra and to attend the Australian Computer Conference in Sydney. Expenses in the approximate amount of $330.00 are to be paid from DA-AROD-31-124-72-G34, 26-0453-1575 Travel.

31. Peter W. M. John, Professor of Mathematics, for March 5, 1974 only, to Georgetown, Texas, to lecture at Southwestern University as part of the Mathematics Speakers Panel program. Expenses in the approximate amount of $12.00 are to be paid from Department of Mathematics Academic Development Fund.

32. Peter W. M. John, Professor of Mathematics, for April 9, 1974 only, to Dallas, Texas, to lecture at Southern Methodist University as part of the Mathematics Speakers Panel program. Expenses in the approximate amount of $60.00 are to be paid from Department of Mathematics Academic Development Fund.

33. Peter W. M. John, Professor of Mathematics, for April 16, 1974 only, to College Station, Texas, to lecture at the Institute of Statistics at Texas A&M University as part of the Mathematics Speakers Panel program. Expenses in the approximate amount of $35.00 are to be paid from Department of Mathematics Academic Development Fund.

34. Donald A. Levin, Professor of Botany, from March 3, 1974 through March 5, 1974, to South and Central Texas, to collect plants for research. Expenses in the approximate amount of $191.00 are to be paid from Institute of Genetics Development Fund (Wagner).

35. Donald A. Levin, Professor of Botany, blanket authorization for multiple trips during the spring and summer of 1974, to Central and Southwestern United States, to collect plants and study pollination in accordance with grant research. Expenses in the approximate amount of $800.00 are to be paid from Institute of Genetics Development Fund (Wagner).

36. Donald A. Levin, Professor of Botany, blanket authorization for multiple trips during the spring and summer of 1974, to Central and South Texas, to collect plants and study pollination in accordance with grant research. Expenses in the approximate amount of $700.00 are to be paid from Institute of Genetics Development Fund (Wagner).

37. E. C. G. Sudarshan, Professor of Physics, Director of Center for Particle Theory, from March 15, 1974 through April 14, 1974, to Paris and Dijon, France and Warsaw, Poland, to lecture at the University of Paris and the University of Dijon in France and to attend the First European Symposium for Mathematics and Physics at the Polish Academy of Science in Warsaw, Poland. Expenses in the approximate amount of $925.00 are to be paid, $325.00 from AEC AT (40-1) 3992-Travel, Center for Particle Theory-Department of Physics, and $500.00 from Arts and Sciences Foundation.
38. John William Lamont, Visiting Assistant Professor of Electrical Engineering, from May 13, 1974 through June 11, 1974, to Romania, to participate in a seminar sponsored by the National Science Foundation and the Romanian Government to discuss computer applications to power systems. No expense to the University.

39. Fernando Pla, Graduate Student in Mechanical Engineering, from April 30, 1974 through May 4, 1974, to Denver, Colorado, to attend the Solar Heating, Cooling and Energy Conservation Conference. Expenses in the approximate amount of $305.00 are to be paid from Bureau of Engineering Research MOhE.

40. Gary K. Underhill, Assistant Professor of Mechanical Engineering, from April 15, 1974 through April 21, 1974, to San Diego and San Francisco, California, to attend a meeting of the American Nuclear Society in San Diego and to visit the Lawrence Livermore Laboratory and the Electric Power Research Institute in San Jose in the San Francisco area. Expenses in the approximate amount of $480.45 are to be paid, $198.00 from Engineering Foundation, $105.00 from M.E. Travel, and $177.45 from Energy Resources.

41. Gary K. Underhill, Assistant Professor of Mechanical Engineering, from April 22, 1974 through April 23, 1974, to Washington, D.C., to visit Federal Power Commission, Atomic Energy Commission, and National Science Foundation concerning funding for a geothermal project for the Gulf Coast Geopressure Sands Geothermal Resource Development Proposal. Expenses in the approximate amount of $254.27 are to be paid from Energy Resources Program.

42. John H. Vanston, Jr., Assistant Professor of Mechanical Engineering, from March 11, 1974 through March 15, 1974, to Carlisle, Pennsylvania and Washington, D.C., to confer with the National Science Foundation on three proposals being submitted by The University of Texas at Austin. Expenses in the approximate amount of $140.00 are to be paid from Energy Resources Program.

43. John H. Vanston, Jr., Assistant Professor of Mechanical Engineering, from April 5, 1974 through April 7, 1974, to Rochester, New York and Dallas, Texas, to make a presentation at the Institute of Management Sciences meeting in Rochester and to attend the Texas Third Annual SAE Tri-Section meeting in Dallas. Expenses in the approximate amount of $35.00 plus car rental fees to be presented on return are to be paid from Energy Resources Program.

44. John H. Vanston, Jr., Assistant Professor of Mechanical Engineering, from April 22, 1974 through April 27, 1974, to Washington, D.C., to discuss a contract between The University of Texas at Austin and the National Science Foundation on geothermal energy project and to attend a conference by the World Futures Society on Energy and Environment. Expenses in the approximate amount of $430.55 are to be paid from Energy Resources Program.

A-14
TRAVEL FOR FACULTY AND STAFF (Cont'd.):

45. Herbert H. Woodson, Chairman, Department of Electrical Engineering, for March 31, 1974 only, to Dallas, Texas, to moderate a panel for the Institute of Electrical and Electronic Engineers-Power Engineering Society meeting. Expenses in the approximate amount of $86.38 are to be paid from Energy Resources Program.

46. Herbert H. Woodson, Chairman, Department of Electrical Engineering, from April 21, 1974 through April 23, 1974, to Boston, Massachusetts and Washington, D.C., to attend EPRI Steering Committee of RP-92 and to recruit Martin Baughmann for The University of Texas at Austin while in Boston, and to meet with NSF personnel to discuss Geothermal Research for Center for Energy Studies while in Washington, D.C. Expenses in the approximate amount of $343.00 are to be paid from Energy Resources Program.

47. John Lednicky, Associate Professor of Art, from April 17, 1974 through April 21, 1974, to Bozeman, Montana, to review the graduate metal program and general programs of the Department of Art at Montana State University. Expenses in the approximate amount of $227.82 are to be paid from College of Fine Arts College-wide Development Fund.

48. Leonard Ruben, Assistant Professor of Art, from April 19, 1974 through April 21, 1974, to Dallas, Texas, to represent the University at the annual Dallas/Fort Worth Society of Visual Communications meeting. Expenses in the approximate amount of $137.00 are to be paid from College of Fine Arts College-wide Development Fund.

49. Leonard Ruben, Assistant Professor of Art, from April 27, 1974 through April 30, 1974, to Los Angeles, California, to serve on the West Coast Jury for the 1974 International Clio Awards. Expenses in the approximate amount of $305.56 are to be paid from College of Fine Arts College-wide Development Fund.

50. Alfred N. Martin, Director of Drug Dynamics Institute, College of Pharmacy, from April 26, 1974 through April 28, 1974, to Memphis, Tennessee, to attend the Central Regional Meeting of American College of Apothecaries. Expenses in the approximate amount of $238.91 are to be paid from Drug Dynamics Institute-Academic Development Fund.

51. Emanuel Solon, Research Associate II, Drug Dynamics Institute, College of Pharmacy, for April 13, 1974 only, to San Antonio, Texas, to visit and discuss mutual research projects at the Health Science Center at San Antonio. Expenses in the approximate amount of $21.72 are to be paid from Drug Dynamics Institute-Academic Development Fund.

52. Emanuel Solon, Research Associate II, Drug Dynamics Institute, College of Pharmacy, for April 20, 1974 only, to San Antonio, Texas, to discuss mutual research project at the Health Science Center in San Antonio. Expenses in the approximate amount of $21.72 are to be paid from Drug Dynamics Institute-Academic Development Fund.
THE UNIVERSITY OF TEXAS AT AUSTIN
June 14, 1974

TRAVEL FOR FACULTY AND STAFF (Cont'd.):

53. David M. Austin, Professor of Social Work, from March 10, 1974 through March 13, 1974, to Atlanta, Georgia, to attend CSWE annual conference. Expenses in the approximate amount of $260.00 are to be paid from Graduate School of Social Work Academic Excellence Fund.

54. Charlotte Clarke, Assistant Professor of Social Work, to Atlanta, Georgia, to attend CSWE annual conference. Expenses in the approximate amount of $260.00 are to be paid from Graduate School of Social Work Academic Excellence Fund.

55. George Herbert, Associate Professor of Social Work, from March 10, 1974 through March 13, 1974, to Atlanta, Georgia, to attend CSWE annual conference. Expenses in the approximate amount of $260.00 are to be paid from Graduate School of Social Work Academic Excellence Fund.

56. William Gilliam Hill, Professor of Social Work, from April 26, 1974 through April 28, 1974, to Atlanta, Georgia, to attend a meeting of the Southern Regional Education Board. Expenses in the approximate amount of $282.50 are to be paid from Graduate School of Social Work Academic Excellence Fund.

57. R. Keith Arnold, Director, Division of Natural Resources and Environment, for April 11, 1974 only, to Kerrville, Texas, to finalize plans for a May Conference on Environmental Resources and Prospects. Expenses in the approximate amount of $31.72 are to be paid from DNR&E Program Development Fund.

58. R. Keith Arnold, Director, Division of Natural Resources and Environment, from May 5, 1974 through May 7, 1974, to Kerrville, Texas, to attend Conference on Environmental Resources and Prospects. Expenses in the approximate amount of $76.72 are to be paid from DNR&E Program Development Fund.

59. James R. Roach, Dean, Division of General and Comparative Studies, from May 5, 1974 through May 7, 1974, to Kerrville, Texas, to participate in Conference on Environmental Resources and Prospects. Expenses in the approximate amount of $36.00 are to be paid from Division of Natural Resources and Environment Program Development Fund.

60. Ross L. Shipman, Research Program Manager, Division of Natural Resources and Environment, from May 5, 1974 through May 7, 1974, to Kerrville, Texas, to attend Conference on Environmental Resources and Prospects. Expenses in the approximate amount of $76.72 are to be paid from DNR&E Program Development Fund.

61. Algird Valiunas, Teaching Assistant, Department of Geography, from April 4, 1974 through April 7, 1974, to Fort Stockton, Van Horn, and Marfa, Texas, to conduct preliminary field work for study of small town viability in West Texas funded through Center for West Texas Environment Studies. Expenses in the approximate amount of $179.28 are to be paid from DNR&E Program Development Fund.
TRAVEL FOR FACULTY AND STAFF (Cont'd.):

62. Dean Ray Pickett, Communications Technician, Physical Plant-Utilities, from June 10, 1974 through June 15, 1974, to West Dennis, Massachusetts, to attend a training session given by Simplex Time Recorder Company on Master Clock Systems and other systems used extensively on campus. Expenses in the approximate amount of $293.00 are to be paid from Building Maintenance-Utilities-MO&E.

USE OF TEXTBOOKS WRITTEN BY FACULTY: In accordance with Chapter 111, Section 24 of Part One of the Regents' Rules and Regulations for the Government of The University of Texas, I recommend approval of the following faculty authored books as textbooks for the 1973-74 fiscal year.

*Indicates that these books have not been previously used at the University.

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Cost to Student</th>
<th>Royalty per volume per author</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Modern Standard Arabic</td>
<td>Peter F. Abboud, et al.</td>
<td>$7.50</td>
<td>None</td>
</tr>
<tr>
<td>Modern Standard Arabic: Intermediate Level</td>
<td>Peter F. Abboud, et al.</td>
<td>7.50</td>
<td>None</td>
</tr>
<tr>
<td>Elementary Hindi Grammar</td>
<td>Herman H. Van Olphen</td>
<td>2.50</td>
<td>None</td>
</tr>
<tr>
<td>*Twentieth Century Criticism: The Major Statements</td>
<td>William J. Handy and Max Westbrook</td>
<td>10.50</td>
<td>$ .26</td>
</tr>
<tr>
<td>The Near East in Modern Times, Vol. I</td>
<td>George G. Arnakis</td>
<td>12.95</td>
<td>None</td>
</tr>
<tr>
<td>*Ruling American Constitutional Law, Vol. 2</td>
<td>Paul C. Bartholomew</td>
<td>3.95</td>
<td>.23</td>
</tr>
<tr>
<td>*The Middle East: Politics and Power</td>
<td>James Bill and Carl Leiden</td>
<td>9.95</td>
<td>.50</td>
</tr>
<tr>
<td>Psychology--Man in Perspective</td>
<td>Arnold Buss</td>
<td>12.00</td>
<td>1.80</td>
</tr>
<tr>
<td>Builders of American Institutions, 2 Vols.</td>
<td>Robert M. Crunden, Frank Freidel, and Norman Pollack, Eds.</td>
<td>2.95</td>
<td>.14</td>
</tr>
<tr>
<td>Governing Texas: Documents and Readings, 3rd Ed.</td>
<td>Fred Gantt, Irving Dawson, L.G. Hagard, Jr.</td>
<td>3.95</td>
<td>.18 (approx.)</td>
</tr>
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</table>
## USE OF TEXTBOOKS WRITTEN BY FACULTY (Cont'd.):

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Cost to Student</th>
<th>Royalty per volume per author</th>
</tr>
</thead>
<tbody>
<tr>
<td>Britain and the Onset of Modernization in Brazil</td>
<td>Richard Graham</td>
<td>$3.95</td>
<td>$0.25</td>
</tr>
<tr>
<td>A Century of Brazilian History Since 1865</td>
<td>Richard Graham</td>
<td>3.00</td>
<td>0.21</td>
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<td>*Politics in the Post-Welfare State: Responses to the New Individualism</td>
<td>M. D. Hancock, G. Sjoberg, et al.</td>
<td>3.95</td>
<td>None</td>
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<td>Vilfredo Pareto</td>
<td>Joseph Lopreato</td>
<td>1.95</td>
<td>None</td>
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<td>The Constitution and the Supreme Court</td>
<td>Wallace Mendelson</td>
<td>13.50</td>
<td>1.35</td>
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<td>Bureaucracy and the Lower Class</td>
<td>G. A. Sjoberg, et al.</td>
<td>.40</td>
<td>0.005 (per reprint)</td>
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<td>Systems of Political Science</td>
<td>Oran R. Young</td>
<td>2.50</td>
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<td>*Student Guide for Astronomy: Fundamentals and Frontiers</td>
<td>Michel Breger and William Jefferys</td>
<td>2.95</td>
<td>0.12</td>
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<td>*Geology</td>
<td>Leon E. Long</td>
<td>13.95</td>
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<td>*Science and the Environment: A Non-Technical Approach</td>
<td>Charles G. Wade</td>
<td>5.00</td>
<td>0.05</td>
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<td>*The American Way of War and Peace</td>
<td>Richard H. Kraemer</td>
<td>.80 (approx.)</td>
<td>.06 (approx.)</td>
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<td>Diagnostic Reading Instruction in the Elementary School</td>
<td>Frank J. Guszak</td>
<td>5.95</td>
<td>0.70</td>
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<td>The Comprehensive Junior College Curriculum</td>
<td>James W. Reynolds</td>
<td>7.50</td>
<td>1.10</td>
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FACTOR LEGISLATION: The following legislation has been passed by the University Council and/or General Faculty. I recommend approval.

1. The University Council, on May 10, 1974, approved by the circularization procedure proposed changes in the catalogue requirements for the College of Fine Arts, Department of Art (D&P 5902-03) to be effective for the academic year 1975-77.

PROPOSED CHANGES FOR COLLEGE OF FINE ARTS CATALOG NUMBER: PART X, 7311 1973-1975

Department of Art

Requirements for the Degree of Bachelor of Arts in Art
Major in the History of Art

p. 40 Twenty-seven (Twenty-four) semester hours in the history of art, including Art 303, 304, 305 and at least fifteen semester hours of upper-division art history distributed among at least three of the following areas: Ancient, Medieval, Renaissance, Baroque, Modern, other (and fifteen-semester-hours-of-upper-division-art-history.)

Six semester hours of art: Art 302K and 302L (including Art-302K-and-302L.)

Sixty-five (seventy-four) semester hours outside the Department of Art, including nine (eighteen) semester hours in science and/or mathematics; Government 310L and 312L (66Q); six semester hours in American history chosen from History 315K, 315L, 315Q, 316K, 316L, or six semester hours of upper-division courses in American history; nine (twelve) additional semester hours in the social sciences; foreign language 406* and 407 and nine additional semester hours in that language (six-additional-semester-hours-of-foreign-language); nine semester hours of English, including English 301 and 305 (English-301-and-305-and-six-semester-hours-of-English-for-which-the-prerequisite-is-English-295-or-6188); and nine semester hours from Area D (Drama-324; and Music-392B).

Twenty-two (Sixteen) semester hours of elective courses.

Total requirements: 120 semester hours as outlined above.

*A student may not receive credit toward the language requirement for two entrance units in a foreign language and Course 406 in that same language.
1. Letter Supplement (dated 27 March 1974) to Agreement dated December 11, 1973 between The University of Texas at Austin, Oscar Mayer & Company, Inc., Madison, Wisconsin, and Beckman Instruments, Inc., Fullerton, California, by which Beckman Instruments, Inc. provides $25,000 additional for the period December 1, 1973, through November 30, 1974, and of this amount currently funds only $12,500 for the period ending May 31, 1974. The research relating to the isolation, chemical and biological characterization and applications of a hypothalamic hormone or material possessing follicle stimulating hormone-relasing hormonal activity (FSHRH) continues under the direction of Dr. Karl Folkers, Director, Institute of Biomedical Research.

2. Letter Supplement (dated 27 March 1974) to Agreement dated December 11, 1973, by which Beckman Instruments, Inc., Fullerton, California, provides $25,000 additional for the period September 1, 1973 through August 31, 1974, and of this amount currently funds $20,800 for the period ending May 31, 1974. The investigation of the structure and physiological properties of pituitary lipid mobilizing hormones or material (LMH) continues under the direction of Dr. Karl Folkers, Director, Institute for Biomedical Research.

3. Letter Supplement (dated 2 April 1974) to Agreement dated December 12, 1972 between the Child Development Associate Consortium, Inc., Washington, D. C., and The University of Texas at Austin, by which CDA provided $2,988.13 additional funds to increase the total award and extend the Agreement for the period September 1, 1973 through September 30, 1973. The program to train assessors of child development associate competencies was under the direction of Dr. Jasper Harvey, Professor of Special Education.

4. Amendment (dated 12 March 1974) to Service Agreement between The Ford Foundation, New York, New York, and The University of Texas at Austin by which the Agreement for the period March 1, 1973, through February 18, 1974 is extended through August 31, 1974, without additional funds. The research entitled, "Potential Economic Effects of Tennessee-Tombigbee Channel Projects," continues under the direction of Dr. F. Ray Marshall, Professor of Economics.

5. Letter Supplement (dated 18 April 1974) to Purchase Order No. 7312-59132X, by which The Johns Hopkins University, School of Hygiene and Public Health, Baltimore, Maryland, extends the period of the purchase order (under subcontract AID/csd-2956) for the period May 1, 1974 through April 30, 1975, without additional funds. The research entitled, "Androgen Polydimethylsiloxane Implants: Contraceptive Efficacy of Different Androgens," continues under the direction of Dr. Claude Desjardins, Associate Professor of Zoology.

6. Amendment (dated 25 March 1974) to Subgrant OTS#73-1, by which the Organization for Tropical Studies, Inc., South Miami, Florida, provides $8,000 additional funds (under NSF #GB4074X) for support of research entitled, "Ecological and Evolutionary Interactions Among Tropical Insect Herbivores, Their Food Plants and Associated Organisms." The period of the sub-grant remains October 15, 1973 through March 31, 1975, and the research continues under the direction of Dr. Lawrence E. Gilbert, Jr., Assistant Professor of Zoology.

7. Grant D 74.011C, by which The Population Council, New York, New York, provides $2,150 for support of research entitled, "Development of Analytical Techniques for Paired Responses in Fertility Surveys." The grant is effective for the period March 15, 1974 through January 15, 1975, and the research will be performed by Jorge Enrique Torres Lezama under the direction of Dr. Harley L. Browning, Professor of Sociology.
8. Letter (dated 13 March 1974) Continuation of Agreement dated May 14, 1973 between Recruitment and Training Program, New York, New York, and The University of Texas at Austin, by which RTP extends the Agreement for the period March 15, 1974 through March 14, 1975 (sub-grant under USDL#21-36-73-35) and provides $40,120 additional funds for continuing the assessment of the program entitled, "A Pilot Project to Demonstrate Techniques for Overcoming Barriers to Employment of Minority Women in White Collar Jobs: Houston." The main objective of the assessment is to describe the approach developed and to identify the causes of success or failure of this particular approach to employing minority females. The project continues under the direction of Dr. F. Ray Marshall, Professor of Economics.

9. Grant-in-Aid BR-1612, by which Alfred P. Sloan Foundation, New York, New York, provides $22,080 for an Alfred P. Sloan Research Fellowship in Physics, effective for the period September 16, 1974 through September 15, 1976, for use by Dr. Frederick L. Hinton, Associate Professor of Physics.

10. Grant Letter (dated 20 March 1974) by which The Spencer Foundation, Chicago, Illinois, provides $2,764 supplemental funds for the current grant period September 1, 1973 through August 31, 1974. The research entitled, "Cultural Knowledge and the Measurement of Intelligence," continues under the direction of Dr. David R. Roth, Assistant Professor of Sociology.

11. Grant Letter (dated 31 January 1974) by which The Spencer Foundation, Chicago, Illinois, provides $90,000 to support the research of young scholars working on problems related to education. The grant is effective for the period September 1, 1974 through August 31, 1977, and the program will be coordinated by Dr. Gardner Lindzey, Vice-President and Dean of Graduate Studies.

12. Agreement between World Health Organization, Geneva, Switzerland, and The University of Texas at Austin, by which WHO provides $3,000 for support of research entitled, "Studies on the Genetics of V. cholerae with Vibriophages," under the direction of Dr. Charlotte Parker, Assistant Professor of Microbiology.

13. Supplemental Grant F-079-4198, by which The Robert A. Welch Foundation, Houston, Texas, provides a $7,500 supplementary award for support of research entitled, "Electrochemical Investigations of Free Radicals," for the period effective May 1, 1974 through April 30, 1975. The research continues under the direction of Dr. Allen J. Bard, Professor of Chemistry.

14. Amendment No. 1 to Contract HR 1-15, by which the National Academy of Sciences, National Cooperative Highway Research Program, Washington, D. C., extends the period of the contract through September 30, 1974, without additional funds. The research entitled, "Design of Continuously Reinforced Concrete Pavements for Highways," continues under the direction of Dr. W. R. Hudson, Associate Professor of Civil Engineering, and Dr. B. F. McCullough, Associate Professor of Civil Engineering.
15. Amendments to existing contract between the Ex-Students' Association and the Coca-Cola/Dr. Pepper Bottling Company, signed by Vice President James H. Colvin, as follows:

1. The first Amendment states that effective September 16, 1973 through February 15, 1974, the Coca-Cola/Dr. Pepper Bottling Company agrees to pay to the Ex-Students' Association 18.05% of gross sales.

2. The second Amendment states that effective February 16, 1974 through August 15, 1974, the Coca-Cola/Dr. Pepper Bottling Company agrees to pay to the Ex-Students' Association 10.0% of gross sales.

3. The third Amendment states that effective August 16, 1974, the vending price for a twelve-ounce can will be $1.20 per can. It also states that effective that date, the Coca-Cola/Dr. Pepper Bottling Company agrees to pay to the Ex-Students' Association 24.16% of gross sales based on a wholesale price of $3.20 per case which is the prevailing price as of March 1, 1974. In the event ingredient costs require further price increases above this level, this agreement may be renegotiated by mutual consent.

This contract contemplates that the Ex-Students' Association will contract with the Coca-Cola/Dr. Pepper Bottling Company to furnish and service vending machines on the campus, and any such agreements shall be approved by The University of Texas at Austin prior to execution. The above Amendments were approved and executed as of March 4, 1974.

16. Agreement between The University of Texas at Austin and Concordia Lutheran College, signed by Vice President James H. Colvin, whereby the University agrees to make the Army ROTC Four Year and Two Year Programs available to qualified students of Concordia who desire to earn appointments as commissioned officers in the United States Army, under the same terms and conditions contained in that certain contract now existing between the University and the Army ROTC. This Agreement shall begin January 15, 1974 and may be terminated at the end of any school year by any of the Parties of this Agreement pursuant to one year's written notice to all Parties to this Agreement of such intent to terminate.

17. Agreement between The University of Texas at Austin and Huston-Tillotson College, signed by Vice President James H. Colvin, whereby the University agrees to make the Army ROTC Four Year and Two Year Programs available to qualified students of Huston-Tillotson who desire to earn appointments as commissioned officers in the United States Army, under the same terms and conditions contained in that certain contract now existing between the University and the Army ROTC. This Agreement shall begin January 15, 1974 and may be terminated at the end of any school year by any of the Parties of this Agreement pursuant to one year's written notice to all Parties to this Agreement of such intent to terminate.
18. Institutional Agreement between The University of Texas at Austin and the Interuniversity Council of the North Texas Area, signed by Vice President James H. Colvin, whereby the University agrees to become an institutional participant in the IUC Computer-based Library Program in cooperation with the Ohio College Library Center (OCLC), as represented by the IUC-OCLC Agreement, dated November 16, 1973. Total estimated costs shall not exceed $11,806.00. This Agreement shall be in effect for three years as of March 28, 1974, subject to a satisfactory annual negotiation of fees, except that it may be terminated by the mutual consent of the parties at any time.

19. Contract between The University of Texas at Austin and Meridith Corporation, signed by Vice President James H. Colvin, whereby the University exclusively grants and assigns to the Meridith Corporation all publication rights, for the term of copyright and any renewals, in a work now entitled "Adelante: An Emerging Design for Mexican American Education." The Meridith Corporation agrees at its expense to secure a copyright of this work in the name of The University of Texas at Austin. This Agreement became effective on March 9, 1973.

20. Amendments to existing contract between the Ex-Students' Association and the Pepsi-Cola Bottling Company of Austin (previously called Sandahl Beverages), signed by Vice President James H. Colvin, as follows:

1. The first Amendment states that effective September 16, 1973 through February 1, 1974, the Pepsi-Cola Bottling Company of Austin agrees to pay to the Ex-Students' Association 18.05% of gross sales.

2. The second Amendment states that effective February 1, 1974 through August 31, 1974, the Pepsi-Cola Bottling Company of Austin agrees to pay to the Ex-Students' Association 10% of gross sales.

3. The third Amendment states that effective August 31, 1974, the vending price of a twelve-ounce can will be $0.20 per can. It also agrees to pay to the Ex-Students' Association 24.16% of gross sales based on a wholesale price of $3.20 per case which is the prevailing price as of March 1, 1974. In the event ingredient costs require further price increases above this level, this agreement may be renegotiated by mutual consent.

This contract contemplates that the Ex-Students' Association will contract with the Pepsi-Cola Bottling Company to furnish and service vending machines on the campus, and any such agreements shall be approved by The University of Texas at Austin prior to execution. The above Amendments were approved and executed as of March 4, 1974.
21. Agreement between The University of Texas at Austin and St. Edwards University, signed by Vice President James H. Colvin, whereby The University of Texas at Austin agrees to make the Army ROTC Four Year and Two Year Programs available to qualified students of St. Edwards University who desire to earn appointments as commissioned officers in the United States Army, under the same terms and conditions contained in that certain contract existing between The University of Texas at Austin and the Army ROTC. This Agreement shall begin January 15, 1974 and may be terminated at the end of any school year by any of the Parties of this Agreement pursuant to one year's written notice to all Parties to this Agreement of such intent to terminate.

22. Lease Agreement (No. U-4849-L) between The University of Texas at Austin (Industrial and Business Training Bureau-Division of Extension) and San Jacinto Properties, signed by Deputy Chancellor for Administration, E. D. Walker, to amend the original lease Agreement to add 8,986 square feet of space, located on the second floor of the building in which The University of Texas at Austin now occupies 2,288 square feet of office space designated as 503 San Jacinto. The added space is in the same building but has an entrance at 304 East Fifth Street. San Jacinto Properties will also make available, at no additional cost, parking space for two vehicles within the building and thirty parking spaces at 601 East Fifth Street. The additional space is to be made available at the same monthly rate of $0.02515 per square foot or an additional $2,250.38 per month. The Amendment Lease Agreement became effective April 1, 1974 and is to be extended through August 31, 1974.
CONTRACTS, GRANTS, AND AGREEMENTS (STATE):

1. Interagency Cooperation Contract No. IAC (72-73)-1242, Amendment No. 2, between The University of Texas at Austin (Balcones Research Center) and the Texas Highway Department, signed by Vice President James H. Colvin, to extend the expiration date from December 31, 1973 to June 1, 1974, and to increase the available funds from $4,960.00 to $5,270.00. All other terms and conditions not hereby amended are to remain in full force and effect. This amendment became effective December 31, 1973.

2. Interagency Cooperation Contract No. IAC (74-75)-0823, Amendment No. 1, between The University of Texas at Austin (Bureau of Economic Geology) and the Texas Parks and Wildlife Department, signed by Vice President James H. Colvin, to increase the present interagency contract by the amount of $25.00 making a total contract amount of $50.00. This will provide registration fee for the workshop and colloquium on "Approaches to Environmental Geology" for one additional employee from the Texas Parks and Wildlife Department making a total of two registration fees. All other terms and conditions not hereby amended are to remain in full force and effect. This amendment became effective April 12, 1974.

3. Interagency Cooperation Contract No. IAC (74-75)-0811, between The University of Texas at Austin (College of Engineering) and the Texas Highway Department, signed by Vice President James H. Colvin, whereby the University agrees to conduct a five day short course in Applied Statistics from May 13 through May 17, 1974, at the Joe C. Thompson Conference Center for one employee of the Texas Highway Department. Total amount of this contract shall not exceed $250.00. The contract period is from May 13, 1974 through May 17, 1974.

4. Interagency Cooperation Contract No. IAC (74-75)-0812, between The University of Texas at Austin (Division of Extension) and the Texas Air Control Board, signed by Vice President James H. Colvin, whereby the University agrees to provide the Texas Air Control Board, prior to August 31, 1974, a training course for the purpose of insuring an adequate staff of administrative and supervisory professionals skilled in supervisory techniques in dealing with subordinates. Total amount of the contract shall not exceed $450.00. The contract period is from March 11, 1974 through August 31, 1974.

5. Interagency Cooperation Contract No. IAC (74-75)-0813, between The University of Texas at Austin (Graduate School of Social Work) and the Austin State Hospital of the Texas Department of Mental Health and Mental Retardation, signed by Vice President James H. Colvin, whereby the University agrees to conduct a workshop on "Continuing Education--Issues in Social Welfare" on March 9, 1974, for personnel of the Texas Department of Mental Health and Mental Retardation. Total amount of the contract shall not exceed $600.00. The contract period is from March 7, 1974 through March 31, 1974.
6. Interagency Cooperation Contract No. IAC (74-75)-0823, between The University of Texas at Austin (Bureau of Economic Geology) and the Texas Parks and Wildlife Department, signed by Vice President James H. Colvin, to cover the registration fee for one of Texas Parks and Wildlife Department’s employees to attend the workshop conducted by the University on May 13 and 14. Total amount of the contract is not to exceed $25.00. The contract period is from May 1, 1974 through August 31, 1974.

7. Interagency Cooperation Contract No. IAC (74-75)-0825, between The University of Texas at Austin (Bureau of Engineering Research) and the Texas Air Control Board, signed by Vice President James H. Colvin, whereby the University agrees to furnish a scanning electron microscope for use by the Texas Air Control Board, and further agrees to furnish an operator skilled in the use of said instrument. Work conducted in the performance of this agreement is to be done in the Electron Microscopic Laboratory, The University of Texas at Austin. Total amount of the contract is not to exceed $600.00. The contract period is from March 22, 1974 through August 31, 1974.

8. Interagency Cooperation Contract No. IAC (74-75)-0829, between The University of Texas at Austin (Printing Division) and The University of Texas Health Science Center at San Antonio, signed by Vice President James H. Colvin, whereby The University of Texas at Austin agrees to furnish such reproduction and assembly services as The University of Texas Health Science Center at San Antonio may consider necessary to its operation. Total amount of the contract shall not exceed $20,000.00 during the fiscal years 1973-74 and 1974-75, $10,000.00 each fiscal year. The contract period shall be from March 1, 1974 through August 31, 1974.

9. Interagency Cooperation Contract No. IAC (74-75)-0836, between The University of Texas at Austin and Pan American University, signed by Vice President James H. Colvin, whereby The University of Texas at Austin shall provide liquid helium in a suitable container for freight transport from Austin to Edinburg, Texas, in containers provided by Pan American University. Total amount of the contract shall not exceed $850.00. The contract period is from April 1, 1974 through August 31, 1975.

10. Interagency Cooperation Contract No. IAC (74-75)-0839, between The University of Texas at Austin (Computation Center) and The University of Texas Health Science Center at San Antonio, signed by Vice President James H. Colvin, for the use of The University of Texas at Austin’s Computation Center System. Total amount of the contract shall not exceed $5,000.00. The contract period is from March 1, 1974 through August 31, 1975.

11. Interagency Cooperation Contract No. IAC (74-75)-0870, between The University of Texas at Austin (University Press) and the Texas Parks and Wildlife Department, signed by Vice President James H. Colvin, whereby the University is to furnish two copies of the publication "Rock Art of Texas Indians", by Forrest Kirkland, 1966, to be shipped to Mrs. Elaine Byrne, Librarian, Texas Parks and Wildlife, John H. Reagan Building, Austin, Texas 78711. Total amount of the contract shall not exceed $25.00. The contract period is from April 15, 1974 through August 31, 1974.
THE UNIVERSITY OF TEXAS AT AUSTIN
June 14, 1974

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

12. Interagency Cooperation Contract No. IAC (74-75)-0873, between The University of Texas at Austin (Computation Center) and the Legislative Property Tax Committee of the State of Texas, signed by Vice President James H. Colvin, for services of the Computation Center. Total amount of the contract shall not exceed $25,000.00. The contract period is from April 18, 1974 through May 31, 1975.

13. Cooperative Highway Research Program Agreement, between The University of Texas at Austin (Center for Highway Research) and the Texas Highway Department, signed by President Stephen H. Spurr, includes sixteen Research Proposals relative to highway research. The agreement period from September 1, 1973 through August 31, 1974. Total amount of the agreement shall not exceed $603,750.00.
THE UNIVERSITY OF TEXAS AT AUSTIN
June 14, 1974

GRANTS, CONTRACTS, AND AGREEMENTS (FEDERAL):

1. Contract F33600-74-C-0314, by which the United States Air Force, Specialized Procurement Branch, Wright-Patterson Air Force Base, Ohio, provides $29,926 (Travis County) for support of research entitled, "Data Base Validation and Integrity Control Study." The contract is effective for the period April 18, 1974 through October 17, 1975, and the research will be under the direction of Dr. James C. Browne, Professor of Computer Sciences and of Physics.


4. Modification P00002, Supplemental Agreement to Contract DAAD 05-73-C-0024, by which the United States Army, Aberdeen Proving Ground, Maryland, extends the period of the contract through August 20, 1974, without additional funds. The research entitled, "Response of Beams, Plates, and Shells to Impact Loading," continues under the direction of Dr. Ching-Hsie Yew, Associate Professor of Aerospace Engineering and Engineering Mechanics.

5. Modification A00002, Supplemental Agreement to Contract DAAD 07-73-C-0196, by which the U. S. Army White Sands Missile Range, New Mexico, provides $20,434 (Travis County) to increase the estimated cost to $57,877 and total funding to $49,758 (an increase of $2,315). The contract is extended for the period December 28, 1973 through September 30, 1974, and the research entitled, "Radar Range Improvement by Means of Inverse Filtering Feasibility Study," continues in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.

6. Modification No. 05 to Contract N00014-67-A-0126-0014, by which the Department of the Navy, Office of Naval Research, Arlington, Virginia, provides $25,000 additional funds (Travis County) and extends the contract for the period January 1, 1974 through August 31, 1974. The research entitled, "Investigation of Pyromagnetic Infrared Radiation Detectors," continues under the direction of Dr. Robert W. Bene' and Dr. Rodger M. Walser, Assistant Professors of Electrical Engineering.
GRANTS, CONTRACTS, AND AGREEMENTS (FEDERAL):

7. Modification No. 02 to Contract N00014-67-A-0126-0019, by which the Department of the Navy, Office of Naval Research, Arlington, Virginia, provides $26,000 additional funds (Travis County) and extends the contract for the period January 1, 1974, through December 31, 1974. The research entitled, "A Capacitance Technique for the Study of Gas Molecule-Surface Interactions," continues under the direction of Dr. William D. McCormick, Associate Professor of Physics, and Dr. Peter R. Antoniewicz, Associate Professor of Physics.

8. Contract N00014-70-A-0166-0020, by which the Department of the Navy, Office of Naval Research, Arlington, Virginia, provides $35,000 (Travis County) for support of research entitled, "Parametric Beamforming and Scanning." The contract is effective for the period February 1, 1974 through July 31, 1974, and the research will be performed by Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.

9. Modification P00010, Supplemental Agreement to Contract N00024-70-C-1395, by which the Department of the Navy, Naval Ship Systems Command, Washington, D. C., increases the estimated cost by $1,250 additional funds (Travis County) to a new total of $77,750 and extends the contract for the period June 1, 1974 through June 30, 1975. The research entitled, "AN/SQS-23 LORAN Program," continues in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.


13. Modification P00004, Supplemental Agreement to Contract N00024-74-C-1069, by which the Department of the Navy, Naval Ship Systems Command, Washington, D. C., provides $9,600 and increases total funding to $1,394,860 against the total estimated cost of $3,166,000 for the current contract period effective September 27, 1973 through March 26, 1975. The research entitled, "Mobile Sonar Technologies Development," continues in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.
14. Modification P00005, Supplemental Agreement to Contract N00024-74-C-1069, by which the Department of the Navy, Naval Ship Systems Command, Washington, D. C., adds $282,520 to prior funds of $1,394,860 and increases total funding to $1,677,380 against the amount of $3,166,000 awarded with the contract. The research entitled, "Mobile Sonar Technologies Development," continues in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.

15. Modification P00006 to Contract N00024-74-C-1069, by which the Department of the Navy, Naval Ship Systems Command, Washington, D. C., provides $72,000 additional funds against the $3,166,000 awarded with the contract for the current period September 27, 1973 through March 26, 1975. Total funding is now $1,749,380 and the research entitled, "Mobile Sonar Technologies Development," continues in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.

16. Contract N00024-74-C-1181, by which the Department of the Navy, Naval Ship Systems Command, Washington, D. C., provides $80,000 (Travis County) for support of research entitled, "AN/SQQ-14 Deep Mod Program." The contract is effective for the period March 18, 1974 through March 17, 1975, and the research will be performed by Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.

17. Modification P00006 to Contract N00123-73-C-0575, by which the Department of the Navy, Naval Regional Procurement Office, Los Angeles, California, provides incremental funding of $12,000 for a new total of $64,310 without increasing the total estimated cost or changing the current contract period effective November 13, 1972, through November 12, 1974. The research entitled, "Bio-Systems Sonar Research Support," continues in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.

18. Modification P00004, Administrative Change to Contract N00126-72-C-1748, by which the Department of the Navy changes the Contracting Office from Navy Electronics Supply, Great Lakes, Illinois, to Ships Parts Control Center (SPCC), Mechanicsburg, Pennsylvania, and sets forth the new Procurement Contracting Officer with current addresses and phone numbers without otherwise altering the contract. The research entitled, "Transducer Component Testing and Calibrating of Test Equipment," continues in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.

19. Modification P00005 to Contract N00123-73-C-1184, by which the Department of the Navy, Naval Regional Procurement Office, Long Beach, California, provides $3,503 additional funds (Travis County) to totally fund the $233,503 awarded with the contract. The current effective period January 5, 1973 through August 4, 1974 remains unchanged and the research, "L-Band Radar Data Analysis," continues in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.

20. Modification P00004, Supplemental Agreement to Contract N00123-73-C-1184, by which the Department of the Navy, Naval Regional Procurement Office, Long Beach, California, provides $20,000 additional funds (Travis County) and increases the total estimated cost to $233,503 for the current contract period January 5, 1973 through August 4, 1974. The research entitled, "L-Band Radar Data Analysis," continues in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.
June 14, 1974

GRANTS, CONTRACTS, AND AGREEMENTS (FEDERAL):

21. Modification P00001, Supplemental Agreement to Contract N00123-73-C-1414, by which the Department of the Navy, Naval Regional Procurement Office, Long Beach, California, provides for a no-cost extension of the contract through April 28, 1974, and deletes the existing ASPR clause entitled, "Insurance-Liability to Third Persons," and in lieu thereof incorporates a clause appropriate to The University of Texas at Austin. The research entitled, "Obstacle Avoidance Sonar," continues in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.

22. Modification P00008, Supplemental Agreement to Contract N00921-73-C-0107, by which the Department of the Navy, U. S. Naval Ordnance Laboratory, White Oak, Silver Springs, Maryland, extends the period of the contract through June 8, 1974, without additional funds. The research and development on acoustic mine mechanisms continues in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.

23. Modification P00001, Supplemental Agreement to Contract N06921-74-C-0217, by which the Department of the Navy, Naval Ordnance Laboratory, White Oak, Silver Spring, Maryland, adds an item of Government-Furnished Material without otherwise changing the contract. The research entitled, "Acoustic Mine Mechanism Research Development," continues in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.

24. Modification P00001, Supplemental Agreement to Contract N61339-74-C-0031, by which the Department of the Navy, Naval Training Equipment Center, Orlando, Florida, provides $50,000 additional funds (Travis County) for the current contract period November 29, 1973 through November 28, 1974. The research entitled, "High Definition Sonar Technology Studies," continues in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.

25. Letter Supplement to Contract AT-(40-1)-2972, by which the U. S. Atomic Energy Commission, Oak Ridge, Tennessee, corrects the overhead rate appearing in Modification No. 18 by indicating a rate of 49% of salary and wages for the period September 1, 1973 through March 31, 1974. The research in nuclear physics continues under the direction of Dr. Tara Tamura, Professor of Physics.

26. Modification No. 6 to Contract AT-(40-1)-3871, by which the U. S. Atomic Energy Commission, Oak Ridge Operations, Oak Ridge, Tennessee, provides $37,500 additional funds (Travis County) and extends the contract for the period February 15, 1974 through November 14, 1974. The research entitled, "Ion Resonance Heating Studies," continues under the direction of Dr. Gary Swanson, Associate Professor of Electrical Engineering.

27. Modification No. 2 to Contract AT-(40-1)-4478, by which the U. S. Atomic Energy Commission, Oak Ridge, Tennessee, provides $30,000 additional funds (Travis County) for the current contract period July 1, 1973 through June 30, 1974. The project entitled, "The Texas Turbulent Torus Experiment," continues under the direction of Dr. William E. Drummond, Professor of Physics.
28. Amendment No. 8 to Indemnity Agreement No. E-25, between the U. S. Atomic Energy Commission, Washington, D. C., and The University of Texas at Austin, relative to the University's Nuclear Reactor Laboratory. This amendment has been issued to reflect the recent amendment to 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," effective March 1, 1974, increasing from $95,000,000 to $110,000,000 the available nuclear energy liability insurance provided by Nuclear Energy Liability Underwriters. Dr. E. Linn Draper is the current Director of the University's Nuclear Reactor Teaching Laboratory.

29. Amendment No. 3 (dated 15 February 1974) to Cooperative Agreement "License to Use Personal Property" between The University of Texas at Austin and National Aeronautics and Space Administration, George C. Marshall Space Flight Center, Marshall Space Flight Center, Alabama, by which the loan of equipment under the original agreement is extended through March 13, 1975. Use of the loan equipment continues in the Electrical Engineering Research Laboratory under the direction of Dr. J. R. Cogdell, Associate Professor of Electrical Engineering, and Dr. H. W. Smith, Director.

30. Contract NAS 9-13957, by which National Aeronautics and Space Administration, Lyndon B. Johnson Space Center, Houston, Texas, provides $10,369 (Travis County) for support of research entitled, "Investigation of Skylab Visual Observation Project Data- Land Use Patterns." The contract is effective for the period March 4, 1974 through July 31, 1974, and the research will be under the direction of Dr. Robert K. Holz, Professor of Geography.

31. Modification No. 1 to Contract NAS 5-21982, by which National Aeronautics and Space Administration, Goddard Space Flight Center, Greenbelt, Maryland, adds $20,000 to prior funds of $75,000 for total funding of the $95,000 estimated cost awarded with the contract for the period effective February 13, 1974 through July 31, 1975. The research entitled, "Participation in the Millimeter Wave Experiment of the ATS-F Satellite," continues in the Electrical Engineering Research Laboratory under the direction of Dr. A. W. Straiton, Ashbel Smith Professor of Electrical Engineering, and Dr. Bob Fannin, Associate Professor of Electrical Engineering.

32. Modification 6S to Contract NAS 9-13176, by which National Aeronautics and Space Administration, Lyndon B. Johnson Space Center, Houston, Texas, incorporates a new article entitled: Equipment Visibility System Reporting. The current contract period remains October 2, 1972 through December 31, 1974, and the research entitled, "Ultraviolet Stellar Astronomy," continues under the direction of Dr. Karl Henize, Adjunct-Professor of Astronomy.

33. Contract NAS 9-13865, by which National Aeronautics and Space Administration, Lyndon B. Johnson Space Center, Houston, Texas, provides $17,471.72 (Travis County) for support of research entitled, "Characterization of Typical Platelet Injector Flow Configurations." The contract is effective for the period March 21, 1974, through March 20, 1975, and the research will be under the direction of Dr. C. E. Hickox, Assistant Professor of Aerospace Engineering and Engineering Mechanics.
GRANTS, CONTRACTS, AND AGREEMENTS (FEDERAL):

34. Contract NAS 9-13946, by which National Aeronautics and Space Administration, Lyndon B. Johnson Space Center, Houston, Texas, provides $30,000 (Travis County) for support of research entitled, "Investigation of Skylab Visual Observation Project Data-GLOBAL Structural Geology." The contract is effective for the period March 4, 1974 through June 30, 1974, and the research will be under the direction of Dr. William R. Muehlberger, Professor of Geology.

35. Supplement No. 1 to Grant NGR 44-012-258, by which the National Aeronautics and Space Administration, Washington, D.C., extends the period of the grant through September 1, 1974, without additional funds. The research entitled, "Stark Broadening of Heavy Neutral Atoms and Ions," continues under the direction of Dr. Roger D. Bengtson, Assistant Professor of Physics.

36. Grant NSC 5005, by which National Aeronautics and Space Administration, Goddard Space Flight Center, Greenbelt, Maryland, provides $9,243 (Travis County) for support of research entitled, "Observation of Emission Lines in M Supergiants." The contract is effective for the period May 1, 1974 through April 30, 1975, and the research will be under the direction of Dr. David L. Lambert, Associate Professor of Astronomy.

37. Grant R 800871-09, by which the U.S. Environmental Protection Agency, Washington, D.C., provides $30,000 additional funds and extends the grant for the period April 1, 1974 through March 31, 1975. The research entitled, "Dynamical Theories of Knudsen Aerosols," continues under the direction of Dr. James R. Brock, Professor of Chemical Engineering.

38. Amendment No. 2 to Grant R 802207, by which the U.S. Environmental Protection Agency, Washington, D.C., provides $113,486 additional funds (Travis County) for a total of $193,486 for support of research entitled, "Biological Countermeasures to Mitigate the Effects of Hazardous Material Spills." The amendment extends the grant for the period July 15, 1974 through February 14, 1976, and the research continues under the direction of Dr. Neal E. Armstrong, Associate Professor of Civil Engineering.

39. Amendment No. 2 to Grant T 900107-05-2, by which the U.S. Environmental Protection Agency, Washington, D.C., provides $9,428 additional funds (Travis County), for the period September 1, 1972 through May 31, 1974. The training program entitled, "Water Supply and Pollution Control," continues under the direction of Dr. Joseph F. Malina, Professor of Civil Engineering.

40. Purchase Order No. 72-010-PH4-39, by which the U.S. Department of the Interior, Bureau of Land Management, New Orleans, Louisiana, provides $1,710,97 for archeological inventory data for the Texas Coastal Zone. The project is effective for the period beginning March 14, 1974 and will be under the direction of Dr. DeeAnn Story, Associate Professor of Anthropology.

41. Purchase Order PX-7490-4-0158, by which the U.S. Department of the Interior, National Park Service, Padre Island National Seashore, Corpus Christi, Texas, provides $2,021 for costs involved in making one cast and a mother mold of the National Park Service Spanish Anchor. The purchase order is effective for the period beginning March 27, 1974, and the project will be under the direction of Dr. DeeAnn Story, Associate Professor of Anthropology.
42. Modification No. 1 to Grant No. 21-48-73-33, by which the U. S. Department of Labor, Manpower Administration, Washington, D. C., provides $638.16 for increase in overhead from 46% to 49% of Salaries and Wages for the period September 1, 1973, through February 28, 1974. The pilot project to overcome barriers to employment of minority women in white collar jobs (the purpose being to test the usefulness of the outreach concept to get black women into professional and managerial positions presently not occupied) continues under the direction of Dr. F. Ray Marshall, Professor of Economics.

43. Modification No. 2 to Grant No. 21-48-73-33, by which the U. S. Department of Labor, Manpower Administration, Washington, D. C., provides $156,000 additional funds (Travis County) and extends the grant for the period March 1, 1974 through February 28, 1975, for continuing support of a pilot project to overcome barriers to employment of minority women in white collar jobs (the purpose being to test the usefulness of the outreach concept to get black women into professional and managerial positions presently not occupied). The project continues under the direction of Dr. F. Ray Marshall, Professor of Economics.

44. Grant No. 21-48-74-24, by which the U. S. Department of Labor, Manpower Administration, Washington, D. C., provides $24,503 (Travis County) for support of research entitled, "Rural Industrialization and Poverty in the South." The grant is effective for the period March 1, 1974 through October 31, 1974, and the research will be under the direction of Dr. F. Ray Marshall, Professor of Economics.

45. Modification No. 9 to Contract No. 81-46-70-24, by which the U. S. Department of Labor, Manpower Administration, Washington, D. C., provides $156.00 for increase in overhead from 46% to 49% of Salaries and Wages and extends the contract through May 31, 1974. The research entitled, "Negro Employment in the South: Minority Construction Contractors," continues under the direction of Dr. F. Ray Marshall, Professor of Economics.

46. Revision No. 5 to Grant OEG-0-72-112(715), by which the Department of Health, Education, and Welfare, Office of Education, Washington, D. C., provides $30,526 additional funds (Travis County) and changes the grant period effective April 3, 1972 through June 15, 1974 by extending it through June 30, 1974. The cumulative total amount of the grant is now $512,546. The Teacher Corps In-Service Program—Seventh Cycle continues under the direction of Ernest D. O'Neil, Assistant Professor of Curriculum and Instruction.

47. Grant No. 91-48-74-36, by which the U. S. Department of Labor, Manpower Administration, Washington, D. C., provides $4,687 (Travis County) for support of research entitled, "Labor Union Response to Federal Manpower Policy: A Comparative Study of the United Steelworkers of America and the International Union of Operating Engineers." The grant is effective for the period April 1, 1974 through September 30, 1974, and the research will be performed by David B. Stephens (Doctoral Candidate) under the direction of Dr. Isadore B. Helburn, Associate Professor of Management (Advisor).
THE UNIVERSITY OF TEXAS AT AUSTIN
June 14, 1974

GRANTS, CONTRACTS, AND AGREEMENTS (FEDERAL):

48. Modification No. 4 to Contract NE-C-00-3-0066, by which the Department of Health, Education, and Welfare, National Institute of Education, Washington, D. C., provides $97,830 additional funds (Travis County) and extends the contract for the period December 1, 1973 through January 31, 1974. The Research and Development Center Teacher Education Program continues under the direction of Dr. Robert F. Peck and Dr. Oliver H. Bown, Professors of Educational Psychology and Co-Directors, R&D Center.

49. Modification No. 5 to Contract NE-C-00-3-0066, by which the Department of Health, Education, and Welfare, National Institute of Education, Washington, D. C., provides $92,307 additional funds (Travis County) and extends the contract for the period February 1, 1974 through March 15, 1974. The Research and Development Center Teacher Education Program continues under the direction of Dr. Robert F. Peck and Dr. Oliver H. Bown, Professors of Educational Psychology and Co-Directors, R&D Center.

50. Revision No. 1 to Grant OEG-0-72-3941, by which the Department of Health, Education, and Welfare, National Institute of Education, Washington, D. C., extends the period of the grant through August 31, 1974, without additional funds. The research entitled, "Psychological Processes in Sentence Comprehension," continues under the direction of Dr. David T. Hakas, Associate Professor of Psychology.

51. Grant AM16836-01, by which the Department of Health, Education, and Welfare, National Institute of Arthritis, Metabolism and Digestive Diseases, Bethesda, Maryland, provides $23,859 (Travis County) for support of research entitled, "Plasma Amino Acid Method to Assess Amino Acid Needs," for the period April 1, 1974 through March 31, 1975. The total project period is April 1, 1974 through March 31, 1977, and the research will be under the direction of Dr. John B. Longenecker, Professor of Home Economics.

52. Grant EY01162-01, by which the Department of Health, Education, and Welfare, Public Health Service, National Eye Institute, Bethesda, Maryland, provides $31,897 (Travis County) for support of research entitled, "Ocular Damage Due to Retinal Temperature Rise," will be under the direction of Dr. Ashley J. Welch, Associate Professor of Electrical Engineering.

53. Grant GM18775-03, by which the Department of Health, Education, and Welfare, Public Health Service, National Institute of General Medical Sciences, Bethesda, Maryland, provides $23,605 (Travis County) for support of research entitled, "Factors Controlling Protein Biosynthesis," for the period April 1, 1974, through March 31, 1975. The total project period is January 1, 1972, through March 31, 1975, and the research continues under the direction of Dr. Joanne M. Ravel, Associate Professor of Chemistry.

54. Grant GM13557-08, by which the Department of Health, Education, and Welfare, Public Health Service, National Institute of General Medical Sciences, Bethesda, Maryland, provides $54,131 (Travis County) for support of research entitled, "Physico-Chemical Studies on Irradiated Cells," for the period April 1, 1974 through March 31, 1975. The total project period is May 1, 1971 through March 31, 1976, and the research continues under the direction of Dr. Edward L. Powers, Professor of Zoology.
55. Grant HD07768-01, by which the Department of Health, Education, and Welfare, Public Health Service, National Institute of Child Health and Human Development, Bethesda, Maryland, provides $7,924 (Travis County) for support of research entitled, "The Emergence of Linguistic Intuitions in Children." The grant is effective for the period May 1, 1974 through April 30, 1975, and the research will be under the direction of Dr. David T. Hakes, Associate Professor of Psychology.

56. Modification No. 2 to Contract NIH-70-2159, by which the Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, National Institute of Child Health and Human Development, Bethesda, Maryland, establishes final overhead rate of 46% of Salaries and Wages for the period May 25, 1970, through November 24, 1971. The research entitled, "Study of the Effects of Steroids on RNS," was under the direction of Dr. Terrell H. Hamilton, Professor of Zoology.

57. Modification No. 1, Change Order to Contract N01-HD-32708 [formerly NIH-NICHD-73-2708], by which the Department of Health, Education, and Welfare, Public Health Service, National Institute of Child Health and Human Development, Bethesda, Maryland, incorporates into the contract an Annual Manpower Report requirement for completion by the Principal Investigator. The research entitled, "Demography of the Black Population," continues under the direction of Dr. Daniel O. Price, Professor of Sociology.

58. Grant MCT-000259-06-0 [formerly MGH Project #259] by which the Department of Health, Education, and Welfare, Public Health Service, Bureau of Community Health Services, Rockville, Maryland, provides $108,888 (Travis County) for continued support of the project entitled, "Social Work Training in Relation to Handicapped Children," for the period April 1, 1974 through March 31, 1975. The total project period is April 1, 1974 through March 31, 1979, and the training project continues under the direction of Dr. Jack Otis, Dean, Graduate School of Social Work.

59. Grant K04 GM2943-04, Development Award—Research Career Program, by which the Department of Health, Education, and Welfare, Public Health Service, National Institute of General Medical Sciences, Bethesda, Maryland, provides $25,000 (Travis County) for support of research entitled, "Regulation of Bacteria: Cell Division." The grant is effective for the period June 1, 1974 through May 31, 1975, and the research will be under the direction of Dr. James R. Walker, Associate Professor of Microbiology (Awardee) and Dr. L. Joe Berry, Professor of Microbiology (Sponsor).

60. Grant T01 AI00414-04S1, by which the Department of Health, Education, and Welfare, Public Health Service, National Institute of Allergy and Infectious Diseases, Bethesda, Maryland, provides $3,905 supplementary funds (Travis County) for support of a training program entitled, "Cellular and Subcellular Basis of Pathogenesis," for the period April 1, 1974 through December 31, 1974. The total project period is July 1, 1970 through June 30, 1975, and the program continues under the direction of Dr. L. Joe Berry, Professor of Microbiology.
THE UNIVERSITY OF TEXAS AT AUSTIN
June 4, 1974

GRANTS, CONTRACTS, AND AGREEMENTS (FEDERAL):

61. Grant T01 GM00836-11S1, by which the Department of Health, Education, and Welfare, Public Health Service, National Institute of General Medical Sciences, Bethesda, Maryland, provides supplementary funds of $31,278 (Travis County) for the period effective March 1, 1974 through June 30, 1974. The current grant period is July 1, 1974 through June 30, 1974, and the program will be under the direction of Dr. A. R. Schrank, Professor of Zoology.

62. Grant A40-41-49, by which National Endowment for the Arts, Washington, D. C., provides $1,500 (Travis County) for support of an Artists, Critics, Photographers, and Craftsmen in Residency Program. The grant is effective for the period June 16, 1974 through June 29, 1974, and the program will be under the direction of Dr. Donald B. Goodall, Professor of Art, and Director of the University Art Collections.

63. Amendment No. 2 to Grant GA-11414, by which the National Science Foundation, Washington, D. C., extends the period of the grant through September 30, 1974, without additional funds. The research entitled, "Variations in Stable Carbon, Oxygen and Nitrogen Isotope Ratios in Normal and Polluted Biogeochemical Systems," continues under the direction of Dr. Patrick L. Parker, Associate Professor of Chemistry.

64. Amendment No. 2 to Grant GA-31408, by which National Science Foundation, Washington, D. C., provides $3,300 additional funds (Travis County) for the current grant period November 1, 1973, through October 31, 1974. The research entitled, "Dynamics of the Stratosphere," continues under the direction of Dr. John H. E. Clark, Assistant Professor of Meteorology, and Dr. Norman K. Wagner, Associate Professor of Meteorology.

65. Amendment No. 1 to Grant GB-31048, by which National Science Foundation, Washington, D. C., extends the period of the grant through September 30, 1974, without additional funds. The research entitled, "Putative Allopatric Introgression Involving Juniperus," continues under the direction of Dr. B. L. Turner, Professor of Botany, and Dr. Robert H. Flake, Associate Professor of Electrical Engineering.

66. Grant GB-42333, by which National Science Foundation, Washington, D. C., provides $4,400 (Travis County) for support of Doctoral Dissertation Research entitled, "Carotenoids and Pollen: A Study of Plant-Pollinator Coevolution." The grant is effective for the period April 1, 1974 through September 30, 1974, and the research will be performed by Steven W. Funderburg (Candidate) under the direction of Dr. D. A. Levin, Professor of Botany (Advisor).

67. Grant GD-42263, by which National Science Foundation, Washington, D. C., provides $13,400 (Travis County) for acquisition of Oceanographic Equipment. The grant is effective for the period March 15, 1974 through August 31, 1975, and the acquisition will be under the direction of Dr. E. William Behrens, Associate Professor of Geological Sciences, The Marine Science Institute at Port Aransas.

68. Grant GF-42410, by which National Science Foundation, Washington, D. C., provides $4,000 (Travis County) for support of research entitled, "To Determine the Dynamical Evolution of the Galilean Satellites of Jupiter." The grant is effective for the period May 15, 1974, through January 31, 1975, and the research will be under the direction of Dr. Paul E. Nacozy, Assistant Professor of Aerospace Engineering and Engineering Mechanics.
GRANTS, CONTRACTS, AND AGREEMENTS (FEDERAL):

69. Grant GF-42556, by which National Science Foundation, Washington, D. C., provides $14,200 (Travis County) for support of a Research-Oriented Bilateral Workshop on Dynamical Astronomy. The grant is effective for the period April 15, 1974 through April 30, 1975, and the project will be under the direction of Dr. Victor G. Szebehely, Professor of Aerospace Engineering and Engineering Mechanics.

70. Amendment No. 1 to Grant GH-36239, by which National Science Foundation, Washington, D. C., extends the period of the grant through May 31, 1974, without additional funds. The research entitled, "Study of the Electronic Properties of Metals," continues under the direction of Dr. J. D. Gavenda, Professor of Physics and Education.

71. Grant GI-42497, by which National Science Foundation, Washington, D. C., provides $117,500 (Travis County) for support of research entitled, "Tertiary Oil Recovery Processes." The grant is effective for the period April 1, 1974 through March 31, 1976, and the research will be under the direction of Dr. William H. Wade, Professor of Chemistry, and Dr. Robert S. Schechter, Professor of Chemical Engineering.

72. Amendment No. 1 to Grant GK-31069, by which National Science Foundation, Washington, D. C., extends the period of the grant through December 31, 1974, without additional funds. The research entitled, "Behavior of Frames with Concrete Columns of Unequal Stiffness," continues under the direction of Dr. John E. Breen, Professor of Civil Engineering.

73. Grant GK-42087, by which National Science Foundation, Washington, D. C., provides $17,000 (Travis County) for support of research entitled, "Research Initiation—Burn and Freezing Injury in Microcirculation." The grant is effective for the period April 1, 1974 through March 31, 1976, and the research will be under the direction of Dr. Kenneth R. Diller, Assistant Professor of Mechanical Engineering.

74. Grant GK-42133, by which National Science Foundation, Washington, D. C., provides $17,000 (Travis County) for support of research entitled, "Research Initiation—Boundary Layer Control." The grant is effective for the period April 1, 1974 through March 31, 1976, and the research will be under the direction of Dr. Frank G. Collins, Assistant Professor of Aerospace Engineering and Engineering Mechanics.

75. Grant GK-42148, by which National Science Foundation, Washington, D. C., provides $17,000 (Travis County) for support of research entitled, "Research Initiation—Flame Spread Through Polymer Foams." The grant is effective for the period April 1, 1974 through March 31, 1976, and the research will be under the direction of Dr. Joel W. Barlow, Assistant Professor of Chemical Engineering.

76. Amendment No. 3 to Grant GP-23282, by which National Science Foundation, Washington, D. C., provides $40,000 additional funds (Travis County) and extends the grant for the period April 1, 1974 through September 30, 1975. The research entitled, "Nuclear Astrophysics—Experimental and Theoretical," continues under the direction of Dr. Cary N. Davids, Assistant Professor of Physics.
GRANTS, CONTRACTS, AND AGREEMENTS (FEDERAL):

77. Amendment No. 2 to Grant GS-32271, by which National Science Foundation, Washington, D. C., extends the period of the grant through August 31, 1974, without additional funds. The research entitled, "Stochastic Control of Macroeconomic Models," continues under the direction of Dr. David A. Kendrick, Professor of Economics.

78. Modification No. 1 to Grant GS-38144X, by which National Science Foundation, Washington, D. C., provides $31,100 additional funds (Travis County) and extends the grant for the period June 1, 1974 through November 30, 1975. The research entitled, "Students' Attitudes Towards Achievement Motivation in Women," continues under the direction of Dr. Janet T. Spence, Professor of Psychology and of Educational Psychology.

79. Grant GS-42504, by which National Science Foundation, Washington, D. C., provides $7,400 (Travis County) for support of research entitled, "Legal Issues in Offender Programs." The grant is effective for the period June 1, 1974 through November 30, 1975, and the research will be under the direction of Dr. George E. Dix, Professor of Law.

80. Grant GY-11158, by which National Science Foundation, Washington, D. C., provides $15,160 (Travis County) for support of a project entitled, "Undergraduate Research Participation." The grant is effective for the period March 15, 1974 through May 31, 1975, and the research will be under the direction of Dr. Charles G. Wade, Associate Professor of Chemistry.

81. Grant GY-11444, by which National Science Foundation, Washington, D. C., provides $8,790 (Travis County) for support of a Student-Originated Studies project entitled, "Comparative Ecology of Native and Imported Fire Ants." The grant is effective for the period March 15, 1974 through January 31, 1975, and the project will be performed by William E. Marshall under the direction of Dr. Lawrence E. Gilbert, Assistant Professor of Zoology (Faculty Advisor).

82. Grant GW-8719, by which National Science Foundation, Washington, D. C., provides $29,939 (Travis County) for support of "An Implementation Project in Secondary School Science." The grant is effective for the period March 15, 1974 through July 31, 1975, and the project will be under the direction of Dr. Earl J. Montague, Professor of Science Education.

83. Grant GW-8726, by which National Science Foundation, Washington, D. C., provides $27,031 (Travis County) for support of "An Implementation Project in Secondary School Science." The grant is effective for the period March 15, 1974 through July 31, 1975, and the project will be under the direction of Dr. Earl J. Montague, Professor of Science Education.

84. Grant GK-42790, by which National Science Foundation, Washington, D.C., provides $80,500 (Travis County) for support of research entitled, "Computer Recognition of Objects, Scenes and Visual Events." The grant is effective for the period April 1, 1974 through September 30, 1976, and the research will be under the direction of Dr. J. K. Aggarwal, Professor of Electrical Engineering.
85. Grant GH-42910, by which National Science Foundation, Washington, D.C., provides $43,900 (Travis County) for support of research entitled, "Gas Transport in Glassy Polymers and Polymer Blends." The grant is effective for the period July 1, 1974 through December 31, 1976, and the research will be under the direction of Dr. Donald R. Paul, Professor of Chemical Engineering.

86. Contract between The University of Texas at Austin, Manuel R. Mazon (author of Adelante) and the U.S. Office of Education, signed by Vice President James H. Colvin, by which the royalties of the manuscript to be published by the Meridith Corporation are to be divided as follows:

U.S. Office of Education----------50%
The University of Texas at Austin----10%
Dr. Manuel R. Mazon------------40%

This contract became effective October 23, 1973.
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.

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<td>To: 7/16 - 8/31</td>
<td>25</td>
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<td>From: 9/1 - 6/31</td>
<td>25</td>
<td>12</td>
<td>21,200</td>
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<td>Concurrent Employment:</td>
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<td>Management Assistant Professor</td>
<td>9/1 - 5/31</td>
<td>75</td>
<td>9</td>
<td>16,600</td>
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</tbody>
</table>
University Personnel Office
Transfer of Funds
6. Amount of Transfer - $2,380
   To: University Personnel Office - Maintenance and Operation
   From: Unallocated Maintenance and Operation
Remodeling and expansion of this office required additional telephone lines and telephone installations. The number of campus-wide memoranda and Personnel-O-Grams incident to increased faculty and staff benefits and the new Transfer and Promotion Policy has caused the printing, postage and Xerox expense to exceed the allocation in these areas in the Original Budget. (RBC# 2241)

Office of the Business Manager
Transfer Between Dissimilar Appropriations
7. Amount of Transfer - $1
   To: Administrative and Professional Salaries
   From: Classified Personnel
Reallocation of salary funds within this office. (RBC# 2170)

Office of Accounting
Transfer of Funds
8. Amount of Transfer - $2,380
   To: Office of Accounting - Classified Personnel
   From: Unallocated Classified Personnel
Funds were used to establish 2 new position of Accounting Clerk III to handle the increased work load incident to new procedures initiated for the handling of student loan funds. (RBC# 2252)

Data Processing Division
Transfer Between Dissimilar Appropriations
9. Amount of Transfer - $7,500
   To: Maintenance and Operation
   From: Classified Salaries
Funds were used for thirty new modems. (RBC# 2253)

Office of Admissions
Interdepartmental Transfer
10. Amount of Transfer - $118
    To: Office of Admissions - Classified Personnel
    From: Office of the Vice-President for Student Affairs - Development of Student Services
To provide the additional funds needed for the reclassification of a member of the staff in the Office of Admissions. (RBC# 2210)
GENERAL ADMINISTRATION AND
STUDENT SERVICES (Continued)

Student Financial Aids

Transfer of Funds
11. Amount of Transfer - $7,000
   To: Student Financial Aids - Maintenance and Operation
   From: Unallocated Maintenance and Operation
   Funds were used to purchase files needed for the Central File System of this office.
   (RBC# 2185)

GENERAL INSTITUTIONAL EXPENSE

Choral Organizations

Transfer Between Dissimilar Appropriations
12. Amount of Transfer - $1,523
   To: Maintenance and Operation
   From: Travel
   Reallocation of funds to provide for expenses incurred.
   (RBC# 2149)

SCHOOL OF ARCHITECTURE

Appointment
Visiting Associate Professor
13. Louis Sauer (Non-tenure) (RBC# 2167)
   2/1 - 2/28 100 9 $13,500

Visiting Professor
14. Michael E. Graves (Non-tenure) (RBC# 2090)
   1/1 - 1/31 100 9 27,000

Transfer Between Dissimilar Appropriations
15. Amount of Transfer - $400
   To: Computer Rental and Purchased Services
   From: Maintenance and Operation
   Reallocation of funds to provide for computer-related expenses.
   (RBC# 2239)

COLLEGE OF HUMANITIES

Philosophy

Appointment
Lecturer
16. Montgomery Furth (Non-tenure) (RBC# 2081, 2140)
   3/9 - 3/31 100 9 18,207
   Source of Funds: Transfer from Unallocated Faculty Salaries.

Lecturer
17. Gwilym E. L. Owen (Non-tenure) (RBC# 2080, 2140)
   3/1 - 3/23 100 9 23,049
   Source of Funds: Transfer from Unallocated Faculty Salaries.
COLLEGE OF HUMANITIES (Continued)

Philosophy (Continued)

Appointment
Lecturer

18. Gregory Vlastos (Non-tenure) 3/9 - 3/31 100 9 $ 18,207

Source of Funds: Transfer from Unallocated Faculty Salaries. (RBC# 2079, 2140)

Slavic Languages

Interdepartmental Transfer

19. Amount of Transfer - $ 500

To: Slavic Languages - Maintenance and Operation

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

To provide the Slavic Languages Department with additional operational funds. (RBC# 2085)

Spanish and Portuguese

Interdepartmental Transfer

20. Amount of Transfer - $ 150

To: Spanish and Portuguese - Wages

From: Office of the Dean, College of Humanities - Wages

Funds will be used for a grader needed during the Summer Session. (RBC# 2280)

COLLEGE OF SOCIAL AND BEHAVIORAL SCIENCES

Anthropology

Interdepartmental Transfer

21. Amount of Transfer - $ 445

To: Anthropology - Travel

From: Office of the Dean, College of Social and Behavioral Sciences - Travel

To provide the additional funds needed for a member of the Anthropology faculty to attend the American Ethnological Society Spring Meeting in April and the annual meeting of the American Association for Health, Physical Education and Recreation in Los Angeles, March 26-31, 1974. (RBC# 2196, 2089)

Government

Interdepartmental Transfer

22. Amount of Transfer - $ 18

To: Government - Visiting Lecturers

From: Office of the Dean - Visiting Lecturers

Funds were used to supplement the Government Department's Visiting Lecturers program. (RBC# 2296)
COLLEGE OF SOCIAL AND BEHAVIORAL SCIENCES (Continued)

Government

Interdepartmental Transfer
23. Amount of Transfer - $683
To: Government - Visiting Lecturers and Consultants
From: Office of the Dean, College of Social and Behavioral Sciences - Visiting Lecturers and Consultants
Funds were needed to support the Government Department's visiting lecturer program. (RBC# 2087, 2148, 2282)

History

Interdepartmental Transfer
24. Amount of Transfer - $150
To: History - Travel
From: Office of the Dean, College of Social and Behavioral Sciences - Travel
Funds were needed for travel expenses of a member of the faculty of the History Department. (RBC# 2238)

Linguistics

Interdepartmental Transfer
25. Amount of Transfer - $330
To: Linguistics - Travel
From: Office of the Dean, College of Social and Behavioral Sciences - Travel
To provide travel funds for two faculty members to attend the Chicago Linguistics Society Conference. (RBC# 2176)

Social Science Statistics Laboratory

Transfer Between Dissimilar Appropriations
26. Amount of Transfer - $250
To: Maintenance and Operation
From: Computation Center Charge - ($76)
Computer Rental and Purchased Services ($174)
To provide operational funds needed for the remainder of the fiscal year. (RBC# 2284, 2281)

Sociology

Appointment and Salary Increase
Assistant Instructor
27. James H. Gundlach (Non-tenure) 1/16 - 5/31 100 9 $ 8,000
Source of Funds: Transfer from Unallocated Faculty Salaries.
Previous appointment: Population Research Center Social Science Research Associate II 9/1 - 1/15 50 12 8,160 9 (equiv) 6,120
Rate Increase (RBC# 2147, 2165) 9 $ 1,880
COLLEGE OF SOCIAL AND BEHAVIORAL SCIENCES (Continued)

Sociology (Continued)

Interdepartmental Transfer
28. Amount of Transfer - $210

To: Sociology - Visiting Lecturers and Consultants
From: Office of the Dean, College of Social and Behavioral Sciences - Visiting Lecturers and Consultants

Funds were needed to supplement the Sociology Department's visiting lecturers program.
(RBC# 2088)

COLLEGE OF NATURAL SCIENCES

Chemistry

Transfer of Funds
29. Amount of Transfer - $12,000

To: Chemistry - Special Equipment
From: Unallocated Special Equipment

To provide the additional funds needed to purchase a multinuclear magnetic resonance spectrometer.
(RBC# 2128)

Interdepartmental Transfer
30. Amount of Transfer - $500

To: Chemistry - Visiting Lecturers and Consultants
From: Office of the Dean, College of Natural Sciences - Visiting Lecturers and Consultants

Funds were used for honorariums of two speakers participating in the departmental seminar program.
(RBC# 2083)

Computer Sciences

Transfer of Funds
31. Amount of Transfer - $6,834

To: Computer Sciences - Wages
From: Unallocated Classified Salaries

To provide this department with part-time help, such as graders, clerical assistants, student operators in the Undergraduate Programming Laboratory, and consultants for the remainder of the fiscal year.
(RBC# 2197)

Geology

Transfer Between Dissimilar Appropriations
32. Amount of Transfer - $25

To: Computer Rental and Purchased Services
From: Maintenance and Operation

Transfer to the appropriate account of funds needed for computer-related expenses.
(RBC# 2285)
Home Economics

Interdepartmental Transfer
33. Amount of Transfer - $ 17
   To: Home Economics - Visiting Lecturers
   From: Office of the Dean, College of Natural Sciences - Visiting Lecturers and Consultants
   Additional funds were needed for Visiting Lecturers in the Home Economics Department.
   (RBC# 2235)

34. Amount of Transfer - $ 203
   To: Home Economics - Travel
   From: Office of the Dean, College of Natural Sciences - Travel
   Funds were used to cover transportation expenses for a faculty member to attend the meeting of the American Council on Consumer Interests held in Cleveland, Ohio.
   (RBC# 2136)

Mathematics

Appointment
35. Gian-Carlo Rota (Non-tenure)
   3/18 - 3/31 100 9 $ 15,975
   (RBC# 2245)

Physics

Leave of Absence
36. Yuval Ne'eman (Tenure)
   9/1 - 5/31 50 9 37,300
   Term of Leave
   4/1 - 5/31
   (RBC# 2250)

Transfer of Funds
37. Amount of Transfer - $ 18,932
   To: Physics - Teaching Assistants
   From: Unallocated Faculty Salaries
   Funds were used for Teaching Assistants needed for the Spring Semester.
   (RBC# 2196)

Zoology

Change of Status
38. Daniel L. Hartl (Non-tenure)
   To: 4/15 - 4/29 100 9 25,000
   From: 4/15 - 4/28
   (RBC# 2106)
DIVISION OF GENERAL AND COMPARATIVE STUDIES

Comparative Studies
Transfer Between Dissimilar Appropriations
39. Amount of Transfer - $2,353
To: Visiting Lecturers and Consultants
From: Wages
Reallocation of departmental funds to provide stipends for visiting lecturers.
(RBC# 2135)

Ethnic Studies: African and Afro-American
Transfer Between Dissimilar Appropriations
40. Amount of Transfer - $1,000
To: Maintenance and Operation
From: Program Development
Reallocation of departmental funds to provide for operational needs.
(RBC# 2190)

Ethnic Studies: Mexican-American
Change of Status
Visiting Professor
41. Rodolfo Jacobson (Non-tenure)
To: 1/13 - 2/4
From: 1/13 - 2/2
9
9
$24,000

Language and Area Center for Latin American Studies
Transfer Between Dissimilar Appropriations
42. Amount of Transfer - $40
To: Faculty Salaries
From: Maintenance and Operation
Reallocation of departmental funds to provide the additional support needed for the salary of a faculty member for the Spring Semester.
(RBC# 2286)

SCHOOL OF COMMUNICATION

Office of the Dean
Transfer Between Dissimilar Appropriations
43. Amount of Transfer - $4,338
To: Maintenance and Operation
From: Administrative and Professional Salaries
Funds available in the Dean's Salaries account were needed for operational expenses incidental to occupancy of the new Communication Building.
(RBC# 2192)

Speech Communication
Appointment
Instructor
44. James S. Howze (Non-tenure)
Source of Funds: Transfer from Unallocated Salaries.
(RBC# 2082, 2141)
SCHOOL OF COMMUNICATION (Continued)

Speech Communication (Continued)

Transfer of Funds

45. Amount of Transfer - $3,336
To: Speech Communication - Classified Personnel
From: Unallocated Classified Salaries
Funds were needed for the salary of a Technical Staff Assistant III for the Listening Laboratories.
(RBC# 2084)

COLLEGE OF EDUCATION

Curriculum and Instruction

Change of Status
Assistant Professor
46. Thomasine H. Taylor (Non-tenure)

To:
9/1 - 1/15 50 9 $11,000
1/16 - 5/31 100

From:
9/1 - 5/31 50 9 $11,000
(RBC# 2061)

Transfer Between Dissimilar Appropriations
47. Amount of Transfer - $25
To: Computation Center Charge
From: Maintenance and Operation
Funds were needed for computer expenses.
(RBC# 2134)

Educational Psychology

Appointment
Lecturer
48. William A. Bryan (Non-tenure)

1/16 - 5/31 -- -- ---

Concurrent Employment:
Office of the Dean of Students
Associate Dean of Students
(RBC# 2114)

9/1 - 8/31 100 12 20,500

Transfer of Funds
49. Amount of Transfer - $2,600
To: Educational Psychology - Teaching Assistants
From: Unallocated Faculty Salaries
Funds were used for Teaching Assistants needed during the Spring Semester.
(RBC# 2240)

Interdepartmental Transfer
50. Amount of Transfer - $36
To: Educational Psychology - Maintenance and Operation
From: Office of the Dean, College of Education - Maintenance and Operation
Funds were used for the development of a slide presentation for use in Educational Psychology courses.
(RBC# 2142)
<table>
<thead>
<tr>
<th>Item, Department, Title, Name</th>
<th>Period of Appointment</th>
<th>% Time</th>
<th>Full-time Salary</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

**COLLEGE OF ENGINEERING**

**Office of the Dean**

**Interdepartmental Transfer**
51. Amount of Transfer - $132
   To: Office of the Dean - Visiting Lecturers and Consultants
   From: Civil Engineering - Travel
   Additional funds were needed for the stipend of a visiting lecturer.
   (RBC# 2212)

**Electrical Engineering**

Transfer Between Dissimilar Appropriations
52. Amount of Transfer - $94
   To: Classified Personnel
   From: Maintenance and Operation
   Reallocation of departmental funds to provide the additional support needed
   for the salary of a member of the classified staff.
   (RBC# 2137)

**COLLEGE OF FINE ARTS**

**Office of the Dean**

**Appointment**

**Associate Dean**
53. David A. Nancarrow
   Academic Status:
   Associate Professor (Drama)
   (RBC# 2202)

**Change of Status**
54. James L. Wyatt
   To: Assistant to the Dean
   From: Administrative Assistant
   Academic Status:
   Assistant Professor (Art)
   Academic Rate - $11,000
   (RBC# 2180)

**Art Teaching Gallery**

Transfer Between Dissimilar Appropriations
55. Amount of Transfer - $4,373
   To: Wages
   From: Administrative and Professional Salaries
   Funds available in the Salaries account were needed to pay student assistants
   who help install exhibitions in the Archer M. Huntington and Michener HRC
   Museums.
   (RBC# 2086)

**Drama**

**Appointment**

**Lecturer**
56. Helen M. Usana (Non-tenure)
   (RBC# 2168)

A-50
<table>
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<tr>
<th>Item, Department, Title, Name</th>
<th>Period of Appointment</th>
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<th>Full-time Salary</th>
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<td><strong>SCHOOL OF LAW - CLINICAL LEGAL EDUCATION</strong></td>
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<td>Change of Status</td>
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<tr>
<td>Director, Clinical Legal Education</td>
<td>57. Cicily J. Simms</td>
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<td>To:</td>
<td>9/1 - 5/31</td>
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<td>7/16 - 8/31</td>
<td>50</td>
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<td>9/1 - 8/31</td>
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<tr>
<td>(RBC# 2179)</td>
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<tr>
<td><strong>GRADUATE SCHOOL OF SOCIAL WORK</strong></td>
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<tr>
<td>Budget Correction</td>
<td>58. Santos Reyes</td>
<td>9/1 - 5/31</td>
<td>LWOP</td>
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<tr>
<td>To: Assistant Professor</td>
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<tr>
<td>From: Instructor</td>
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<tr>
<td>Mr. Reyes academic rank as shown in the 1973-74 Original Budget was in error. (RBC# 2059)</td>
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<td>Transfer Between Dissimilar Appropriations</td>
<td>59. Amount of Transfer - $ 2,500</td>
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<tr>
<td>To: Maintenance and Operation</td>
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<tr>
<td>From: Travel</td>
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<tr>
<td>Reallocation of funds to provide for operational needs. (RBC# 2191)</td>
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<td><strong>UBJ SCHOOL OF PUBLIC AFFAIRS</strong></td>
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<tr>
<td>Appointment</td>
<td></td>
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<tr>
<td>Associate Director, Conferences and Training</td>
<td>60. Robert J. Macdonald</td>
<td>3/18 - 8/31</td>
<td>100</td>
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<tr>
<td>(RBC# 2219)</td>
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<tr>
<td>Leave of Absence</td>
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<tr>
<td>Professional Librarian</td>
<td>61. Tayna M. Reischman</td>
<td>9/1 - 8/31</td>
<td>100</td>
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<tr>
<td>Term of Leave</td>
<td>(RBC# 2243)</td>
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<tr>
<td>Resignation</td>
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<tr>
<td>Associate Director</td>
<td>62. James F. Russell, Jr.</td>
<td>11/6 - 8/31</td>
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<td>Date of Resignation</td>
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<td>Transfer Between Dissimilar Appropriations</td>
<td>63. Amount of Transfer - $ 60,000</td>
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<tr>
<td>To: Maintenance, Operation and Equipment</td>
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<tr>
<td>From: Faculty Salaries</td>
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<tr>
<td>Reallocation of available funds to provide for anticipated operational and equipment needs for the remainder of fiscal year. (RBC# 2115)</td>
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<tr>
<td>Item, Department, Title, Name</td>
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<td>% Time</td>
<td>Full-time Salary No.</td>
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<tr>
<td><strong>Transfer of Funds</strong></td>
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<tr>
<td>64. <strong>Amount of Transfer</strong> - $80,000</td>
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<td>From: Unallocated Faculty Salaries</td>
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<tr>
<td>To provide for unanticipated institutional maintenance and operation expenses. (RBC# 2189)</td>
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<tr>
<td><strong>LIBRARY</strong></td>
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<tr>
<td><strong>Change of Status</strong></td>
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<tr>
<td>Professional Librarian (Temporary)</td>
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<tr>
<td>65. Sharon S. Justice</td>
<td>9/1 - 3/31</td>
<td>50</td>
<td>12</td>
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<tr>
<td>4/1 - 8/31</td>
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<td>12</td>
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<td>(RBC# 2207)</td>
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<td><strong>Change of Status and Salary Increase</strong></td>
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<tr>
<td>66. Jo Anne Hawkins</td>
<td>To: Reference Librarian, Inter-Library Series</td>
<td>9/1 - 3/31</td>
<td>100</td>
</tr>
<tr>
<td>Head Librarian, Inter-Library Series</td>
<td>4/1 - 8/31</td>
<td>100</td>
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<td>From: Reference Librarian, Inter-Library Series</td>
<td>9/1 - 8/31</td>
<td>100</td>
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<td>Rate Increase</td>
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<tr>
<td>(RBC# 2225)</td>
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<td><strong>Transfer Between Dissimilar Appropriations</strong></td>
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<tr>
<td>67. <strong>Amount of Transfer</strong> - $14,200</td>
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<tr>
<td>To: Computer Rental and Purchased Services</td>
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<tr>
<td>From: Maintenance and Operation</td>
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<tr>
<td>Transfer to the appropriate account funds needed to purchase cataloging and related library services from the Interuniversity Council of the North Texas area. (RBC# 2187)</td>
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<tr>
<td><strong>ORGANIZED RESEARCH</strong></td>
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<tr>
<td><strong>Bureau of Business Research</strong></td>
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<td><strong>Transfer Between Dissimilar Appropriations</strong></td>
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<tr>
<td>68. <strong>Amount of Transfer</strong> - $10,134</td>
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<tr>
<td>To: Administrative and Professional Salaries</td>
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<tr>
<td>From: Classified Personnel</td>
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<tr>
<td>Funds available in two unfilled classified positions will be used to employ faculty members who will work for the Bureau on a part-time basis this summer. (RBC# 2227)</td>
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</tbody>
</table>
Organized Research (Continued)

Center for Intercultural Studies in Folklore and Oral History

Transfer Between Dissimilar Appropriations
69. Amount of Transfer - $745

To: Maintenance and Operation
From: Wages

To return to the Center's Maintenance and Operation account unused funds previously transferred from it for wages. (RBC# 2120)

Center for Nuclear Studies

Transfer Between Dissimilar Appropriations
70. Amount of Transfer - $2,047

To: Maintenance and Operation
From: Special Equipment ($47)
Travel ($2,000)

Reallocation of funds to provide for operational expenses. (RBC# 2064, 2257)

Center for Research in Water Resources

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

To: Maintenance and Operation
From: Classified Personnel

Reallocation of available funds to provide for the replacement of a faulty computer terminal card reader. (RBC# 2259)

Transfer Between Dissimilar Appropriations
72. Amount of Transfer - $240

To: Travel
From: Classified Salaries ($140)
Library Acquisitions ($100)

Funds will be used for a trip to Logan, Utah in July to attend the annual meeting of Universities Council on Water Resources. (RBC# 2255)

Center for Structural Studies

Transfer Between Dissimilar Appropriations
73. Amount of Transfer - $800

To: Travel
From: Maintenance and Operation

Funds will be used for travel expenses of Professor James E. Boggs who will go to England and Norway in May to deliver a series of lectures and confer with research groups. (RBC# 2228)
Division of Natural Resources and Environment

Transfer Between Dissimilar Appropriations
74. Amount of Transfer - $5,000
    To: Maintenance and Operation ($1,500)
        Travel ($3,500)
    From: Classified Personnel

Funds available in this Division's Classified Personnel account were needed for operational costs and for travel expenses.
(RBC# 2169, 2119)

Institute for Latin American Studies
Reappointment
Consultant
75. Michael Conroy
    Previous appointment was at the same rate.
    Academic Status: Assistant Professor (Economics)
    (RBC# 2163)

Laboratory for Computer-Assisted Instruction
Change of Status
Co-Director
76. Harold F. O'Neil, Jr.
    To: 7/16 - 8/31 100 9 14,200
    From: 6/1 - 8/31 50 9 14,200
    (RBC# 2161, 2164)

McDonald Observatory
Transfer Between Dissimilar Appropriations
77. Amount of Transfer - $3,500
    To: Maintenance and Operation
    From: Computer Rental and Purchased Services

Reallocation of departmental funds to provide for expenses of a teletype maintenance contract, printer paper and computer supplies and accessories.
(RBC# 2256)

Research in Botany - Herbarium
Reappointment
Associate Curator
78. Marshall C. Johnston
    Previous appointment was at the same rate.
    Academic Status: Professor (Botany)
    (RBC# 2157)
ORGANIZED RESEARCH (Continued)

Research in Botany - Herbarium (Continued)

Transfer Between Dissimilar Appropriations
79. Amount of Transfer - $942

To: Wages
From: Administrative and Professional Salaries
Funds were used for part-time help needed to intercollate Lundell Collection (about 200,000 specimens) into the existing collection. (RBC# 2172)

Research in Texas History

Change of Status
Director
80. Joe B. Frantz

To: 9/1 - 5/31 50 12 $34,000
From: 9/1 - 8/31 12 34,000

Concurrent Employment:
History Professor 9/1 - 1/15 50 9 25,500
Management Professor 1/16 - 5/31 50 9 25,500

Transfer Between Dissimilar Appropriations
81. Amount of Transfer - $1,374

To: Wages
From: Administrative and Professional Salaries
Funds released due to the reassignment of duties of a member of the professional staff will be used for the salary of a clerk-typist needed during the summer. (RBC# 2269)

University Research Institute

Appointment
Assistant Professor (Oriental and African Languages and Literatures) and (Center for Asian Studies)
82. Herman VanOlphen
Summer Faculty Research Assignment 6/1 - 7/31 100 9 12,000
(RBC# 2159)

Assistant Professor (English)
83. John R. Trimble
Summer Faculty Research Assignment 6/1 - 7/31 100 9 12,100
(RBC# 2112)

Assistant Professor (Speech Communication and Linguistics)
84. Harvey Sussman
Summer Faculty Research Assignment 6/1 - 7/31 100 9 13,200
(RBC# 2153)
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<td>85. Yolanda Solé</td>
<td>6/1 - 7/31</td>
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<td>86. Charles F. Sherry</td>
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<tr>
<td>87. D. Schmandt-Besserat</td>
<td>6/1 - 7/31</td>
<td>33</td>
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<td>Summer Faculty Research Assignment (RBC# 2208)</td>
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<td>Assistant Professor (Geological Sciences)</td>
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<td>88. John L. Lufkin</td>
<td>6/1 - 7/31</td>
<td>100</td>
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<td>89. Lewis Gould</td>
<td>6/1 - 7/31</td>
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<td>90. Michael Donjan</td>
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<td>Summer Faculty Research Assignment (RBC# 2155)</td>
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<td>91. Amount of Transfer - $ 37</td>
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<tr>
<td>To: University Research Institute - Research Project (Cunningham)</td>
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<td>From: Marketing - Wages</td>
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<td>To provide for wages expenses incurred in connection with this faculty URI Project, (RBC# 2283)</td>
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</table>

DIVISION OF EXTENSION

Extension Teaching and Field Service Bureau

Transfer Between Dissimilar Appropriations

92. Amount of Transfer - $ 10,000

To: Maintenance and Operation

From: Extension Classes and Consultant Services

Relocation of funds to provide for operational costs, (RBC# 2217)
Communications and Projections

Transfer Between Dissimilar Appropriations

93. Amount of Transfer - $15,000

To: Wages

From: Classified Personnel - ($5,000)
       Maintenance and Operation - ($10,000)

Reallocation of funds within this area to provide for needed part-time help.
(RBC# 2224)

Marine Science Institute

Interdepartmental Transfer

94. Amount of Transfer - $3,098

To: Building Maintenance - Classified Personnel

From: Custodial Services - Classified Personnel

Funds were used to employ a Maintenance Worker needed in the Building Maintenance area of the Marine Science Institute.
(RBC# 2171)

Custodial Services

Transfer of Funds

95. Amount of Transfer - $19,000

To: Custodial Services - Maintenance and Operation

From: Unallocated Maintenance and Operation

Funds were needed to replace paper products dispensers in University buildings to conform to paper products available.
(RBC# 2127)

Academic Development Program

Junior Fellows

Interdepartmental Transfer

96. Amount of Transfer - $400

To: Junior Fellows - Program Development Fund

From: Office of the Dean, Division of General and Comparative Studies - Academic Development Fund

To provide additional support for the Junior Fellows Program.
(RBC# 2129)

Spanish and Portuguese

Interdepartmental Transfer

97. Amount of Transfer - $250

To: Spanish and Portuguese - Program Development Fund

From: Office of the Dean, General and Comparative Studies - Academic Development Fund

To provide the Division's share of support for the jointly-sponsored Romance Linguistics Symposium held March 7-9.
(RBC# 2195)
<table>
<thead>
<tr>
<th>Item, Department, Title, Name</th>
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<th>% Time</th>
<th>Full-time Salary No.</th>
<th>Rate</th>
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<td><strong>Government</strong></td>
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<td><strong>Interdepartmental Transfer</strong></td>
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<tr>
<td>98. Amount of Transfer - $275</td>
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<tr>
<td>To: Government - Academic Development Program</td>
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<tr>
<td>From: Office of the Dean - General and Comparative Studies - Academic Development Fund</td>
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<tr>
<td>To provide the Division’s share of the purchase price of two films which will be used by both the Government Department and the Division of General and Comparative Studies.</td>
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<tr>
<td>(RBC# 2178)</td>
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<tr>
<td><strong>Professor</strong></td>
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<tr>
<td><strong>Sylvan Lang Professor</strong></td>
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<tr>
<td>100. William O. Huie</td>
<td>6/1 - 8/31</td>
<td>29</td>
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<td><strong>Professor</strong></td>
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<tr>
<td>101. Lucas A. Powe, Jr.</td>
<td>7/16 - 8/31</td>
<td>31</td>
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<td>Source of Funds: Academic Development Funds for the School of Law.</td>
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<tr>
<td><strong>Assistant Professor</strong></td>
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<tr>
<td>102. Alan S. Rau</td>
<td>6/1 - 7/15</td>
<td>31</td>
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<td>Source of Funds: Academic Development Program funds for the School of Law.</td>
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<tr>
<td><strong>Professor</strong></td>
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<tr>
<td>103. George R. B. Schatzki</td>
<td>7/16 - 8/31</td>
<td>67</td>
<td>9</td>
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<tr>
<td><strong>Marre McLean Professor</strong></td>
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<tr>
<td>104. Russell J. Weintraub</td>
<td>6/1 - 8/31</td>
<td>29</td>
<td>9</td>
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</table>
**ACADEMIC DEVELOPMENT PROGRAM (Continued)**

**Transfer of Funds**

105. Amount of Transfer - $31,950

Transfers were made from the Academic Development Program Fund Allotment account as follows:

1. **School of Architecture**
   - Amount of Transfer: $750
   - To provide the additional funds which will enable Professor Peter O. Coltman to attend the Environmental and Social Planning courses in Great Britain.
   - (RBC# 2236)

2. **Office of the Dean, General and Comparative Studies**
   - Amount of Transfer: $10,200
   - To provide the additional funds needed for programs and projects sponsored by this Division.
   - (RBC# 2130, 2143, 2276)

3. **Office of the Dean, College of Fine Arts**
   - Amount of Transfer: $10,000
   - Funds will be used in support of the Aids project.
   - (RBC# 2144)

4. **Graduate School of Social Work**
   - Amount of Transfer: $3,000
   - Funds will be used for a special summer assignment for Assistant Professor Grace G. Schmitt who will be developing teaching materials for the field practicum program.
   - (RBC# 2237)

5. **Texas Archeological Survey**
   - Amount of Transfer: $8,000
   - Funds are to be used for the archeological study of the Indian burial site on the West Tract of the Balcones Research Center.
   - (RBC# 2102)

**SPONSORED PROJECTS**

**Economics**

Appointment
Project Director
106. Vernon M. Briggs, Jr. 6/1 - 8/31 100 9 $18,500

Source of Funds: Contract Funds - Rural Poverty in the South Project

Academic Status: Associate Professor (Economics)
   (RBC# 2156)

**Psychology**

Appointment
Social Science Research Associate (Faculty)
106a. Robert A. Wicklund 6/1 - 7/31 100 9 13,600

Source of Funds: NSF Grant

Academic Status: Associate Professor (Psychology)
   (RBC# 2182)

**Astronomy**

Appointment
Research Scientist (Non-faculty)
107. Laurence M. Trafton 9/1 - 8/31 100 12 21,600

Source of Funds: NASA Contract
   9/1 - 2/28
   4/1 - 4/30
   5/28 - 8/31

California Institute of Technology Purchase Orders
   3/1 - 3/31
   5/1 - 5/27

(RBC# 2067, 2068, 2069, 2070)
<table>
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<th>Item, Department, Title, Name</th>
<th>Period of Appointment</th>
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<th>Full-time Salary No.</th>
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<td>108. W. David Arnett</td>
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<td>112. David T. Gibson</td>
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<td>Microbiology (General Budget</td>
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<td>113. Marshal R. Wheeler</td>
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<tr>
<td>(RBC# 2226)</td>
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<tr>
<td><strong>Electrical Engineering</strong></td>
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<tr>
<td>114. Terry J. Wagner</td>
<td>6/1 - 8/31</td>
<td>100</td>
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<td>U. S. Air Force Contract</td>
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<td>(RBC# 2233)</td>
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<tr>
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<tr>
<td>115. J. K. Aggarwal</td>
<td>6/1 - 8/31</td>
<td>100</td>
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<td>U. S. Air Force Contract</td>
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<td>116. Stephen A. Underwood</td>
<td>6/1 - 7/31</td>
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<tr>
<td>Source of Funds:</td>
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<td>Resignation</td>
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<td>Lecturer</td>
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<tr>
<td>117. John Frannes</td>
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<td>Item, Department, Title, Name</td>
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<td>% Time</td>
<td>Full-time Salary No.</td>
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<tr>
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</tbody>
</table>

**SPONSORED PROJECTS (Continued)**

**Fusion Research Center**

Reappointment
Research Program Manager
118. Alan B. Macmahon

| Source of Funds: Atomic Energy Commission Contract |
| Previous appointments were at the same rate. |
| Concurrent Employment: |
| Fusion Research Center - NSF Grant Funds |
| Research Program Manager (RBC# 2271) |

| 4/1 - 6/30 | 50 | 12 | $19,543 |

Appointment
Research Scientist (Faculty)
119. C. Wendell Horton, Jr.

| Source of Funds: Atomic Energy Commission Contract |
| Academic Status: Associate Professor (Physics) (RBC# 2162) |

| 6/1 - 6/30 | 100 | 9 | 14,700 |

**Fusion Research Center and Bureau of Engineering Research**

Reappointment
Research Scientist (Faculty)
120. William E. Drummond

| Source of Funds: Texas Atomic Energy Research Foundation |
| Previous appointments were at the same rate. |
| Concurrent Employment: |
| Physics Professor |
| Fusion Research Center - Atomic Energy Commission Contract Funds |
| Research Scientist (Faculty) (RBC# 2270) |

| 5/1 - 6/30 | 50 | 9 | 36,000 |

| 9/1 - 5/31 | 50 | 9 | 36,000 |

<p>| 6/1 - 6/30 | 50 | 9 | 36,000 |</p>
<table>
<thead>
<tr>
<th>Item, Department, Title, Name</th>
<th>Period of Appointment</th>
<th>% Time</th>
<th>Full-time Salary</th>
</tr>
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<tbody>
<tr>
<td>SPONSORED PROJECTS (Continued)</td>
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<tr>
<td>Research in Astronomy - McDonald Observatory</td>
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<td>Appointment</td>
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<tr>
<td>Research Scientist (Non-faculty)</td>
<td>3/1 - 8/31</td>
<td>50</td>
<td>12</td>
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<tr>
<td>Source of Funds: Plant Funds-McDonald Observatory Improvement and Replacement Fund</td>
<td>3/1 - 4/30</td>
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<tr>
<td>NASA Contract Funds</td>
<td>5/1 - 8/31</td>
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<tr>
<td>Concurrent Employment: McDonald Observatory - General Budget Funds</td>
<td>9/1 - 8/31</td>
<td>25</td>
<td>12</td>
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<tr>
<td>McDonald Observatory - Revolving Funds (RBC# 2071, 2094)</td>
<td>9/1 - 8/31</td>
<td>25</td>
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<td>Research and Development Center for Teacher Education</td>
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<tr>
<td>Reappointment</td>
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<tr>
<td>Social Science Research Associates (Faculty)</td>
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<tr>
<td>122. Julienne X. Pendleton</td>
<td>1/1 - 5/31</td>
<td>75</td>
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<tr>
<td>Source of Funds: Office of Education Contract</td>
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<tr>
<td>Concurrent Employment: Mathematics Instructor (RBC# 2108, 1835, 2181)</td>
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<td>25</td>
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<tr>
<td>Co-Director (Faculty)</td>
<td>2/1 - 5/31</td>
<td>50</td>
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<tr>
<td>Source of Funds: Office of Education Contract</td>
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<tr>
<td>Concurrent Employment: Educational Psychology Professor (RBC# 2262, 2077)</td>
<td>1/16 - 5/31</td>
<td>50</td>
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<tr>
<td>Project Director (Faculty)</td>
<td>3/16 - 5/31</td>
<td>80</td>
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<tr>
<td>Source of Funds: Office of Education Contract</td>
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<tr>
<td>Previous appointment was at the same rate.</td>
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<tr>
<td>Concurrent Employment: Center for Teaching Effectiveness Project Director (RBC# 2263, 2264)</td>
<td>2/1 - 5/31</td>
<td>20</td>
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<tr>
<td>Item, Department, Title, Name</td>
<td>Period of Appointment</td>
<td>% Time</td>
<td>Full-time Salary</td>
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<td>-------------------------------</td>
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<tr>
<td><strong>SPONSORED PROJECTS (Continued)</strong></td>
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<tr>
<td>Research and Development Center for Teacher Education (Continued)</td>
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<tr>
<td>Reappointment</td>
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<tr>
<td>Research Scientist (Faculty)</td>
<td>125. Jere E. Brophy</td>
<td>3/16 - 5/31</td>
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<tr>
<td>Source of Funds:</td>
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<td>Office of Education Contract</td>
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<tr>
<td>Concurrent Employment:</td>
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<tr>
<td>Educational Psychology</td>
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<tr>
<td>Associate Professor</td>
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<td>9/1 - 5/31</td>
<td>50</td>
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<tr>
<td><strong>AUXILIARY ENTERPRISES</strong></td>
<td></td>
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<tr>
<td>Intercollegiate Athletics</td>
<td></td>
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<tr>
<td>Reappointment and Salary Increase</td>
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<td></td>
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<tr>
<td>Head Basketball Coach</td>
<td>126. Meredith L. Black</td>
<td>4/1 - 8/31</td>
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</tr>
<tr>
<td>Source of Funds: Transfer</td>
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<td></td>
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<tr>
<td>from Intercollegiate Athletics-</td>
<td></td>
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<tr>
<td>Allocation for Budget Adjust-</td>
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<tr>
<td>ments</td>
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<tr>
<td>Previous Appointment:</td>
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<td>9/1 - 3/31</td>
<td>100</td>
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<tr>
<td>Rate Increase</td>
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<tr>
<td>(RBC# 2125, 2124)</td>
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<tr>
<td>Transfer of Funds</td>
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<tr>
<td>127. Amount of Transfer - $ 2,000</td>
<td></td>
<td></td>
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<tr>
<td>To: Salaries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>From: Allocation for Budget Adjustments</td>
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<td></td>
<td></td>
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<tr>
<td>Funds were needed for the employment of an Accounting Clerk I.</td>
<td>(RBC# 2216)</td>
<td></td>
<td></td>
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<tr>
<td>128. Amount of Transfer - $3,700</td>
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<td></td>
<td></td>
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<tr>
<td>To: Other Expenses</td>
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<td></td>
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</tr>
<tr>
<td>From: Operating Reserve</td>
<td></td>
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<tr>
<td>For expenses in connection with removal and replacement of synthetic turf on stadium and practice field.</td>
<td>(RBC# 2393)</td>
<td></td>
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</tr>
<tr>
<td>Senior Cabinet and Student Councils</td>
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<tr>
<td>Appointment</td>
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<tr>
<td>Administrative Assistant</td>
<td>129. John B. Knox (RBC# 2205)</td>
<td>3/1 - 5/31</td>
<td>25</td>
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</tbody>
</table>

A-64
AUXILIARY ENTERPRISES (Continued)

Senior Cabinet and Student Council (Continued)

Transfer of Funds

130. Amount of Transfer - $770

Transfers were made from the Senior Cabinet - Allocation for Budget Adjustments account as follows:

(1) Business Administration Council $270
   Funds were used for materials, postage and telephone charges for several projects.
   *(RBC# 2150)*

(2) Education Council 400
   To provide the additional funds needed for completion of several projects of the Education Council.
   *(RBC# 2211)*

(3) Graduate Student Council 100
   Funds were used for computer print-out and reduction and for printing costs of a Teaching Assistant study.
   *(RBC# 2152)*

Student, Faculty and Staff Identification Cards

Transfer of Funds

131. Amount of Transfer - $44,435

To: Student, Faculty and Staff Identification Cards
From: Auxiliary Enterprises Administration - Unallocated
Funds were used to cover initial costs of equipment needed to initiate a U. T. Austin operated ID Card Center.
*(RBC# 2203)*

CURRENT RESTRICTED FUNDS

School of Law - Law School Foundation

Leave of Absence Professor

132. Michael P. Rosenthal
   Term of Leave 3/1 - 5/31
   *(RBC# 2092)*
   $26,200

Cell Research Institute

Appointment Director (Faculty)

133. W. Gordon Whaley
   Source of Funds: Faith Foundation Grant
   Academic Status: Professor (Botany)
   *(RBC# 2223)*
CURRENT RESTRICTED FUNDS (Continued)

Administrative Charges to Trust Funds

Transfer of Funds
134. Amount of Transfer - $3,000
   To: Account No. 19-0619-1262
   From: Account No. 19-0619-1200
   (RBC# 2131)

Washington Internship Program

Transfer of Funds
135. Amount of Transfer - $2,000
   To: Washington Internship Program, Including Travel
   From: President's Associates
   To provide funds to establish a Summer Internship Program for U. T. Austin undergraduate students in Washington, D. C.
   (RBC# 2204)
### Source of Funds: Departmental Salaries unless otherwise specified.

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Explanation</th>
<th>Present Status</th>
<th>Proposed Status</th>
<th>Effective Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Richard Burdick, Office of the Dean, College of Business Administration</td>
<td>Computer Programmer Assistant I</td>
<td>Computer Programmer I</td>
<td>Salary Rate $8,160 $10,656 3/1/74</td>
</tr>
<tr>
<td>2.</td>
<td>Jiri Jancarik, Fusion Research Center</td>
<td>Research Scientist Associate V</td>
<td>Special Research Associate</td>
<td>Salary Rate $18,804 $21,492 4/1 - 6/30</td>
</tr>
<tr>
<td>3.</td>
<td>Thomas J. Moffett, Astronomy</td>
<td>Research Scientist Assistant III</td>
<td>Research Scientist Associate II</td>
<td>Salary Rate $9,336 $12,168 3/8/74</td>
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<tr>
<td>4.</td>
<td>Edward M. Stieber, Jr., Center for Nuclear Studies</td>
<td>Laboratory Research Assistant II</td>
<td>Technical Staff Assistant III</td>
<td>Salary Rate $4,620 $7,380 2/8 - 3/31</td>
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<tr>
<td>5.</td>
<td>James C. Wiley, Fusion Research Center</td>
<td>Research Scientist Assistant III</td>
<td>Research Scientist Associate IV</td>
<td>Salary Rate $9,336 $13,452 3/6 - 6/30</td>
</tr>
</tbody>
</table>

**Source of Funds:**
- Departmental Salaries unless otherwise specified.
### Source of Funds

<table>
<thead>
<tr>
<th>Project No.</th>
<th>Project Title</th>
<th>FROM</th>
<th>TO (New or Additional Appropriation)</th>
<th>Amount</th>
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<tbody>
<tr>
<td>102-33</td>
<td>Landscaping</td>
<td>IOP</td>
<td></td>
<td>$80,000</td>
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<tr>
<td>102-39</td>
<td>Printing and Press Building</td>
<td>CFB</td>
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<td>1,375,000</td>
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<tr>
<td>102-196</td>
<td>Robert A. Welch Hall</td>
<td>CFB</td>
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<td>14,125,000</td>
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<tr>
<td>102-198</td>
<td>Special Events Center</td>
<td>CFB</td>
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<td>12,750,000</td>
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<tr>
<td>102-200</td>
<td>Social Sciences and Humanities Library</td>
<td>IOP</td>
<td>BRB</td>
<td>200,000</td>
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<tr>
<td>102-222</td>
<td>Tennis Center Expansion</td>
<td>BRB</td>
<td>IOP</td>
<td>200,000</td>
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<tr>
<td>102-271</td>
<td>Concert Hall</td>
<td>BRB</td>
<td>PUF</td>
<td>100,000</td>
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<td></td>
<td>(Errata Correction: May 1974 Docket indicated FROM as IOP)</td>
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<tr>
<td>102-309</td>
<td>Gateway Apartments - Improvements and Landscaping</td>
<td>IOP</td>
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<td>250,000</td>
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**Legend**
- BRB - U. T. Building Revenue Bonds
- IOP - Interest on Bond Proceeds
- CFB - Combined Fee Bonds
- PUF - Permanent University Fund Bonds
May 3, 1974

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

Dear Chancellor LeMaistre:

The docket for the June 14, 1974 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
GIFTS

The following gifts in excess of $5,000 have been received at The University of Texas at Dallas. I recommend acceptance and that the thanks and appreciation of the Board be sent the donors by the Secretary.

<table>
<thead>
<tr>
<th>DONOR</th>
<th>PURPOSE AND CONDITIONS</th>
<th>AMOUNT</th>
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</thead>
<tbody>
<tr>
<td>1. Mr. Paul M. Buttermore 6005 Tarrytown Terrace #5108 Dallas, Texas 75205</td>
<td>Geological Information Library of Dallas</td>
<td>$11,284.85</td>
</tr>
<tr>
<td>2. Mr. Charles C. Bankhead, Jr. Chas. C. Bankhead, Jr. &amp; Associates 1601 Fidelity Union Tower Dallas, Texas 75201</td>
<td>Geological Information Library of Dallas</td>
<td>$9,911.00</td>
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</tbody>
</table>

GRANTS, CONTRACTS AND AGREEMENTS (NON-GOVERNMENTAL)

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

1. Agency: The Ford Foundation
   Grant No.: 73-627 (UTD E1335-01)
   New Funds: None
   Date: July 1, 1973 - September 1, 1974
   Description: Delphi Study of Undergraduate Education
   County of Expenditure: Dallas/Collin
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.

<table>
<thead>
<tr>
<th>#</th>
<th>Agency:</th>
<th>Grant No.:</th>
<th>Principal Investigator:</th>
<th>New Funds:</th>
<th>Date:</th>
<th>Description:</th>
<th>County of Expenditure:</th>
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</thead>
<tbody>
<tr>
<td>2</td>
<td>Air Force Systems Command, USAF</td>
<td>F19628-73-C-0285, Modification PO0002 (UTD E1662-02)</td>
<td>Mark Landisman</td>
<td>None</td>
<td>March 26, 1974</td>
<td>Research for Determining Propagation Characteristics for ARPA's Norwegian Array</td>
<td>Dallas/Collin</td>
</tr>
<tr>
<td>3</td>
<td>Air Force Systems Command, USAF</td>
<td>F19628-72-C-0230, Modification PO0003 (UTD E1305-02)</td>
<td>J. D. Winningham</td>
<td>None</td>
<td>March 26, 1974</td>
<td>Auroral Data Analysis</td>
<td>Dallas/Collin</td>
</tr>
</tbody>
</table>
5. Agency: NASA/Headquarters
   Grant No.: NGR 44-004-120, Supplement No. 3 (UTD E1457-04)
   Principal Investigator: William B. Hanson
   New Funds: $160,000
   Date: February 1, 1974 - January 31, 1975
   Description: Rocket Studies of the Upper F Region
   County of Expenditure: Dallas/Collin

6. Agency: NASA/Goddard Space Flight Center
   Contract No.: NAS 5-11003, Modification No. 18 (UTD E1498)
   Principal Investigator: John H. Hoffman
   New Funds: None
   Date: April 4, 1974
   Description: Composition Measurements of the Topside Ionosphere
   County of Expenditure: Dallas/Collin

7. Agency: NASA/Goddard Space Flight Center
   Contract No.: NAS 5-11011, Modification No. 18 (UTD E1602)
   Principal Investigator: William B. Hanson
   New Funds: None
   Date: April 4, 1974
   Description: A Soft-Particle Spectrometer for the ISIS-B Satellite
   County of Expenditure: Dallas/Collin

8. Agency: NASA/Goddard Space Flight Center
   Contract No.: NAS 5-11406, Modification No. 9 (UTD E1678)
   Principal Investigator: John H. Hoffman
   New Funds: $30,000
   Date: March 12, 1974
   Description: Atmosphere Explorer Magnetic Ion Mass Spectrometer Experiment
   County of Expenditure: Dallas/Collin

9. Agency: NASA/Goddard Space Flight Center
   Contract No.: NAS 5-11406, Modification No. 10 (UTD E1678)
   Principal Investigator: John H. Hoffman
   New Funds: $60,000
   Date: April 18, 1974 - June 30, 1974
   Description: Atmosphere Explorer Magnetic Ion Mass Spectrometer Experiment
   County of Expenditure: Dallas/Collin
10. Agency: NASA/Goddard Space Flight Center  
Contract No.: NAS 5-11407, Modification No. 11 (UTD E1677)  
Principal Investigator: William B. Hanson  
New Funds: $96,619  
Date: April 19, 1974 - June 30, 1974  
Description: Atmosphere Explorer Planar Ion Trap Experiment  
County of Expenditure: Dallas/Collin

11. Agency: NASA/Lyndon B. Johnson Space Center  
Grant No.: NGR 44-004-116, Supplement No. 5 (UTD E1659-16)  
Principal Investigator: James L. Carter  
New Funds: $45,000  
Date: February 1, 1974 - January 31, 1975  
Description: Studies Related to the Evolution of the Lunar Soil Materials  
County of Expenditure: Dallas/Collin

12. Agency: National Institute of Arthritis, Metabolism, and Digestive Diseases, DHEW  
Grant No.: 1 R01 AM16947-01 (E1343-01)  
Principal Investigator: A. Dean Sherry  
New Funds: $19,220 Direct Costs Only  
Date: April 1, 1974 - March 31, 1975  
Description: Lanthanide Ions as Spectroscopic Rulers in Con A  
County of Expenditure: Dallas/Collin

13. Agency: National Science Foundation  
Grant No.: GF-443, Amendment No. 2 (UTD E1690-03)  
Principal Investigator: Carl B. Collins, Jr.  
New Funds: $121,800  
Date: June 15, 1971 - November 30, 1976  
Description: U. S. - Romanian Atomic/Plasma Physics Program  
County of Expenditure: Dallas/Collin

14. Agency: National Science Foundation  
Grant No.: GF-42659 (UTD E1346-01)  
Principal Investigator: John W. Van Ness  
New Funds: $10,000  
Date: April 1, 1974 - September 30, 1975  
Description: Multivariate and Time Series Analysis and Applications  
County of Expenditure: Dallas/Collin
15. **Agency:** U. S. Atomic Energy Commission  
**Contract No.:** AT(05-1)-1629 (E1342-01)  
**Principal Investigator:** Charles E. Helsley  
**New Funds:** $14,749  
**Date:** May 1, 1974 - April 30, 1975  
**Description:** Application of Paleomagnetic Methods to the Detection of Epigenetically Altered Sediments Associated with Uranium Ore Deposits in the Morrison Formation  
**County of Expenditure:** Dallas/Collin
GENERAL ADMINISTRATION

Administrative Data Processing

1. Transfer of Funds
   Amount of Transfer - $ 3,384
   From: Classified Salaries $ 3,384
   To: Computer Services $ 3,384

   To provide additional computing services for Administrative Data Processing. (D106)

Budget Office

2. Transfer of Funds
   Amount of Transfer - $ 300
   From: Maintenance and Operation $ 300
   To: Wages $ 300

   To provide for additional help in the preparation of the annual operating budget and the Legislative Appropriation Request. (D86)

Personnel

3. Transfer of Funds
   Amount of Transfer - $ 85
   From: Classified Salaries $ 85
   To: Travel $ 85

   To provide travel funds for Affirmative Action Plan Workshop at State EEO office in Austin. (D109)
GENERAL INSTITUTIONAL

Affirmative Action System Development

4. Transfer of Funds
   Amount of Transfer  $11,964
   From: Unallocated Resident Instruction Faculty Salaries $11,964
   To:  Administrative and Professional Salaries $1,875
        Classified Salaries $6,539
        Maintenance and Operation $600
        Computer Services $2,700
        Travel $250

   Establish an account entitled "Affirmative Action System Development" to provide for development of a personnel information system. Funds for this project available from Unallocated Faculty Salaries. (D92)

Campus Planning

5. Transfer of Funds
   Amount of Transfer  $2,000
   From: Physical Plant General Services Computer Services $2,000
   To:  Computer Services $2,000

   To provide computing services in Campus Planning for the UTD Master Schedule "PERT" Chart. (D108)

RESIDENT INSTRUCTION

Office of Undergraduate Dean

6. Transfer of Funds
   Amount of Transfer  $4,298
   From: Unallocated Resident Instruction Maintenance and Operation $4,298
   To:  Classified Salaries $4,298

   To provide for the establishment of a position of Administrative Assistant to the Dean. (D85)
AMENDMENTS TO THE 1973/74 OPERATING BUDGET (continued)

RESIDENT INSTRUCTION (continued)

Office of the Executive Dean for Graduate Studies

7. Transfer of Funds
   Amount of Transfer  -  $4,350
   From: Administrative & Professional Salaries  $2,850
         Unallocated Resident Instruction Faculty Salaries  $1,500
   To: Maintenance and Operation  $4,350

   To provide for consultant and reproduction costs associated with
   the preparation of graduate program proposals. (D99)

Undergraduate Planning Delphi Project

8. Transfer of Funds
   Amount of Transfer  -  $1,200
   From: Unallocated Resident Instruction Computer Services  $1,200
   To: Computer Services  $1,200

   To provide computer services for the Undergraduate
   Planning Delphi Project. (D91)

Graduate Program in Geological Sciences

9. Transfer of Funds
   Amount of Transfer  -  $1,000
   From: Unallocated Resident Instruction Computer Services  $1,000
   To: Computer Services  $1,000

   To provide additional funds for computer services for
   the Graduate Program in Geological Sciences. (D103)

Graduate Program in Environmental Science

10. Transfer of Funds
    Amount of Transfer  -  $1,000
    From: Faculty Salaries  $1,000
    To: Maintenance and Operation  $1,000

    To provide for consulting fees for guest lecturers
    in Environmental Sciences 530. (D101)
AMENDMENTS TO THE 1973/74 OPERATING BUDGET (continued)

ORGANIZED RESEARCH

Institute for Environmental Sciences

11. Transfer of Funds
   Amount of Transfer - $ 500
   From: Graduate Program in Environmental Sciences
          Faculty Salaries $ 500
   To:    Maintenance & Operation $ 500
   To provide for operating expenses not provided by the
   original budget. (D100)

Institute for Geological Sciences

12. Transfer of Funds
   Amount of Transfer - $ 5,916
   From: Administrative and Professional Salaries
          Maintenance & Operation $ 1,802
          Graduate Program in Geological Sciences
          Classified Salaries $ 3,884
   To:    Classified Salaries $ 5,916
   To provide for the establishment of classified positions.
   (D84, D95, D104).

13. Transfer of Funds
   Amount of Transfer - $ 615
   From: Administrative & Professional Salaries $ 615
   To:    Research Assistants $ 615
   To provide for the establishment of a Research Assistant
   position. (D90)

14. Transfer of Funds
   Amount of Transfer - $ 5,869
   From: Unallocated Organized Research
          Maintenance & Operation $ 5,869
   To:    Maintenance & Operation $ 5,869
   To provide startup funds for additional projects within
   the Institute for Geological Sciences. (D89)
Institute for Management Sciences

15. Transfer of Funds
   Amount of Transfer  -  $2,430
   From: Research Assistants  $2,430
   To: Travel
      Maintenance and Operation
      To provide funds for preparation of future research proposals. (D93)

Institute for Mathematical Sciences

16. Transfer of Funds
   Amount of Transfer  -  $4,000
   From: Unallocated Resident Instruction
          Computer Services
          To: Computer Services
              $4,000
   To provide funds for computer services for the Institute for Mathematical Sciences. (D88)

Institute for Molecular Biology

17. Transfer of Funds
   Amount of Transfer  -  $6,386
   From: Administrative & Professional Salaries
          Unallocated Organized Research
          Maintenance & Operation
          To: Classified Salaries
              $6,386
   To provide for the establishment of classified positions in a summer research program. (D89, D98)

Institute for Physical Sciences

18. Transfer of Funds
   Amount of Transfer  -  $3,500
   From: Maintenance & Operation
          To: Wages
              $3,500
   To provide wages for Physical Plant personnel making laboratory alterations. (D97)
AMENDMENTS TO THE 1973/74 OPERATING BUDGET (continued)

ORGANIZED RESEARCH (continued)

Institute for Physical Sciences (continued)

19. Transfer of Funds
   Amount of Transfer - $14,000
   From: Unallocated Organized Research Computer Services $4,000
         Unallocated Resident Instruction Computer Services $10,000
   To:    Computer Services $14,000
   To provide additional computer services for the Institute for Physical Sciences. (D88, D107)

20. Transfer of Funds
   Amount of Transfer - $2,802
   From: Unallocated Organized Research Maintenance & Operation $2,802
   To:    Maintenance & Operation $2,802
   To provide startup funds for additional projects within the Institute for Physical Sciences. (D89)

CONTRACTS AND GRANTS

Institute for Physical Sciences

21. Promote John D. Winningham from Research Associate to Research Scientist effective 4/01/74 with an increase in salary rate from $14,600 to $15,860. Dr. Winningham has assumed significant responsibility for space physics research program direction. Funds for this appointment available in the Institute for Physical Sciences Contracts and Grants. (D87)

22. Reappoint David A. Storm, Research Associate, to the Institute for Physical Sciences, 100% time for the period 3/01/74 thru 8/31/74, annual salary rate $10,900. Funds for this appointment available in the Institute for Physical Sciences Contracts and Grants. (D105)

OTHER FISCAL ITEMS

SCHEDULE OF ADDITIONAL (OR CHANGES IN) FUNDING OF CONSTRUCTION PROJECTS

<table>
<thead>
<tr>
<th>Project No.</th>
<th>Project Title</th>
<th>Source of Funds</th>
<th>TO (New or Additional Appropriation)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>302-310</td>
<td>Outdoor Athletics Facilities and Parking</td>
<td>TRB</td>
<td></td>
<td>$650,000</td>
</tr>
</tbody>
</table>

Legend
TRB - Tuition Revenue Bonds
1974 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 pro rata based on the nine-month academic rate. No salary rate increases are permitted in the Summer Session Budget.

Appropriation for 1974 Summer Session
(See Budget adopted by the Board of Regents, Page 54)

$125,000

Less: Transfer to establish Graduate Program in Science Education
(RBC No. D118)

(2,458)

Subtotal

$122,542

Allocations for 1974 Summer Session
Resident Instruction - Faculty Salaries

<table>
<thead>
<tr>
<th>Program</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Program in Biology</td>
<td>$21,961</td>
</tr>
<tr>
<td>Graduate Program in Chemistry</td>
<td>10,116</td>
</tr>
<tr>
<td>Graduate Program in Environmental Science</td>
<td>9,853</td>
</tr>
<tr>
<td>Graduate Program in Geological Science</td>
<td>14,879</td>
</tr>
<tr>
<td>Graduate Program in Management Science</td>
<td>19,081</td>
</tr>
<tr>
<td>Graduate Program in Mathematical Science</td>
<td>16,627</td>
</tr>
<tr>
<td>Graduate Program in Physics</td>
<td>13,154</td>
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</table>

Subtotal

$111,671

Unallocated Summer Session Balance

$10,871
## Graduate Program in Biology

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Name</th>
<th>Tenure</th>
<th>Academic Rate (9-Month)</th>
<th>Effective Dates</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Walter Harm</td>
<td>T</td>
<td>$24,600</td>
<td>58%</td>
<td>6/01/74 8/31/74</td>
</tr>
<tr>
<td>2.</td>
<td>Donald J. McCorquodale</td>
<td>T</td>
<td>21,500</td>
<td>74%</td>
<td>6/01/74 8/31/74</td>
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</table>

### Associate Professor

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Name</th>
<th>Tenure</th>
<th>Academic Rate (9-Month)</th>
<th>Effective Dates</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>Harold Werbin</td>
<td>T</td>
<td>17,700</td>
<td>10%</td>
<td>7/01/74 7/31/74</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>65%</td>
<td>8/01/74 8/31/74</td>
</tr>
<tr>
<td>4.</td>
<td>Herbert Gutz</td>
<td>T</td>
<td>16,500</td>
<td>50%</td>
<td>6/01/74 8/31/74</td>
</tr>
<tr>
<td>5.</td>
<td>Edmund W. Guttes</td>
<td>T</td>
<td>15,600</td>
<td>50%</td>
<td>6/01/74 8/31/74</td>
</tr>
</tbody>
</table>

### Assistant Professor

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Name</th>
<th>Tenure</th>
<th>Academic Rate (9-Month)</th>
<th>Effective Dates</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td>Richard G. Cutler</td>
<td></td>
<td>12,800</td>
<td>33%</td>
<td>6/01/74 8/31/74</td>
</tr>
<tr>
<td>7.</td>
<td>Jost Kemper</td>
<td></td>
<td>12,800</td>
<td>86%</td>
<td>6/01/74 8/31/74</td>
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</tbody>
</table>

**TOTAL GRADUATE PROGRAM IN BIOLOGY** $21,961

## Graduate Program in Chemistry

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Name</th>
<th>Tenure</th>
<th>Academic Rate (9-Month)</th>
<th>Effective Dates</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.</td>
<td>Donald Rapp</td>
<td>T</td>
<td>$16,500</td>
<td>32%</td>
<td>6/01/74 7/31/74</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>60%</td>
<td>8/01/74 8/31/74</td>
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</tbody>
</table>

### Associate Professor

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Name</th>
<th>Tenure</th>
<th>Academic Rate (9-Month)</th>
<th>Effective Dates</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.</td>
<td>Richard A. Caldwell</td>
<td>T</td>
<td>14,300</td>
<td>22%</td>
<td>6/01/74 7/31/74</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
<td>8/01/74 8/31/74</td>
</tr>
</tbody>
</table>

### Assistant Professor

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Name</th>
<th>Tenure</th>
<th>Academic Rate (9-Month)</th>
<th>Effective Dates</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.</td>
<td>Lynn A. Melton</td>
<td></td>
<td>10,300</td>
<td>100%</td>
<td>6/01/74 6/30/74</td>
</tr>
<tr>
<td>11.</td>
<td>Christopher A. Parr</td>
<td></td>
<td>10,000</td>
<td>100%</td>
<td>6/01/74 6/30/74</td>
</tr>
<tr>
<td>12.</td>
<td>William R. Thompson</td>
<td></td>
<td>9,900</td>
<td>100%</td>
<td>6/01/74 8/31/74</td>
</tr>
</tbody>
</table>

**TOTAL GRADUATE PROGRAM IN CHEMISTRY** $10,116
## Graduate Program in Environmental Sciences

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Title</th>
<th>Name</th>
<th>Tenure</th>
<th>Academic Rate (9-Month)</th>
<th>Pct.</th>
<th>Effective Dates</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.</td>
<td>Professor</td>
<td>Ervin J. Fenyves</td>
<td>T</td>
<td>$21,400</td>
<td>100%</td>
<td>6/01/74 - 8/31/74</td>
<td>$7,133</td>
</tr>
<tr>
<td>14.</td>
<td>Lecturers</td>
<td>Kenneth B. McCool</td>
<td></td>
<td>8,000</td>
<td>34%</td>
<td>6/01/74 - 8/31/74</td>
<td>907</td>
</tr>
<tr>
<td>15.</td>
<td></td>
<td>Loyd D. Thurman</td>
<td></td>
<td>8,000</td>
<td>68%</td>
<td>6/01/74 - 8/31/74</td>
<td>1,813</td>
</tr>
</tbody>
</table>

**Total Graduate Program in Environmental Sciences**

$9,853

## Graduate Program in Geological Sciences

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Title</th>
<th>Name</th>
<th>Tenure</th>
<th>Academic Rate (9-Month)</th>
<th>Pct.</th>
<th>Effective Dates</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.</td>
<td>Professor</td>
<td>Charles E. Helsley</td>
<td>T</td>
<td>$20,500</td>
<td>33%</td>
<td>6/01/74 - 8/31/74</td>
<td>$2,255</td>
</tr>
<tr>
<td>17.</td>
<td></td>
<td>Mark Landisman</td>
<td>T</td>
<td>20,500</td>
<td>66%</td>
<td>7/16/74 - 8/31/74</td>
<td>2,279</td>
</tr>
<tr>
<td>18.</td>
<td>Associate Professor</td>
<td>Martin Halpern</td>
<td>T</td>
<td>15,900</td>
<td>33%</td>
<td>6/01/74 - 8/31/74</td>
<td>1,749</td>
</tr>
<tr>
<td>19.</td>
<td></td>
<td>Emile A. Pessagno, Jr.</td>
<td>T</td>
<td>15,200</td>
<td>10%</td>
<td>6/01/74 - 8/31/74</td>
<td>507</td>
</tr>
<tr>
<td>20.</td>
<td></td>
<td>Dean C. Presnall</td>
<td>T</td>
<td>13,700</td>
<td>10%</td>
<td>6/01/74 - 8/31/74</td>
<td>457</td>
</tr>
<tr>
<td>21.</td>
<td></td>
<td>James B. Urban</td>
<td>T</td>
<td>13,700</td>
<td>100%</td>
<td>6/01/74 - 8/31/74</td>
<td>4,567</td>
</tr>
<tr>
<td>22.</td>
<td></td>
<td>Richard M. Mitterer</td>
<td>T</td>
<td>12,800</td>
<td>34%</td>
<td>6/01/74 - 8/31/74</td>
<td>1,450</td>
</tr>
<tr>
<td>23.</td>
<td></td>
<td>William I. Manton</td>
<td>T</td>
<td>12,800</td>
<td>10%</td>
<td>6/01/74 - 8/31/74</td>
<td>427</td>
</tr>
<tr>
<td>24.</td>
<td>Assistant Professor</td>
<td>Peter A. Scholle</td>
<td></td>
<td>11,500</td>
<td>31%</td>
<td>6/01/74 - 8/31/74</td>
<td>1,188</td>
</tr>
</tbody>
</table>

**Total Graduate Program in Geological Sciences**

$14,879
SUMMER BUDGET FOR 1973/74 (continued)

Graduate Program in Management Sciences

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Title</th>
<th>Name</th>
<th>Academic Rate (9-Month)</th>
<th>Pct.</th>
<th>Effective Dates</th>
<th>From</th>
<th>Thru</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>25.</td>
<td>Professor</td>
<td>Raymond P. Lutz</td>
<td>T</td>
<td>$20,700</td>
<td>100%</td>
<td>6/01/74</td>
<td>8/31/74</td>
<td>$ 6,900</td>
</tr>
<tr>
<td>26.</td>
<td>Assistant Professor</td>
<td>Laurence Madeo</td>
<td>15,000</td>
<td>50%</td>
<td>6/01/74</td>
<td>8/31/74</td>
<td>2,500</td>
<td></td>
</tr>
<tr>
<td>27.</td>
<td></td>
<td>Larry J. Merville</td>
<td>16,000</td>
<td>100%</td>
<td>6/01/74</td>
<td>8/31/74</td>
<td>5,333</td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td></td>
<td>Klaus Truemper</td>
<td>15,000</td>
<td>100%</td>
<td>6/01/74</td>
<td>7/15/74</td>
<td>2,473</td>
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<tr>
<td>29.</td>
<td>Lecturer</td>
<td></td>
<td></td>
<td>7,500</td>
<td>75%</td>
<td>6/01/74</td>
<td>8/31/74</td>
<td>1,875</td>
</tr>
</tbody>
</table>

TOTAL GRADUATE PROGRAM IN MANAGEMENT SCIENCES ---------------- $19,081

Graduate Program in Mathematical Sciences

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Title</th>
<th>Name</th>
<th>Academic Rate (9-Month)</th>
<th>Pct.</th>
<th>Effective Dates</th>
<th>From</th>
<th>Thru</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>30.</td>
<td>Professor</td>
<td>Ivor Robinson</td>
<td>T</td>
<td>$28,000</td>
<td>75%</td>
<td>6/01/74</td>
<td>8/31/74</td>
<td>$ 7,000</td>
</tr>
<tr>
<td>31.</td>
<td></td>
<td>Istvan Ozsvath</td>
<td>T</td>
<td>22,700</td>
<td>75%</td>
<td>6/01/74</td>
<td>8/31/74</td>
<td>5,675</td>
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<tr>
<td>32.</td>
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<td>John W. Van Ness</td>
<td>19,300</td>
<td>50%</td>
<td>6/01/74</td>
<td>7/31/74</td>
<td>2,144</td>
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<tr>
<td>33.</td>
<td>Lecturers</td>
<td>Nancy Lutz</td>
<td>8,100</td>
<td>66%</td>
<td>7/16/74</td>
<td>8/31/74</td>
<td>901</td>
<td></td>
</tr>
<tr>
<td>34.</td>
<td></td>
<td>Kenneth B. McCool</td>
<td>8,000</td>
<td>34%</td>
<td>6/01/74</td>
<td>8/31/74</td>
<td>907</td>
<td></td>
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</table>

TOTAL GRADUATE PROGRAM IN MATHEMATICAL SCIENCES ---------------- $16,627

D - 16
### Graduate Program in Physics

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Title</th>
<th>Name</th>
<th>Academic Rate</th>
<th>Effective Dates</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tenure</td>
<td>From</td>
<td>Thru</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(9-Month)</td>
<td>Pct.</td>
<td></td>
</tr>
<tr>
<td>35.</td>
<td>Professor</td>
<td>Wolfgang A. Rindler</td>
<td>T</td>
<td>$22,700</td>
<td>100%</td>
</tr>
<tr>
<td>36.</td>
<td></td>
<td>Donald Rapp</td>
<td>T</td>
<td>16,500</td>
<td>40%</td>
</tr>
<tr>
<td>37.</td>
<td>Associate Professor</td>
<td>Carl B. Collins, Jr.</td>
<td>T</td>
<td>17,700</td>
<td>50%</td>
</tr>
<tr>
<td>38.</td>
<td></td>
<td>James E. Midgley</td>
<td>T</td>
<td>16,500</td>
<td>100%</td>
</tr>
<tr>
<td>39.</td>
<td>Assistant Professor</td>
<td>Roy C. Chaney</td>
<td></td>
<td>11,500</td>
<td>50%</td>
</tr>
<tr>
<td>40.</td>
<td></td>
<td>Augustine Cunningham, Jr.</td>
<td></td>
<td>9,400</td>
<td>67%</td>
</tr>
<tr>
<td>41.</td>
<td></td>
<td>Stephen M. Curry</td>
<td></td>
<td>10,300</td>
<td>100%</td>
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</table>

**TOTAL GRADUATE PROGRAM IN PHYSICS**

$\$19,154$
The benefits of education and of useful knowledge, generally diffused through a community, are essential to the preservation of a free government.

SAM HOUSTON

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

MIRABEAU B. LAMAR

Statement on Equal Educational Opportunity

With respect to the admission and education of students, with respect to the availability of student loans, grants, scholarships, and job opportunities, with respect to the employment and promotion of teaching and non-teaching personnel, and with respect to the student and faculty activities conducted on premises owned or occupied by the University, The University of Texas at Dallas shall not discriminate either in favor of or against any person on account of race, creed, color, sex, or national origin.
# THE UNIVERSITY OF TEXAS AT DALLAS

## 1974-75

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BOARD OF REGENTS
THE UNIVERSITY OF TEXAS SYSTEM

OFFICERS
A. G. McNeese, Jr., Chairman
Dan C. Williams, Vice-Chairman
Betty Anne Thedford, Secretary

MEMBERS
Terms Expire January, 1975
Frank C. Erwin, Jr. ....................................Austin
Jenkins Garrett .........................................Fort Worth
Dan C. Williams .......................................Dallas

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 Antonio
Edward Clark ........................................Austin
Allan Shivers .........................................Austin

THE UNIVERSITY OF TEXAS SYSTEM

Officers of the Administration
Charles A. LeMaistre, M.D. .........................Chancellor
Harry Huntt Ransom, Ph.D., Litt.D., LL.D. ..........Chancellor Emeritus
Everitt Donald Walker, M.B.A., C.P.A. .......Deputy Chancellor
James W. Wagener, Ph.D. ........Assistant [Vice-] to the Chancellor
for Administration
William H. Knisely, Ph.D. ........................Assistant [Vice-] to the Chancellor
for Academic Programs

THE UNIVERSITY OF TEXAS AT DALLAS

Officers of Central Administration
Bryce Jordan, Ph.D. .................................President
Lee R. Smith, Ph.D. ..........Vice President for Academic Affairs
Stewart C. Fallis, B.S. .......Vice President for Business Affairs
James L. Crowson, LL.B........Assistant-to-the] Vice President
Warren Gould, M.A. ........Executive Director of Development
and University Relations
James T. Dodson, M.S. .......................University Librarian

Officers of Academic Administration
Patrick L. Odell, Ph.D...Executive Dean of Graduate Studies;
Acting Head, Graduate Program in Environmental Sciences;
[Acting-Director-Institute-for-Environmental-Studies]
Acting Head, Graduate Program in Special Education

D - 21
Regina M. J. Kyle, Ph.D..........................Executive Dean of Undergraduate Studies
Francis S. Johnson, Ph.D........Executive Director, Center for Advanced Studies
David W. Canham, M.A.............Assistant Director, Center for Advanced Studies
Allan Watson, Ph.D.....................Assistant to the Vice President for Academic Affairs and Director of Admissions and Registrar
Robert E. Fielder, Ed.D......Assistant to the Vice President for Academic Affairs (Special Projects)
Richard A. Caldwell, Ph.D...............Head, Graduate Program in Chemistry; [Acting] Director, Institute for Chemical Sciences
Royston C. Clowes, Ph.D., D.Sc........Head, Graduate Program in Biology; Director, Institute for Molecular Biology
Carl B. Collins, Jr., Ph.D...............Head, Graduate Program in Physics
Aram Glorig, M.D.......................Head, Graduate Program in Communication Disorders
Charles E. Helsley, Ph.D................Head, Graduate Program in [Geological-Sciences--Director, Institute] Geosciences; Director, Institute for Geosciences
William B. Hanson, Ph.D...............Director, Institute for Physical Sciences
G. Fred Lee, Ph.D......................Director, Institute for Environmental Sciences
Cyrus L. Lundell, Ph.D...............Director, Plant Sciences Laboratory
Raymond P. Lutz, Ph.D...............Acting Head, Graduate Program in International Management Studies; Head, Graduate Program in Management and Administrative Sciences; Director, Institute for Management and Administrative Sciences
James B. Urban, Ph.D..................Head, Graduate Program in Science Education
John W. Van Ness, Ph.D...............Head, Graduate Program in Mathematical Sciences; Director, Institute for Mathematical Sciences

Other Officers of Administration
Sandra M. Budreck, M.S..............Director of Student Services
Alfred T. Mitchell, B.A............Associate Director of Development and University Relations
Eugene E. Payne, Ph.D...............Director, Office of Planning and Management Systems
Grady C. Starnes, B.B.A., C.P.A........Business Manager [end]
[Acting-Director-of-Student][Financial-Aid]
INFORMATION DIRECTORY

Graduate Admission
Contact the Director of Admissions and Registrar, Ext. 2341

Undergraduate Admission
Contact the Director of Admissions and Registrar, Ext. 2342

[Fellowship Applications]
Contact the appropriate Program Head

Foreign Students/Student Visas
Contact the Director of Admissions and Registrar, Ext. 2348

Housing
Contact the Director of Student Services, Ext. 2282

Advice on Course Registration
See the Graduate Advisor in the appropriate Program

Loans and Scholarships
[Student-Financial Aid--contact-the-Business-Manager]
Contact the Director of Student Services, Ext. 2282

Employment
[Student-Financial Aid--contact-the-Business-Manager]
Contact the Director of Student Services, Ext. 2282

Medical Services
Contact the Director of Student Services, Ext. 2282

[Research] Assistantships
Contact the appropriate Program Head

Transcripts of Records
Contact the Director of Admissions and Registrar, Ext. 2348

Adding and Dropping Courses
Contact the Director of Admissions and Registrar, Ext. 2348

Veterans Affairs
Contact the Director of Admissions and Registrar, Ext. 2348

Location and Address
Location--The 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 Campbell Road where the entrances to the campus are located. U.T. 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 Berkner Hall.

Mailing Address--Post Office Box [30365-Dallas] 688, Richardson, Texas, [75080] 75080
Telephone--(214) [231-4771, Ext. 471] 690-2341

Office Hours--Monday through Thursday, 8:30-7:00; Friday, 8:30-5:00; Saturday, 9:00-12:00
THE UNIVERSITY OF TEXAS AT DALLAS

Calendar of the Long Session of 1974-1975

Fall Semester
(15 Class Weeks)

August 28-29
[Thursday-Friday] Wednesday-Thursday.
Registration, orientation and advisement for the Fall Semester.

August 29
[Friday] Thursday. Last day for registration without late registration charge.

September 2-7

September 14-16
Tuesday. Classes begin.

September 19-23
Friday. Last day for adding courses, registering or making any changes in class schedule, other than withdrawal from the University or from a particular course.

September 19-23
Wednesday. Twelfth class day and the date on which the official enrollment count is taken.

September 24-28
Monday. Last day for making application for a graduate degree.

[October 1] September 30
Monday. Last day for dropping courses with automatic grade of "WP".

October 28
Monday. Courses dropped after this date will receive an automatic grade of "WF".

November 22-30
Thursday-Saturday, inclusive. Thanksgiving holidays.

[November 28] December 4
Wednesday. Last day for presenting final copies of the Master's Thesis or Doctoral Dissertation, approved by Committee, to the Graduate Dean.

December 12-14
Thursday-Saturday. Reading period.

December 16-19
Monday-Thursday. Fall Semester final examinations. (Note: Evening class examinations Thursday-Wednesday, December 12-18.)

December 20
Friday. Graduation day. (No public exercises.)
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<tr>
<th>Date Range</th>
<th>Event Description</th>
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<tr>
<td>January 9</td>
<td>[Friday] Thursday. Last day for registration without late registration charge.</td>
</tr>
<tr>
<td>January 13</td>
<td>Monday. Classes begin.</td>
</tr>
<tr>
<td>January 16</td>
<td>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.</td>
</tr>
<tr>
<td>January 28</td>
<td>Tuesday. Twelfth class day and the date on which the official enrollment count is taken.</td>
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<tr>
<td>[February 1]</td>
<td>[January 31] Friday. Last day for making application for a graduate degree.</td>
</tr>
<tr>
<td>February 7</td>
<td>Friday. Last day for dropping courses with automatic grade of &quot;WP&quot;.</td>
</tr>
<tr>
<td>March 7</td>
<td>Friday. Courses dropped after this date will receive an automatic grade of &quot;WP&quot;.</td>
</tr>
<tr>
<td>April 10</td>
<td>Friday. Last day for presenting final copies of the Master's Thesis or Doctoral Dissertation, approved by Committee, to the Graduate Dean.</td>
</tr>
<tr>
<td>May 5-6</td>
<td>Monday-Tuesday. Reading period.</td>
</tr>
<tr>
<td>May 7-9</td>
<td>Wednesday-Friday. Spring semester final examinations. (Note: Evening class examinations Monday-Friday, May 5-9.)</td>
</tr>
<tr>
<td>May 10-17</td>
<td>Saturday. Commencement. (Public exercises.)</td>
</tr>
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Calendar of the Summer Session, 1974

First Term (6 Weeks)—June 13–July 21
Second Term (6 Weeks)—July 24–August 22
Double Term (12 Weeks)—June 13–August 22

June 13
Monday. Registration. Students registering for any course on June 13 will register and pay fees for all other courses to be taken during the entire Summer Session.

June 14
Tuesday. Classes begin.

June 16
Thursday. Last day for adding courses.

June 21
Friday. Fourth class day and the date on which the official enrollment count is taken.

June 24
Thursday. Last day for dropping First Term courses with automatic grade of "WP".

June 27
Monday. Last day for making application for a graduate degree.

June 28
Tuesday. First Term courses dropped after this date will receive an automatic grade of "WF". Last day for dropping Double Term courses with automatic grade of "WP".

July 4

July 8–9
Tuesday-Wednesday. Reading period for first term courses.

July 10–11
Thursday-Friday. Final examinations for First Term courses.

July 14–15
Thursday-Monday. Mid-Session vacation for Double Term courses.

July 17
Monday. Registration for Second Term only.

July 18
Tuesday. Classes begin for Second Term courses.

July 20
Thursday. Last day for adding Second Term courses. Double Term courses dropped after this date will receive an automatic grade of "WP".

July 24
Friday. Fourth class day and the date on which the official enrollment count is taken for Second Term courses.

July 27
Thursday. Last day for dropping Second Term courses with automatic grade of "WP".

July 28
Monday. Last day for dropping Second Term courses with automatic grade of "WP".

August 5
Tuesday. Second Term courses dropped after this date will receive an automatic grade of "WP".

August 7
Thursday. Last day for presenting final copies of Master's Thesis or Doctoral Dissertation, approved by Committee, to the Graduate Dean.
August [19-20] Tuesday-Wednesday. Reading period for Second Term and Double Term courses.


August [23] Saturday. Graduation day. (No public exercises.)
INTRODUCTION

THE MEANING OF GRADUATE EDUCATION

From the dawn of mankind, the quest for knowledge has been fundamental to the human spirit. This endeavor crystallized in the Middle Ages, when scholars banded together to form universities, to preserve knowledge, to pass their knowledge on to others, and to advance the frontiers of knowledge.

The graduate schools of a modern university contain many of the institution's best faculty and students. These are true scholars, bound together by their love of learning. The quest for knowledge leads along a difficult path. The scholar must exert great effort to attain competence in his field and he must have the mental discipline to explore those aspects of a research problem that may be dull, routine, or difficult. Attempts to circumvent the difficulties lead only to mediocrity; there are no short cuts to becoming a scholar.

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 banded 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 perseverance and mental discipline. Some fall beside the way, but those fortunate enough to be able to press on gradually perceive 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 [44]111 sponsored research projects were under way in the various Research Institutes of The University of Texas at Dallas as of January 1, [1973]1974. A significant building program is planned through 1980.
ACADEMIC PLAN FOR [1973-76]1974-76

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

[The commitment of this University to excellence in education applies not only to the learning experience within the institution, but to the competence of those who go from the University to teach others. There are special needs related to teacher preparation and professional development to which The University of Texas at Dallas intends to respond.]

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 [only] in Mathematical Sciences and Science Education. It is anticipated that it will be offered in other areas such as [physical and biological sciences], social sciences and the humanities in the near future.

[Other special roles in education for which this University plans exemplary graduate preparation include: Educational Management, Learning-Resource Consultant, and Special Education (Language-Learning Disabilities; Speech Pathology and Audiology).]
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, student's 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.

PLANNED UNDERGRADUATE PROGRAMS

The undergraduate student at The University of Texas at Dallas will find his place as a member of a particular college. (It is expected that eight undergraduate colleges will be required in 1975.) The college 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:
Information regarding the undergraduate programs [will be made] available [in Fall, 1973] 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.

ADMISSION TO THE UNDERGRADUATE PROGRAMS

Admission

Admission by transfer is the primary means of gaining entrance as an undergraduate 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

Concurrent 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-half of his high school graduating class, establishing a score of 800 on the Scholastic Aptitude Test (SAT), or 18 on the American College Test (ACT), is eligible for Concurrent Admission to The University of Texas at Dallas. Students holding Concurrent Admission status 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 Concurrent Admission upon presentation of twenty-seven (27) semester hours credit with a cumulative minimum grade point average of 2.5 on a 4.0 system. Students holding Concurrent Admission status 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.

Individual Approval

The Undergraduate Committee on Admissions may review the educational background 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 academic 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 at 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 is starting 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 sciences), 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, a faculty 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.)
- Communication Disorders (M.S., Ph.D.)
- Environmental Sciences (M.S., Ph.D.)
- Geologic Sciences (M.S., Ph.D.)
- International Management Studies (M.S., 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 551).

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 no intention of duplicating 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 1975-1976:
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 Graduate 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 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.

COMMUNITY SERVICE PROGRAMS

The University will offer, beginning in 1974-75, a series of non-credit courses and seminars through its Community Service Programs. These activities will be structured to serve 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 library of The University of Texas at Dallas is temporarily located on the second floor of the Founders North Building. Its collections, including the Lloyd V. Berkner Collection, were assembled with the primary consideration that, in order best to serve the students and faculty of the University, it should comprise an active research collection.

More than 1,600 current journals and other scientific and general serial publications are available in the library. The selection of these current publications was made to provide students and faculty with the most up-to-date information in selected fields. Additionally, for many of the current journals there are sets of older volumes covering an extended period of time. A recently acquired collection which will form the nucleus of a general library materials has been given to the University by the Texas Research Foundation. The total collection numbers 60,000 volumes and is expected to grow to 250,000 volumes by 1975 as new educational programs develop. The library is continually adding materials in support of these programs. For example, a core collection has been purchased in order to help support the University's new program in Management and Administrative Sciences.

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

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 U.T.-Dallas Library has access to search and exchange facilities of the Library of Congress and to the Smithsonian Scientific Information Exchanger.

In addition to the traditional services, the library provides a variety of developing media services for the campus. 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.
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 with 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.

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 U.T. 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.

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 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 will yield 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 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.

STUDENT AFFAIRS

At present the student population of The University of Texas at Dallas consists 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 relating to orientation, general information, housing, interpretation of University regulations, student activities, discipline, and other personal affairs.

Arts and Humanities

An Arts and Humanities 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 Orchestra, the Dallas Civic Opera, the Dallas Civic Music, and the Dallas Chamber Music organizations. Each group presents a number of concerts and performances during the year, many featuring guest artists. A variety of dramatic shows are 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, soccer, 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 Gulf of Mexico is only a few hours away; the ski areas of New Mexico and the border towns of Old Mexico are within a day's drive.

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 responsible for a "Host 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 Host 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.

Transportation

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 8:00 a.m. to 1:30 p.m., weekdays only, with soup and sandwich service [in-the-evenings] from 2:00 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 Adviser 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 continuing 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
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 adjacent to 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 participating 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 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

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 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. 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 he registers.

It is the responsibility of each student to establish, prior to registration, his residency classification. This may be determined through the Office of the Director of Admissions and Registrar. (See Appendix A.)

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Residents of Texas</th>
<th>U.S. Citizens</th>
<th>Foreign Students</th>
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Summer Session—6 Week Term

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<td>360.00</td>
<td>126.00</td>
<td>150.50</td>
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</table>
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: (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.

[Students-Service-Fee]

[Every student who registers in The University of Texas at Dallas, unless he is registered in absentia (see p. 45), will pay a compulsory student services fee of $10.00 for each semester of the long session, and $5.00 for each summer session, or $10.00 for the entire summer term. 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.]

Student Services Fee (Required)

Every student who registers in The University of Texas at Dallas, unless he is registered in absentia (see p. 45), 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.

[Graduation-Fee]

[Every student, at the time of filing for graduation, shall pay a graduation fee in the amount of $25.00.]
[General-Property-Deposit]

[Every-student-not-registered-in-absentia-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 his property deposit 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 must pay the excess immediately. No credit 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 forfeited, and the deposit shall become operative in the permanent use and purposes of the Student Property Deposit Scholarships.]

[Books]

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

[laboratory-Fee]

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

[living-Expenses]

[Much-of-what-student-spends-will-depend-upon-his-own-desires-and-budgetary limitations. The single student should anticipate something like $180.00 per month. This figure would include housing, food, medical insurance, and other necessities. It would not include costs for entertainment or transportation.]

[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 approval of the Graduate Advisor, 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 without refund.]

[Transcript-Fee]

[A-student-shall-pay-a-fee-of $1.00 for each official transcript. No partial or incomplete transcript will be issued. See "Transcripts" entry (page 35) for information regarding alteration of records.]

D - 42
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 approval 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 without refund.

Graduation Fee

Every student, at the time of filing for graduation, shall pay a graduation 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 35) for information regarding alteration of records.

General Property Deposit

Every student not registered 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 his property deposit 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 must pay the excess immediately. Pending payment, no credit 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 forfeited, 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 month. This figure would include housing, food, medical insurance, and other necessities. It 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

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 [Acting Director of Financial Aid (in the Office of the Business Manager, 2802 North Waterview Parkway)] Coordinator of Financial Aid and Student Employment for detailed information and application materials.

Part-Time Employment

A limited number of part-time [research] 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 College Work Study program that is funded through the Department of Health, Education, and Welfare.

Student Loan Funds

Long-term student loan funds are available:

National 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 over a 10-year period beginning after the student completes his education. There are several exceptions whereby up to 50% of the loan may be cancelled.

Federally Insured Loans

The Federally Insured Loan Program was established in the Higher Education Act of 1965. Under this program a student may borrow from a bank or other financial institution after his application has been certified by the University. The major objective of this program is to make loans available to students 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. This program now qualifies under the Federally Insured Loan Program referred to above.

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

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

Scholarships

The University of Texas at Dallas Women's Club sponsors 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 environmental sciences.

The Strauss Award is made for scholastic achievement and leadership.

Additional scholarship information is available in the Office of Financial Aids.

Vocational Rehabilitation

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, 4333 North Central Expressway, Dallas, Texas.
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 by January for enrollment the following June or August] Students are urged to apply by January for enrollment the following 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 [30969 - Dallas] 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 equivalent training in a foreign institution.

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. A satisfactory score on the Graduate Record Examination Aptitude Test for all applicants -- with the single exception of those 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 page 36).

4. Adequate subject preparation for the proposed graduate major.

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

6. Fluency 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 to 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

The Aptitude Test of the Graduate Record Examinations is designed to test preparation and aptitude for graduate study, and a satisfactory score must be submitted by everyone seeking 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 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:

<table>
<thead>
<tr>
<th>Institution</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>The University of Texas at Dallas</td>
<td>R-6897-3</td>
</tr>
</tbody>
</table>

NOTE: All applicants are urged to register and complete the GRE 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:

<table>
<thead>
<tr>
<th>Institution</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>The University of Texas at Dallas</td>
<td>R-6897</td>
</tr>
</tbody>
</table>

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. Completion 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 tuberculosis, 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 received since the fourth birthday. (Poliomyelitis vaccine is not required for persons nineteen years of age or older.)

5. A minimum of 3 doses of diphtheria/tetanus, with the last dose within 10 years. (Booster dose only after initial series — TD adult type.)

Exclusions from compliance are allowable on an individual basis for medical contraindications and religious conflicts. Students falling into these categories must submit affidavits as specified by law:

1. 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 physician's opinion, the immunization 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 immunization 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 subject 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 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 enroll 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 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 research 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[?]i; S (satisfactory); U (Unsatisfactory); X (incomplete); NC (non-credit); WF (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 or WF (0). The grades S, U, X, NC, WF 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.

Theses 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 the period during which an X grade can 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 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 then (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 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 Advisor 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.

Medical Requirements

No student will be permitted to complete registration who has not complied with University medical requirements as outlined under the section on Admissions.

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 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. 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 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 requirements 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 [CANDIDATES]

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 the 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
1. 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 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.)

Members of Faculty currently participating:

PROFESSOR: Donald Rapp (Physics)

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

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

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.

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 U.T. Dallas programs allows the student to prepare himself, if he chooses, for ultimate interdisciplinary work.

The following research is in progress in Chemistry at U.T. Dallas.


L. A. Melton—Experimental studies of electronic, vibrational and rotational energy transfer as studied by optical pumping with a tunable dye laser.


D. 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.


H. 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 is 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, [and gas chromatography—], [A] and a mass spectrometer. [and—] A minicomputer [see] is projected for purchase in 1974. [Interim arrangements for obtaining mass spectra have been made.] Facilities external to Chemistry, but readily available to its use, include the Library, Computer Center, and [various other University-wide facilities], 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 chemistry, and in addition his choice of one of the following: Biochemistry, Inorganic, or Analytical 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 strengthening his preparation for subsequent work.

Master of Science (Chemistry)

All students must: complete a required Core consisting of Chemistry 511 and Chemistry 531; complete nineteen hours of further graduate coursework, of which at least seven must be in Chemistry; complete a 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.

For general degree requirements, see "Procedures and Requirements for Graduate Degrees [Candidates]," page 47.
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. 500, 501, 513 and 521), a set of elective courses to be arranged by the student and his advisors (typically to include courses such as Chem. 512, 514, 532, 622, and Phys. 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 U.T. Dallas, or after acquiring a M.S. in Chemistry.

Chemistry Courses

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<thead>
<tr>
<th>Course</th>
<th>Description</th>
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<tbody>
<tr>
<td>500</td>
<td>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)</td>
</tr>
<tr>
<td>509</td>
<td>Special Topics/TAGER (3 semester hours) (3-0) Staff</td>
</tr>
<tr>
<td>511</td>
<td>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)</td>
</tr>
<tr>
<td>512</td>
<td>Chemical Dynamics (3 semester hours) Parr Contemporary experimental methods for reaction rate data. Theory of uni-, bi-, and thermolecular reactions. Phase space and collision theories of reaction. Mechanisms of reactive collision. Prerequisites: Chemistry 511 and 514 or equivalent. (3-0)</td>
</tr>
<tr>
<td>513</td>
<td>Statistical Mechanics (Same as Physics 513) (3 semester hours) Rapp Classical and quantum statistical mechanics, localized and non-localized ensembles. Thermodynamic properties in terms of partition functions for atoms and molecules. Equations of state of non-ideal gases and liquids. Fermi-Dirac and Bose-Einstein statistics with emphasis on extreme degenerate regions. Introduction to the Darwin-Fowler method. Prerequisite: Chemistry 511. (3-0)</td>
</tr>
<tr>
<td>514</td>
<td>Thermostatics and Thermodynamics (3 semester hours) Parr 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)</td>
</tr>
<tr>
<td>531</td>
<td>Advanced Organic Chemistry (4 semester hours) Caldwell Core course. Modern concepts of bonding and structure in covalent compounds. Static and dynamic stereochemistry and methods for study. A survey of the relationships between structure and reactivity. (4-0)</td>
</tr>
</tbody>
</table>
Physical Organic Chemistry (3 semester hours) Caldwell
Reaction mechanisms. Techniques for determining reaction mechanisms. Reactive intermediates. Applications to synthesis. Prerequisite: Chemistry 531. (3-0)

Synthetic Organic Chemistry (3 semester hours)
A survey of modern synthetic methods in organic chemistry. Prerequisite: Chemistry 531. (3-0)

Advanced Inorganic Chemistry (3 semester hours) Sherry
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; crystal field theory, ligand field theory and spectra. (3-0)

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

Instrumental Analysis (3 semester hours) Melton
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. Prerequisite: Chemistry 551 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)
Special Topics in Theoretical Chemistry (3 semester hours)
Subject matter will vary and the course may be repeated for credit.
Examples of topics are: Inelastic scattering in ion-atom collisions, theoretical calculation of molecular potential curves, semiclassical methods in inelastic scattering theory. Prerequisite: Chemistry 511; 513, 622 strongly recommended. (3-0)

Atomic and Molecular Spectroscopy (Same as Physics 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 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 variational theory. Approximation methods for atomic and molecular structure. Time-dependent phenomena and transition probabilities. Prerequisite: Chemistry 511. (3-0)

Molecular Spectroscopy (3 semester hours) Melton
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 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 are: Molecular beam experiments, scattering theory, computer simulation, and molecular quantum mechanics. Prerequisites: 511, 513, 622, or consent of instructor. (3-0)

Natural Products (3 semester hours)
Chemistry and synthesis of naturally occurring and biologically active molecules. Prerequisite: Chemistry 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 are: Organic photochemistry, organometallic chemistry, homogeneous and heterogeneous catalysis, and advanced NMR techniques. Prerequisite: Chemistry 531. (3-0)

Special Topics in Inorganic Chemistry (3 semester hours)
Subject matter will vary and the course may be repeated for credit. Examples of topics include: Physical Methods of Inorganic Chemistry, Applications of Group Theory, and Bioinorganic Chemistry. (3-0)

Special Topics in Analytical Chemistry (3 semester hours)
Subject matter will vary and the course may be repeated for credit. (3-0)

Seminar (1 semester hour) Staff
Presentations of current work by faculty and outside speakers. May be repeated. (1-0)
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)

Research in Physical Chemistry
(2 to 12 semester hours) (0-variable) Parr, Melton, Rapp

Research in Theoretical Chemistry
(2 to 12 semester hours) (0-variable) Rapp, Parr

Research in Organic Chemistry
(2 to 12 semester hours) (0-variable) Caldwell

Research in Inorganic Chemistry
(2 to 12 semester hours) (0-variable) Sherry

Research in Analytical Chemistry
(2 to 12 semester hours) (0-variable) Staff

Research in Biochemistry
(2 to 12 semester hours) (0-variable) Werbin, Sherry

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: David D. Daly (Communication Disorders), Aram Glorig (Head) (Communication Disorders), George Moushegian (Communication Disorders)

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

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

LECTURER: Donnell F. Johns (Communication Disorders)

OBJECTIVES

This curriculum prepares students to integrate the interdisciplinary bases of communicative behavior and to express this knowledge in a practical manner through research and study and through innovative and effective delivery of clinical services. 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.

M.S. PROGRAM

Three categories of instruction fulfill the specific aims of the proposed program: (1) core courses, (2) basic science courses, and (3) clinical training courses.

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 clinical 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 clinical 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: (1) researchers who can direct investigation of the basic aspect of that segment of the population, with communication disorders, with a broad knowledge of its clinical characteristics; and (2) administrators of clinical and/or educational programs who have a general background in the scientific and systematic investigation of communication disorders.

In this program, classroom learning must be demonstrated and validated in a clinical, educational or laboratory situation to meet performance criteria specified by the faculty.

FACILITIES

The unique facilities available for this program provide access to, and training in, a variety of laboratories, both at Callier Hearing and Speech Center and The University of Texas Health Science Center. 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 Hearing and Speech Center, both in basic and clinical areas. Learning generated by the free interaction between the personnel of the various disciplines, the extensive laboratory facilities and the wealth of clinical material all serve well to develop a depth in this educational program not generally encountered in other academic settings.

SPECIFIC DEGREE REQUIREMENTS

A background in speech pathology, audiology, linguistics, education or psychology would be expected for students entering the study of communication disorders. 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 of each student through various work areas of communication behavior with demonstrated competency 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 academic requirements for Certification of Clinical Competence in either speech pathology or audiology, offered by the American Speech and Hearing Association.

Applicants for the Doctorate are usually expected to hold a Master's Degree in Communication Disorders or some related field. While such prior formal training is not required, it is strongly recommended.
All students pursuing the Doctor of Philosophy degree will take a majority of the core courses during the first two semesters. After the student has passed the written and oral examination, an individualized degree program will be developed by the faculty. Specific courses will be prescribed for each student for the next three to four semesters. The remaining semesters will be allocated to directed research studies and scholarly investigations. The program is completed by acceptance of a doctoral dissertation and a final oral examination.

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

M.S. Program in Communication Disorders

Core Courses (Required of all M.S. Students)

Course   Description

500   Introduction to Communication Disorders (3 semester hours)
This course will cover the social, physical, physiological, neurological, phonetic, linguistic, psychological, genetic, and semantic bases of speech and hearing. This course is primarily expository in nature and will provide basic information regarding the nature and function of the communicative process from many points of view to provide for a broad understanding from which direct application may be made. (3-0)

501   Introduction to Graduate Studies in Communication Disorders
(1 semester hour)
This course will provide an overview of the history and contemporary philosophies in speech pathology and audiology. Special reference is given to the cooperative interaction between speech pathology and audiology and their relationships to other health related disciplines. Introduction to research methodologies and scientific writing. (1-0)

515   Clinical Practicum in Communication Disorders (1 semester hour)
Supervised participation in clinical practice demonstrating behavioral skills in evaluative and therapeutic consultation with individual patients and groups. Intake procedures, case histories, records, and reports and the therapeutic processes and techniques applicable to both children and adults. (May be repeated for credit.) (1-10)

520   Communication Sciences (3 semester hours)
Instrumentation and measurements. A survey of the nature of sound, acoustics and the general mathematical concepts essential to work in speech pathology and audiology. Measurement of fundamental frequency and intensity of speech. Demonstration of instrumentation and laboratory experiments will augment the lectures. (3-2)

525   Seminar in Medical Aspects of Communicative Disorders (2 semester hours)
This course is a study of the diseases which cause communicative disorders. Lecturers will cover medical evaluation of these problems and consider the various medical and surgical treatment approaches (otolaryngology, neurology, neurosurgery, pediatrics, radiology, physical medicine and rehabilitation) and relate them to the specific communicative disorder. Participation in clinical conferences and at special clinics will be coordinated with didactic presentation. (2-0)
Habilitation of Hearing Impaired Children (3 semester hours)
A study of 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. The course will involve exposure to and participation in the Infant Home Training, Pre-primary, and Primary classes in the Educational Division of Callier and with special programs for the deaf. (3-0)

Advanced Seminar Internship in Communicative Disorders
(6 semester hours)
This is an intensive internship program in a clinical setting with daily scheduled seminars dealing with the varied aspects of communicative disorders. Advanced study of clinical problems in communicative disorders on an apprenticeship basis, whereby 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 treatment. (2-10)

Introduction to Language and Linguistics (3 semester hours)
Introduction to the basic concepts of verbal communication, proceeding from (1) its acoustic characteristics and phonemic description, through (2) the application of information theory, to (3) language as a social behavior. (3-0)

Required Courses for Emphasis in Audiology

A. Basic Science Courses

Anatomy and Physiology of the Auditory System (2 semester hours)
A comparative anatomical study of both the peripheral and central auditory system. A study of the normal physiology of the auditory system, which will include middle ear and cochlear biophysics, cochlear biochemistry and electrophysiology of the cochlea and central auditory system. (2-0)

B. Clinical Training Courses

Advanced Clinical Audiology (3 semester hours)
The study of auditory pathology, symptomatology and measurement. Clinical application and interpretation of speech audiometry, bone conduction tests, masking, and special tests for sensorineural lesion differentiation. (3-0)

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

Differential Audiological Procedures (3 semester hours)
A lecture and clinical course dealing with more advanced audiological procedures used to establish differential diagnoses of auditory disorders. Principles and technique of the measurement and the interpretation of audiological data in conjunction with interdisciplinary evaluations of patients with auditory disorders. Specialized audiometric procedures used with exceptional populations: infants, the retarded, the aged, the multiple handicapped, and patients with psychogenic disorders. (3-0)
Seminar in Clinical Audiology (3 semester hours)
Etiological, medical, legal, and genetic, and psycho-acoustical consider-
deration with exceptional populations: infants, the retarded, the aged, the 
multiple consideration in audiological practice. (3-0)

Required Courses for Emphasis in Speech Pathology

A. Basic Science Courses

503 Anatomy and Physiology of Voice and Speech Production (2 semester hours)
A didactic and laboratory study of the anatomy and physiology of the 
phonatory, resonance, and articulatory systems. (1-5)

539 Neurophysiological Bases of Language (3 semester hours)
A study of the neurophysiological foundations of language and linguist-
ics. Emphasis on the theoretical, developmental, and comparative as-
pects of linguistic behavior as applied to neurophysiological and psy-
chological deficits evidenced in language disorders. (3-0)

B. Clinical Training Courses

505 Advanced Clinic Methods in Speech Pathology (3 semester hours)
The study of the speech pathologies, symptomatology, and measurement, 
including instrumentation and clinical measurement procedures. The 
therapeutic process in speech pathology; materials, techniques appli-
cable to speech therapy. Case presentations and demonstrations will 
supplement lectures. (2-5)

507 Disorders of Voice and Articulation (3 semester hours)
The study of the pathology, physiology and acoustic symptomatologies 
in disorders affecting phonation, resonance and articulation. Emphasis 
on procedures and methods for the evaluation and treatment of phonatory 
resonance and articulatory disorders. Lectures will be supplemented 
with patient presentations and demonstrations. (3-0)

521 Differential Diagnostic Techniques in Speech Pathology (3 semester hours)
Emphasis on procedures for the differential diagnosis of hearing impair-
ment, mental retardation, emotional disturbance and brain injury. Prin-
ciples of diagnosis; rational, validity, and reliability of diagnostic 
procedures. Lectures will be supplemented by the demonstrations and 
clinical observations. (2-5)

533 Organic Disorders in Speech Pathology (3 semester hours)
Neurophysiological background and etiologies of speech and language 
disorders associated with neurogenic speech and language disorders, cleft 
palate, and other orofacial pathologies. (3-0)

Elective Courses (Master's Degree)

These courses will be offered subject to sufficient student demand.

509 Special Topics/AGER (3 semester hours) (3-0)

522 Stuttering (3 semester hours)
A review of the theories of stuttering and the study of the approaches 
to the treatment of disorders producing stuttering symptomatology. The 
principles of therapeutic techniques and management programs will be 
supplemented by patient presentations and demonstrations. (3-0)
Communication Sciences II - Acoustical and Physiological Phonetics (3 semester hours)
The acoustic features of voice and speech production. The use of vocal synthesis methods to evaluate the relevance of the acoustic properties of vocal production to perception. Application of acoustic 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. [3-0] (3-3)

Experimental Audiology (3 semester hours)
Description of 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 electro-physiological techniques and objective audiometric procedures. Emphasis on the application of psychophysical theory to the analysis of results obtained from human and animal experimentation. [3-0] (3-2)

Seminar in Speech Pathology (3 semester hours)
Advanced study of selected topics in speech pathology with an emphasis 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. (3-0)

Introduction to Language and Linguistics (3 semester hours)
Introduction to the basic concepts of verbal communication, proceeding from (1) the acoustic characteristics and phonemic description, through (2) the application of information theory, to (3) language as a social behavior (3-0)

Linguistic Analyses (3 semester hours)
A survey of the techniques and methods of modern linguistics; including specific analysis of phonetic, phonological morphemic, and syntactic aspects of natural language systems. (3-0)

Directed Individual Studies in Communicative Disorders (1-3 semester hours)
Independent pursuit of advanced problems in speech pathology and/or audiology of special concern to qualified graduate students. May be repeated to a maximum of six semester hours. Requires the consent of the major professor and the instructor involved. (May be repeated for credit) (1-5 to 1-10)

Ph.D. Program in Communication Disorders

Core Courses

Course Description

Communicology I (3 semester hours)
The input stage of the communicative process. Basic acoustics and optics. Normal and pathological functioning of the auditory and visual systems. Principles of psychophysics. Sensory prostheses. (3-0)

Communicology II (3 semester hours)
The meaning stage in the acquisition and employment of communicative skills. Cognition and perception, psycholinguistics learning and memory, development psychology, evaluation and pathology, therapeutic procedures. (3-0)
613 Communicology III (3 semester hours)
The output stage: the generation of communicative behavior. Neurology, speech science, anatomy and physiology of speech, phonetics, evaluation, and pathology therapeutic procedures. (3-0)

614 Communicology IV (3 semester hours)
Techniques in the study and analysis of communicative behavior. Research design computer skills, evaluation methods, statistical measures, critiques of studies. (3-0)

621 Laboratory in Communicology I (3 semester hours)
Acoustical and optical measurement. Gross and microscopic anatomy of sensory systems. Physiology of sensory systems. Procedures in psychophysics. (0-9)

622 Laboratory in Communicology II (3 semester hours)
Measurements in cognition and perception. Measurement and analysis of phonetic, phonological, morphemic, and syntactic aspects of normal and impaired language. Therapeutic procedures. Supervised practice in the use of evaluative instruments and therapeutic strategies. (0-9)

623 Laboratory in Communicology III (3 semester hours)
Speech analysis and evaluations. Use and administration of standardized measures of articulation, language, and psycholinguistic tests. Examination of normal and pathological oral-peripheral mechanisms. Gross neuroanatomy. Dissection of the human brain. (0-9)

624 Laboratory in Communicology IV (3 semester hours)
Introduction to principles of computer programming, including hardware and software use. Design and implementation of experimental programs. Use of procedures emphasizing practical aspects of research methods. (0-9)

Electives

631 Delivery of Comprehensive Speech and Hearing Services in the Community I (3 semester hours)
Program development and implementation, including staff selection and development. Interagency relationships. Development of satellite programs. (3-0)

635 Advanced Neuroanatomy and Neurophysiology of Sensory Systems (3 semester hours)
Intensive study of brain mechanism and pathways of the auditory and visual systems. (3-0)

636 Neuropsychology of the Sensory Systems (3 semester hours)
Higher brain function as related to behavior in audition and vision. (3-0)

637 Neurogenic Speech and Language Disorders (3 semester hours)
Aphasia, agnosia, and apraxia. Study of linguistic impairments in aphasia and related disorders. Description and delineation of the apraxias, dysarthrias, agnosias. Procedure for evaluation and implications for treatment. (3-0)
Psychophysiology of Audition (3 semester hours)
Psychophysiological bases of auditory sensation and perception, including its theoretical foundations. Analysis of disturbed physiological function as evidenced in human auditory disorders with supporting evidence from animal experimentation. (2-5)

Psychological Approach to Physical Disability (3 semester hours)
Effects of sensory impairment on cognitive and affective development. Sociological aspects of physical disability. (3-0)

Learning Patterns of Sensorially Impaired Children (3 semester hours)
Assessment of learning patterns. Research in learning patterns. Evaluation of learning programs. (3-0)

Therapeutic Environments for Sensorially Impaired Children (3 semester hours)
Classroom management. Therapy settings. Parent/home programming. Behavior management. Developmental approaches to intervention. (3-0)

Practicum in Communication Behavior (3 semester hours)
Rotation through various settings in communication disorders agency. (May be repeated for credit) ([0-15]) (1-15)

Individual Study in Communicative Behaviors (3 semester hours)
Individualized program of reading, research and implementation of clinical strategies. (May be repeated for credit) (3-0)

Research in Communicology (2-12 semester hours)
(Varying from 0-6 to 0-36)

Dissertation (3 semester hours)
(May be repeated for credit) (0-9)
GRADUATE PROGRAM IN ENVIRONMENTAL SCIENCES (M.S., Ph.D.)

Members of Faculty currently participating:

PROFESSORS: Ervin J. Fenyves (Engineering and Applied Sciences), Francis S. Johnson (Physics), G. Fred Lee (Engineering and Applied Sciences), Cyrus L. Lundell (Biology), Patrick L. Odell (Acting Head) (Mathematical Sciences)

ASSOCIATE PROFESSOR: William I. Manton (Geology)

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 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 Soil 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 Courses 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 geological sciences, and can be applied to environmental studies. The completion of the construction of a new Environmental Sciences building equipped with special facilities and instruments is scheduled for early 1974.
SPECIFIC DEGREE REQUIREMENTS

Those students choosing to enter the program should have a Bachelor's Degree in a basic science, including mathematical sciences, 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, and 530.

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 area, and

(2) a master's thesis (minimum of six semester credit hours)

or

(1) six hours of electives selected from one of the topics area, 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 six 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

Core Curriculum

Course | Description
--- | ---
ENV 501 | Natural Resources I: Air (3 semester hours) Atmospheric physics, physical meteorology, and environmental micro-meteorology; sources, fate, and monitoring of air pollutants. (3-0)
ENV 502 | Natural Resources II: Water (3 semester hours) Hydrologic systems, water resources; sources, fate, and monitoring of pollutants. (3-0)
ENV 510 | Ecology I (3 semester hours) Earth processes: geological evolution, soil dynamics, geography of the earth, emergence and stabilization of biological diversity, population dynamics, ecological equilibria; energy networks in the biosphere. (3-0)
ENV 511 | Ecology II (3 semester hours) Man's impact on the biosphere: exploration, exploitation, conservation and development of natural resources. Aspects of comparative physiology; pathology and toxicology of different pollutants. Effects on the biosphere; public health problems. (3-0)
ENV 520 Energy Consumption: Resources and Impact (3 semester hours)
Energy need and resources; current technological problem. (3-0)

ENV 530 Economic, Social and Legal Aspects of Environmental Quality
(3 semester hours)
Introduction to environmental systems analysis; economics of public
works and water resource planning; economic, legal, and social prob-
lems in pollution control, land use, and resource management. (3-0)

Meteorology and Air Pollution

ENV 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)

ENV 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)

ENV 603 Biological Effects of Air Pollution (3 semester hours)
Biological processes involved with the absorption, fate and pathology
of air pollutants. Effects of air pollution on the biosphere. (3-0)

ENV 604 Air Pollution Measurements and Control (3 semester hours)
Sources and characteristics of air pollution, techniques of measure-
ments, air pollution control systems. (3-0)

ENV 605 Air Pollution and Public Health (3 semester hours)
Acute and chronic public health aspects of air pollution; problems of
detection, correlation, and evaluation of epidemiological data.
(3-0)

ENV 609 Special Topics in Air Pollution Control (3 semester hours)
(May be repeated for credit). (3-0)

Hydrology and Water Pollution

ENV 610 Applied Fluid Mechanics (3 semester hours) (3-0)

ENV 611 Dynamic Hydrology (3 semester hours)
Transport processes; dynamical modeling; analysis of hydrologic sys-
tems; measurement techniques. (3-0)

ENV 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)

ENV 613 Physics and Chemistry of Water and Soil Pollutants
(3 semester hours)
Source, chemistry, and transport of water pollutants. Analysis of
water and soil; instrumentation. (3-0)
ENV 614 Biological Effects of Water and Soil Pollution (3 semester hours)
Biological processes involved in the absorption, fate, and pathology of water pollutants; effects of water and soil pollution on the biosphere. (3-0)

ENV 615 Water and Soil Pollution Control (4 semester hours)
Sources of water and soil pollution; techniques of measurements; methods for solid and liquid waste disposal, design of control systems; legal, economical, social and management aspects. (3-3)

ENV 616 Water and Soil Pollution and Public Health (3 semester hours)
Acute and chronic public health aspects of water and soil pollution; problems of detection, correlation, and evaluation of epidemiological data. (3-0)

ENV 619 Special Topics in Water Quality Control (3 semester hours)
(May be repeated for credit). (3-0)

Energy Resources and Radioactive Pollution

ENV 620 Energy Problem in our Technological Civilization (3 semester hours)
The energy supply: coal, production cycles, world reserves, new energy sources. Environmental aspects of various fuels. (3-0)

ENV 621 Physics and Measurement of Nuclear Radiations (3 semester hours)
Properties and detection of radioactivity; dosimetry and shielding; radiation hazards in environmental systems; maximum permissible level of radiations, environmental monitoring and safety measures. (3-3)

ENV 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 procedures; ecological perturbations. (3-0)

ENV 623 Handling and Disposal of Radioactive Materials (2 semester hours)
Handling, shielding, storage and transportation of radioactive materials; sources and characteristics of radioactive wastes. (2-0)

ENV 629 Special Topics in Energy Resources (3 semester hours)
(May be repeated for credit). (3-0)

Ecology (To be offered after September, 1975)

ENV 630 Earth Processes (3 semester hours)
Geomorphology, igneous and sedimentary processes; evolution of continents and oceans; geochemistry of the sedimentary environment. (3-0)

ENV 631 Environmental Biology (3 semester hours)
Biochemical energetics, genetics, and evolution; physiology and interactions with the environment. (3-3)

ENV 632 Ethnogeography (3 semester hours)
Exploitation and conservation of renewable natural resources, exploration of untouched resources, development of resources. (3-0)
ENV 633 Mathematical Ecology (3 semester hours)
A general survey of the mathematical and statistical aspects of
classical ecology. Population genetics and dynamics; ecology of
animal communities; food chains and webs. (3-0)

ENV 634 Agriculture and Environmental Science (3 semester hours)
A general survey of the environmental aspects of agriculture and
forestry, land use for food production, pesticides, environmental
toxicology, food control and public health. (3-0)

ENV 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)

ENV 639 Special Topics in Ecology (3 semester hours)
(May be repeated for credit). (3-0)

Land Use and Landscape Architecture (To be offered after September, 1975)

ENV 641 Landscape Design and Construction (3 semester hours)
Theories and methods in landscape analysis, physiographic and cul-
tural aspects of landscape planning; environmental aspects. (3-0)

ENV 642 Regional and Urban Landscape Design (3 semester hours)
Landscape design for the community, renewal and development, social
and psychological factors; special problems of metropolitan areas;
environmental aspects. (3-0)

ENV 643 Social, Public Health and Safety Aspects of Landscape Architecture
(3 semester hours)
Social, health and safety aspects of regional and urban planning and
development; housing and industrial areas; highways and communica-
tion; air quality and water supplies; sewage system and solid waste
disposal; policy making, management and administrative problems.
(3-0)

ENV 644 Special Topics in Landscape Architecture (3 semester hours)
(May be repeated for credit). (3-0)

Environmental Management, Social and Economic Problems

MAS 725 Operations Research Techniques for Environmental Quality
(3 semester hours)
Applications of operations research techniques to problems of en-
vironmental quality. Critical review of current literature. Pre-
requisite: MAS 613. (3-0)

MAS 755 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)

MAS 767 Land Use and Resource Management (3 semester hours)
Seminar or selected topics in optimal land use models and the en-
vironmental and economic trade-offs necessary for effective manage-
ment. (3-0)
Economic Planning of the Public Sector (3 semester hours)
Prepresents a variety of applications of operations research techniques
in the areas of economics, environmental engineering and urban plan-
ing. Several quantitative models are examined and the advantage or
limitations of each are investigated from a methodological and prac-
tical viewpoint. (3-0)

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)

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)

Other Courses

Special Topics/TAGER (3 semester hours) (3-0)

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 inter-
disciplinary 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
MS thesis, a change in problem may necessitate a longer time to com-
plete the MS Degree. (0-9)

Thesis (3 semester hours)
(May be repeated for credit). (0-9)

Research in Environmental Science (3-12 semester hours)
Open to students who are candidates for the Ph.D. Degree. (0-9)

Dissertation (3 semester hours)
(May be repeated for credit). (0-9)
GRADUATE PROGRAM IN GEOLOGICAL SCIENCES

[PROFESSORS: P. Abramovic, A. L. Hales, E. E. Helsley (Head), M. Landisman]

[ASSOCIATE PROFESSORS: M. Halpern, E. Pessagno, B. E. Presnall, J. B. Urban]


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

Members of Faculty currently participating:

PROFESSORS: Anton L. Hales (Geosciences), Charles E. Helsley (Head) (Geosciences), Mark Landisman (Geosciences)

ASSOCIATE PROFESSORS: James L. Carter (Geosciences), Martin Halpern (Geosciences), William I. Manton (Geosciences), Emile A. Pessagno, Jr. (Geosciences), Dean C. Presnall (Geosciences), James B. Urban (Geosciences)

Joint Appointments from The University of Texas Marine Sciences Institute (Galveston Location):

PROFESSORS: H. James Dorman (Geosciences), William M. Ewing (Geosciences), Gary V. Latham (Geosciences), Joel S. Watkins (Geosciences), J. Lamar Worzel (Geosciences)

ADJUNCT PROFESSOR: Andrew D. Suttle, Jr. (Geosciences)

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:

A. Each student must fulfill the following Program requirements:

1. Complete with satisfactory grades the Core Courses (Core I and Core II).
2. Fulfill the minimal mathematics requirement (one course beyond [calculus] one year of calculus in either mathematics or statistics).
3. Prove his scientific facility 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. Master's of Science aspirants must take at least 5 advanced courses (exclusive of Core I and Core II) with acceptable grades.
7. Ph.D. aspirants should normally take at least 7 advanced courses (exclusive of Core I and Core II). Two of these courses may be research courses.
B. General

Requirements for granting degrees for the M.S. and Ph.D. are stated under "General Procedures and Requirements for Degrees [Candidates]," page .

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, an X-ray diffractometer, an absorption spectrophotometer, an electron microprobe, a scanning electron microscope, high-pressure and high-temperature experimental petrology laboratories, a paleomagnetic laboratory, an organic geochemistry laboratory, equipment for seismic studies on land and at sea, a seismic data processing system using a PDP-15 computer, and a library of WWSSN records. The University has an IBM 360/65 computer which is available for student computing. The University of Texas (North-Central Texas) Regional Computer Center is now operationally offering additional facilities to graduate students in geological sciences. Other facilities at Southern Methodist University are also available to students.]

[In addition to the above facilities, students enrolled at UTB have access to courses in Marine Sciences through The University of Texas Marine Science Institute. Students also have access to the facilities of the Institute of Geophysics and Earth Sciences at Galveston and Port Aransas.]

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 a flume and an automated settling tube, an array of recording three-component magnetovariometers, 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 University Regional Computer Center. 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.

<table>
<thead>
<tr>
<th>Geosciences Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL</td>
</tr>
<tr>
<td><strong>Course</strong></td>
</tr>
</tbody>
</table>
| 500 | Introduction to Geology (3 semester hours) Manton, Presnall, Mitterer  
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, chemical fractionation within the earth, etc.  
This course is open only to students whose major undergraduate study was in subjects other than geology. (3-0) |
| 501 | Core I (3 semester hours) Staff  
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) |
| 502 | Core II (3 semester hours) Staff  
Regional and global stratigraphy with emphasis on the tectonic framework and chemical evolution of sediments; evidence for early life and the ecologic significance of its subsequent evolution; modern concepts of bio- and lithostratigraphic correlation. (3-0) |
| 503 | Use of the Computer (3 semester hours) Staff  
An introduction to computer languages and programming as applied to geological problems. Laboratory sessions are included. (2-3) |
| 504 | Spring Field Trip (1 semester Hour) Staff  
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. (0-3) |
| 505 | Field Geology (4 semester hours) Helsley, Manton, Halpern  
An introduction to the interrelation of geologic features in the field including the fundamental principles and techniques of geologic mapping. Course consists of lectures, 8 days of detailed field mapping and preparation of a report prepared in professional form. (2-6) |
| 506 | Field Geology--Summer Camp (6-12 semester hours) (1-20) Staff  
(Note: Students are responsible for all personal expenses related to field trips.) |
| 507 | Introduction to Field Geology (1 semester hour) Manton, Presnall, Mitterer  
A series of three, two-day field trips to study a variety of geologic features and rock types. This course is designed to accompany Geosciences 500 and is open only to students whose major undergraduate study was in subjects other than geology. (0-3) |
<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>508</td>
<td>Special Topics in Geology-Geophysics (3 semester hours) (3-0) (Offered at Dallas and Galveston) Staff</td>
</tr>
<tr>
<td>509</td>
<td>Special Topics/TAGRR (3 semester hours) (3-0) Staff</td>
</tr>
<tr>
<td>510</td>
<td>Elements of Earth's History (3 semester hours) Staff Overview of historical geology and its relationships to sedimentation, structural geology, stratigraphy and plate tectonics. Pre-requisite GEO 500, or consent of instructor. GEO 511 can be taken concurrently. (3-0)</td>
</tr>
<tr>
<td>511</td>
<td>Geology Laboratory II (1 semester hour) Staff Sedimentary rocks, paleontology, structural and stratigraphic problems. (0-3)</td>
</tr>
<tr>
<td>512</td>
<td>Geology and Man (3 semester hours) Staff 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. (3-0)</td>
</tr>
</tbody>
</table>

**PALEONTOLOGY**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>530</td>
<td>Invertebrate Paleontology (4 semester hours) Pessagno Studies of the morphology, evolution, classification and paleocology of invertebrates important in the fossil record. (2-6)</td>
</tr>
<tr>
<td>531</td>
<td>Principles &amp; Methods of Paleontology (3 semester hours) Urban, Pessagno Collection, processing and microscopic techniques in paleontology. (2-3)</td>
</tr>
<tr>
<td>532</td>
<td>Micropaleontology I (4 semester hours) Pessagno Introduction to the study of invertebrate microfossils with emphasis on the Foraminiferida, Ostracoda, and Radiolaria. 535 to be taken concurrently. (4-0)</td>
</tr>
<tr>
<td>533</td>
<td>Palynology I (2 semester hours) Urban An introduction to palynology. Morphology, systematics and stratigraphic distribution of Mesozoic and Cenozoic palynomorphs, including spores, pollen, dinoflagellates, and hystrichospheres. 536 to be taken concurrently. (2-0)</td>
</tr>
<tr>
<td>534</td>
<td>Paleoecology (3 semester hours) Urban Relations between sediment type, organism distribution, diagenesis, and the historical continuity of community organization. (3-0)</td>
</tr>
<tr>
<td>535</td>
<td>Micropaleontology IA (2 semester hours) Pessagno Laboratory studies of microfossils important in the fossil record. (0-6)</td>
</tr>
<tr>
<td>536</td>
<td>Palynology IA (2 semester hours) Urban Laboratory studies of Mesozoic and Cenozoic palynomorphs, including spores, pollen, dinoflagellates, and hystrichospheres. (0-6)</td>
</tr>
</tbody>
</table>
Micropaleontology (2 semester hours) Pessagno
Morphology, phylogeny, and classification of Mesozoic and Cenozoic planktonic Foraminifera. 633 to be taken concurrently. (2-0)

Micropaleontology IIA (2 semester hours) Pessagno
Investigation of Mesozoic Globigerinacea in the laboratory. Special studies dealing with the stratigraphic distribution of Upper Cretaceous planktonic Foraminifera in Texas. Field trips will be mandatory. (0-6)

Palynology II (2 semester hours) Urban
Morphology, systematics and stratigraphic distribution of Paleozoic palynomorphs, including spores, pollen, acritarchs, chitinozoa, and microscopic algae. 635 to be taken concurrently. (2-0)

Palynology IIA (2 semester hours) Urban
Laboratory studies of Paleozoic palynomorphs, including spores, pollen, acritarchs, chitinozoa, and microscopic algae. (0-6)

Seminar in Paleontology (3 semester hours) (3-0) Pessagno

Seminar in Palynology (3 semester hours) (3-0) Urban

Research in Paleontology (1-12 semester hours) (Offered at Dallas and Galveston) Pessagno, Urban (May be repeated for credit).

SEDIMENTOLOGY--STRATIGRAPHY

Course Description

541 [Biestrata~igrey]Principles of Stratigraphy (3 semester hours) Pessagno
Principles of biostratigraphy. Evolution of modern biostratigraphic nomenclature: D'Orbigny to Hedberg. Prerequisite: An upper division undergraduate course or graduate course in palentology. (3-0)

542 Sedimentary Environments (3 semester hours) [Schellie]
The interpretation of ancient sedimentary environments of deposition based on the study of primary sedimentary structures, grain size analysis, fossils, trace fossils, unit geometry, quartz grain surface textures, trace element, geochemistry, etc. Deals with classic terrigenous as well as carbonate sediments. (3-0)

543 Introductory Sedimentology (3 semester hours) [Schellie] Mitterer
Basic principles of physical and chemical sedimentation. Fluid-sediment interactions; introduction to hydrodynamics; water chemistry; weathering and formation of carbonate and siliceous sediments. (3-0)

544 Sedimentary Petrography I (2 semester hours) [Schellie]
Description, classification and genesis of clastic terrigenous sedimentary rocks in thin-section and hand sample. Emphasis is on sandstones, but coverage of siltstones, shales and chemical deposits (chert and evaporites) is also included. 545 to be taken concurrently. (2-0)
Sedimentary Petrography IA (2 semester hours) Laboratory studies of clastic sediments. (0-6)

Sedimentary Petrography II (3 semester hours) Study of the origin, textures, distribution patterns and alteration of recent and ancient carbonate sediments. The chemistry of formation and diagenesis of carbonates will be emphasized. (3-0)

Sedimentary Petrography III (2 semester hours) Description, classification and genesis of carbonate grains as seen in thin-section and hand samples. Includes the microscopic identification of calcareous fossils. 548 to be taken concurrently. (2-0)

Sedimentary Petrography IIIA (2 semester hours) Laboratory studies of carbonate sediments. (0-6)

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. (3-0)

Sedimentary Petrography I (4 semester hours) Description, classification and genesis of clastic terrigenous sedimentary rocks in thin-section and hand sample. Emphasis is on sandstones, but coverage of siltstones, shales and chemical deposits (cherts and evaporites) also is included.

Seminar in Stratigraphy (3 semester hours) (3-0) Urban, Pessagno

Seminar in Sedimentation (3 semester hours) (3-0) Staff

Research in Biostratigraphy-Paleontology (1-12 semester hours) (Offered at Dallas and Galveston) Urban, Pessagno

Research in Stratigraphy-Sedimentology (1-12 semester hours) (Offered at Dallas and Galveston) Staff

GEOCHEMISTRY

Biogeochemistry (3 semester hours) Composition and distribution of organic matter in sedimentary environment; influence on sedimentary processes; carbonate geochemistry; organic-inorganic interactions; diagenesis; origin of life and petroleum. 557 to be taken concurrently. (3-0)

Environmental Geochemistry (3 semester hours) Geochemistry of the sedimentary environment including atmosphere, hydrosphere and biosphere and the effects of man on the environment. 556 to be taken concurrently. (3-0)

Sedimentary Geochemistry (3 semester hours) Organic and inorganic aspects of the sedimentary environment including sediments, water and organisms. (3-0)
Instrumental Techniques in Geochemistry-Petrology
(4 semester hours) Carter
Modern instrumental techniques including atomic absorption spectrophotometry, mass spectrometry, electron microprobe spectrophotometry, mass spectrophotometry, scanning electron microscopy, and X-ray diffraction and sample preparation. (2-6)

Environmental Geochemistry Laboratory
(1 semester hour) Mitterer, Carter, Manton
Laboratory procedures related to environmental processes. (0-3)

Laboratory Techniques in Biogeochemistry and Sedimentary Geochemistry (1 semester hour) Mitterer
This course may be taken concurrently with either biogeochemistry or sedimentary geochemistry. (0-3)

Geochemistry (3 semester hours) Carter
Principles of geochemistry including geochemistry of the elements, the hydrosphere, the atmosphere and the biosphere; chemical evolution of the solar system and igneous and sedimentary rocks. (3-0)

Isotope Geochemistry (3 semester hours) Manton
Application of isotopic abundance measurements of stable and radiogenic isotopes to problems concerning the origin of the elements, the solar system and rock systems. (3-0)

Geochronology ([2]3 semester hours) Halpern
Uranium-lead, rubidium-strontium, and potassium-argon radiometric age dating as applied to the solution of geologic problems. (3-0)

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)

Geochronology Laboratory (2 semester hours) Halpern, Manton
Laboratory studies dealing with mass spectrometric methods for the determination of the age and origin of rocks. Prerequisite: 653 and/or 654. (0-6)

Seminar in Isotope and Trace Element Geochemistry
(3 semester hours) Manton
Discussion of the application of radiogenic isotopes and trace element fractionation patterns to the problem of the origin of igneous rocks. (1-0)

Seminar in Geochemistry (3 semester hours) (3-0) Staff (Offered at Dallas and Galveston)

Seminar in Geochronology (3 semester hours) (3-0) Halpern (Offered at Dallas and Galveston)

Research in Geochemistry (1-12 semester hours) Staff (Offered at Dallas and Galveston) (May be repeated for credit).
PETROLOGY-MINERALOGY

Course  Description

560  Advanced Mineralogy (2 semester hours) Carter
Elements of optical mineralogy, X-ray and chemical properties of
rock forming minerals. 562 to be taken concurrently. (2-0)

561  Introduction to Igneous and Metamorphic Petrology
(3 semester hours) Carter, Manton, Presnall
Origin, classification and nomenclature of igneous and metamorphic
rocks. Topics include mineralogy, trends and associations of ig-
neous and metamorphic rocks, an introduction to phase diagrams, and
a discussion of igneous and metamorphic processes in light of recent
concepts of plate tectonics. 564 to be taken concurrently. (3-0)

562  Advanced Mineralogy Laboratory (2 semester hours) Carter
Microscope, X-ray diffractometer and chemical studies of the rock
forming minerals. (0-6)

564  Igneous and Metamorphic Petrology Laboratory
(1 semester hour) Carter, Manton, Presnall
Identification of rocks and minerals in hand specimens and under the
microscope. (0-3)

560  Phase Equilibria and Thermodynamics I (3 semester hours) Presnall
Principles of phase equilibria and thermodynamics as applied to pe-
trologic problems, pressure-temperature-composition phase diagrams,
pressure-temperature projections of multicomponent systems using
Schreinemakers' rules, methods of deducing paths of crystallization
and fusion, calculation of phase diagrams from thermodynamic data.
(3-0)

561  Igneous Petrology (3 semester hours) Presnall
Origin of igneous rocks in light of recent theoretical, experimental
and field studies, petrology of the crust and upper mantle, basalt,
granite and andesite genesis. (3-0)

562  Phase Equilibria and Thermodynamics II (3 semester hours) Presnall
Continuation of 560. (3-0)

563  Electron Microprobe Techniques (4 semester hours) Carter
Introduction to principles and procedures in scanning electron mi-
croprobe spectrophotometry including energy dispersive analysis.
(2-6)

569  Seminar in Petrology (3 semester hours) (3-0) Staff

960  Research in Petrology (1-12 semester hours) Staff
(May be repeated for credit).

STRUCTURAL GEOLOGY--TECTONICS

570  Structural Geology (3 semester hours) Manton
An intermediate level course for the student who has had little or
no exposure to the subject. The fundamentals of descriptive struc-
tural geology will be covered, followed by more advanced concepts
leading to the Coulomb-Nohr criterion for rock failure and the an-
alysis of rock deformation by means of finite homogeneous strain the-
ory. Prerequisites: Analytical geometry and calculus. (2-3)
Tectonics (3 semester hours) Helsley
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)

Regional Geology of North America (3 semester hours) Urban
Historical development of the North American Continent. (3-0)

Regional Geology (excluding North America) (3 semester hours) Helsley, Manton, Halpern, Pessagno
Examination of the stratigraphy and tectonics of selected areas in central Europe, the Caribbean, Africa, South America and Antarctic and their relation to a global tectonic framework. (3-0)

Petroleum Geology (3 semester hours) Mitterer, Urban, Outside Lecturers
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. (3-0)

Area Geology (3 semester hours) Staff
An examination of the geology of Texas and adjacent states. Two or three two-day field trips to adjacent regions such as the Gulf Coastal Plain, Llano Uplift, Ouachita, Arbuckle and Wichita Mountains. (3-0)

Advanced Structural Geology (3 semester hours) Helsley
Mechanics of materials, development of rock fabrics, development of basins and mountain systems with particular emphasis on those of the North American Continent. (3-0)

Marine Geology (3 semester hours) Mitterer
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 thicknesses of sediments in various basins. (3-0)

Seminar on Marine Geology (3-0) (Galveston only) Staff
Discussion and reviews of literature on selected topics.

Seminar in Tectonics (3 semester hours) Helsley
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 (1-12 semester hours) (Offered at Dallas and Galveston) Helsley
(May be repeated for credit).

Research in Marine Geology (1-12 semester hours) Staff
(Offered at Dallas and Galveston)
### GENERAL GEOPHYSICS

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
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</table>
| 580            | **Applied Geophysics I** (3 semester hours) Landisman  
Techniques and interpretation of seismic, gravitational, magnetic, and electric prospecting methods as applied to exploration of the crust. (3-0) |
| 581            | **Paleomagnetism** (3 semester hours) Helsley  
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) |
| 582            | **Potential Methods in Geophysics** (3 semester hours)  
Potential theory, emphasizing application to geophysical problems, such as gravity, magnetics and heat flow. (3-0) |
| 583            | **Instrumental Techniques in Geophysics** (4 semester hours)  
A discussion of the instruments commonly used in investigating the interior of the earth. (2-6) |
| 584            | **Digital Methods Used in Geophysics**  
(3 semester hours) Visiting Lecturers  
Fourier series and transform analysis of time series. (3-0) |
| 680            | **Applied Geophysics II** (3 semester hours) Landisman  
Continuation of topics in Applied Geophysics I. (Permission of instructor required.) (3-0) |
| 681            | **Geophysical Implications of Plate Tectonics**  
([?]3 semester hours) Landisman  
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. ([2-0-0]) (3-0) |
| 682            | **Terrestrial Magnetism & Geoelectricity**  
(3 semester hours) Staff  
Studies of the main magnetic field of the earth; secular variation; external magnetic field; electromagnetic induction and conductivity in the earth. (3-0) |
| 684            | **Seminar on Numerical Methods in Geophysics**  
(Galveston only) Staff  
Formal consideration of computational topics related to current research problems. |
| 685            | **Seminar on Gravity and Geodesy**  
(Galveston only) Staff  
Study and discussion of selected topics. |
| 686            | **Seminar on Marine Geophysics**  
(Galveston only) Staff  
Study and discussion of selected topics. |
<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Name</th>
<th>Description</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>687</td>
<td>Seminar in Rock Magnetism</td>
<td>(3 semester hours) Helsley</td>
<td>3-0</td>
<td></td>
</tr>
<tr>
<td>688</td>
<td>Seminar in Electromagnetic Sounding</td>
<td>(3 semester hours) Landisman</td>
<td></td>
<td></td>
</tr>
<tr>
<td>689</td>
<td>Seminar in Paleomagnetism</td>
<td>Current topics in paleomagnetism and their relation to geology and geophysical applications. (3-0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>980</td>
<td>Research in Geophysics</td>
<td>(1-12 semester hours) Staff (Offered at Dallas and Galveston) (May be repeated for credit).</td>
<td>1-12</td>
<td></td>
</tr>
<tr>
<td>981</td>
<td>Research in Marine Geophysics</td>
<td>(1-12 semester hours) Staff (Offered at Dallas and Galveston)</td>
<td>1-12</td>
<td></td>
</tr>
<tr>
<td>982</td>
<td>Research in Paleomagnetism</td>
<td>(1-12 semester hours) Staff (May be repeated for credit).</td>
<td>1-12</td>
<td></td>
</tr>
</tbody>
</table>

**SEISMOLOGY**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Name</th>
<th>Description</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>590</td>
<td>Seismology</td>
<td>An introductory course in seismology. Analysis of stress and strain; the wave equation; plane and spherical waves; surface waves; seismicity; earthquake mechanisms. (3-0)</td>
<td>3-0</td>
<td></td>
</tr>
<tr>
<td>692</td>
<td>Physics of the Interior of the Earth I</td>
<td>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)</td>
<td>3-0</td>
<td></td>
</tr>
<tr>
<td>693</td>
<td>Physics of the Interior of the Earth II</td>
<td>Continuation of 692. (3-0)</td>
<td>3-0</td>
<td></td>
</tr>
<tr>
<td>694</td>
<td>Seminar on Lunar Seismology and Structure</td>
<td>Review of current literature and results of lunar geophysics.</td>
<td>3-0</td>
<td></td>
</tr>
<tr>
<td>695</td>
<td>Theoretical Seismology I</td>
<td>Background of elastic wave theory. Mathematical and physical basis, fundamental concepts. Must be taken concurrently with 697. Permission of instructor required. (3-0)</td>
<td>3-0</td>
<td></td>
</tr>
<tr>
<td>696</td>
<td>Theoretical Seismology II</td>
<td>Continuation of theoretical basis for elastic wave propagation, dispersion, generation, and attenuation. Must be taken concurrently with 698. Prerequisites: 695 and 697. (3-0)</td>
<td>3-0</td>
<td></td>
</tr>
<tr>
<td>697</td>
<td>Seismological Literature I</td>
<td>Study of selected references illustrating important ideas related to the propagation, dispersion, generation and attenuation of elastic disturbances. Must be taken concurrently with 693. Permission of instructor required. (3-0)</td>
<td>3-0</td>
<td></td>
</tr>
<tr>
<td>698</td>
<td>Seismological Literature II</td>
<td>Continuation of study of selected references illustrating important concepts of elastic waves. Must be taken concurrently with 696. Prerequisites: 695 and 697. (3-0)</td>
<td>3-0</td>
<td></td>
</tr>
</tbody>
</table>
Seminar in Seismology (3 semester hours) Staff
Discussion and review of literature on selected topics in seismology.
(Offered at Dallas and Galveston) (3-0)

Research in Seismology (1-12 semester hours) Staff
(Offered at Dallas and Galveston) (May be repeated for credit).

Thesis (3 semester hours)
(Offered at Dallas and Galveston) (May be repeated for credit).
(0-9)

Dissertation (3 semester hours)
(Offered at Dallas and Galveston) (May be repeated for credit).
(0-9)
GRADUATE PROGRAM IN INTERNATIONAL MANAGEMENT STUDIES (M.A., Ph.D.)

Members of Faculty currently participating:

PROFESSORS: Raymond P. Lutz (Acting Head) (Management Science), Lee H. Smith (Management Science), Howard F. Van Zandt (Management Science)

ASSISTANT PROFESSORS: Laurence A. Madeo (Management Science), Larry J. Merville (Management Science), David M. Raddock (Political Science), Klaus Truemper (Management Science)

LECTURER: Jack Seward (Foreign Languages)

OBJECTIVES

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 operating systems of trade, industry and modes of bureaucratic operation.

PROGRAM

The Program in International Management Studies would provide students with the opportunity to learn in depth the fundamentals of (a) international management, and (b) cultural, socio-political and geographical constraints affecting international business decisions, with emphasis on the Pacific Basin. It would also provide 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 including (1) the basic core courses in Management Systems, (2) the courses in the International Management Core, (3) one of the sets of courses for the various geographic 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 Core relates to the functional business topics of management, marketing and commercial law in the international environment. In keeping with the existing philosophy of The University of Texas at Dallas, these courses treat management problems from the system perspective, cutting across functional lines. A student may elect a 33 credit hour program and upon completion of the course requirements, submit a Master's Thesis.

BASIC CORE IN MANAGEMENT SYSTEMS (see Graduate Program in Management and Administrative 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 CORE (12 semester hours)

590 Technical Licensing
596 Comparative Management Methods and Cross Cultural Behavior I
598 Exporting and Importing I
694 Modernization of Developing Areas

ELECTIVES – AREA STUDIES

9 semester hours from various geographic sub-regions of China, 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. Each student must (1) complete the Functional International Management Development Core, (2) complete the Advanced Core Courses, (3) complete 9 semester hours of Area Studies Courses 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 DEVELOPMENT CORE (9 semester hours)

591 Technical Licensing and Management II
599 Exporting and Importing II
696 or 697 China or Japan

ADVANCED 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 Corporation 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 Courses, the student must pass written and oral qualifying examinations to be admitted to doctoral candidacy.

ELECTIVES – AREA STUDIES

9 semester hours required from various geographic sub-regions of China, Japan, or others from the Pacific Basin.

ELECTIVES

9 semester hours of electives to be selected by the student with his adviser to help prepare him to undertake dissertation research.

General dissertation requirements are listed on pages ____.
<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>590</td>
<td>Technical Licensing and Management I (3 semester hours)</td>
</tr>
<tr>
<td></td>
<td>Licensing of technology; management of branch offices, joint ventures</td>
</tr>
<tr>
<td></td>
<td>and subsidiaries; recruitment and training for service overseas and</td>
</tr>
<tr>
<td></td>
<td>in back up positions in the home office; international transfer of</td>
</tr>
<tr>
<td></td>
<td>management skills; communications. (3-0)</td>
</tr>
<tr>
<td>591</td>
<td>Technical Licensing and Management II (3 semester hours)</td>
</tr>
<tr>
<td></td>
<td>Continuation of 590. (3-0)</td>
</tr>
<tr>
<td>592</td>
<td>East Asia and Oceania I (3 semester hours)*</td>
</tr>
<tr>
<td></td>
<td>Flow of trade and investments between the U.S. and the countries in</td>
</tr>
<tr>
<td></td>
<td>the area, cooperative efforts in developing countries; cooperative</td>
</tr>
<tr>
<td></td>
<td>efforts in communist nations, tourism, air and sea transportation. (3-0)</td>
</tr>
<tr>
<td>593</td>
<td>East Asia and Oceania II (3 semester hours)*</td>
</tr>
<tr>
<td></td>
<td>Continuation of 592. (3-0)</td>
</tr>
<tr>
<td>595</td>
<td>China Trade (3 semester hours)*</td>
</tr>
<tr>
<td></td>
<td>Canton trade fair, barter arrangements, techniques of dealing with</td>
</tr>
<tr>
<td></td>
<td>the Chinese, foreign products needed by China, products China offers</td>
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<tr>
<td></td>
<td>for export, Chinese foreign policy as it influences her external trade.</td>
</tr>
<tr>
<td></td>
<td>(3-0)</td>
</tr>
<tr>
<td>596</td>
<td>Comparative Management Methods and Cross Cultural Behavior I (3 semester</td>
</tr>
<tr>
<td></td>
<td>hours) International employment practices, training, decision-making</td>
</tr>
<tr>
<td></td>
<td>techniques, commercial law, competitiveness, loyalties, work ethic,</td>
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<tr>
<td></td>
<td>productivity, research and development, preferred industries, plans for</td>
</tr>
<tr>
<td></td>
<td>1970's and 1980's, politico-government-business cooperation, adaptation of</td>
</tr>
<tr>
<td></td>
<td>management methods to foreign situations. (3-0)</td>
</tr>
<tr>
<td>597</td>
<td>Comparative Management Methods and Cross Cultural Behavior II (3 semester</td>
</tr>
<tr>
<td></td>
<td>hours) Continuation of 596. (3-0)</td>
</tr>
<tr>
<td>598</td>
<td>Exporting and Importing I (3 semester hours)</td>
</tr>
<tr>
<td></td>
<td>Tariffs, quotas, non-tariff barriers, OECD, GATT, European Common Market,</td>
</tr>
<tr>
<td></td>
<td>rebates, free trade zones, drawbacks, insurance, export support problems,</td>
</tr>
<tr>
<td></td>
<td>most favored nation treaties, exporting and marketing abroad. (3-0)</td>
</tr>
<tr>
<td>599</td>
<td>Exporting and Importing II (3 semester hours)</td>
</tr>
<tr>
<td></td>
<td>Continuation of 598. (3-0)</td>
</tr>
<tr>
<td>690</td>
<td>Commercial Geography of Oceania (3 semester hours)*</td>
</tr>
<tr>
<td></td>
<td>Political, economic, ecological, and social elements in the geography of</td>
</tr>
<tr>
<td></td>
<td>the region; resources; exploitation of the sea bed; off-shore oil</td>
</tr>
<tr>
<td></td>
<td>exploitation; pollution; racial and cultural regions. (3-0)</td>
</tr>
</tbody>
</table>

*Not offered 1974-75
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; ocean floor mining; pollution; racial and cultural regions. (3-0)

693 Comparative Psychologies and Political Cultures (3 semester hours)
Anglo-Saxon, Pacific Islander, Japanese, Chinese, Russian, Southeast Asian, etc. characteristic behavior. Xenophobia. Work ethic. (3-0)

694 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)

696 China (3 semester hours)
Industry, agriculture, fisheries, mining, forestry, climate, races, population problems, commerce, government, politics, overseas Chinese, foreign economic relations. (3-0)

697 Japan (3 semester hours)
Industry, agriculture, fisheries, mining, forestry, population problems, commerce, government, politics, foreign economic relations. (3-0)

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 hijacking; narcotics smuggling; terrorism; Interpol; extradition agreements. (3-0)

791 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)

792 United States and China Commercial Relations since the 1780's (3 semester hours)*
First contacts via the northwest coast of America; trade through Canton and Macao; opening of Hong Kong and Shanghai; open door policy; World War II, anti-communist philosophy in the United States; detente; revival of relations. (3-0)

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 influence of business upon international political behavior; readings and discussion of recent and older works of theoretical significance, both empirical and normative. (3-0)

*Not offered 1974-75
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)

797 Problems in International Management Using Case Study Methods
(3 semester hours)*
Specific experiences of American, European, and other companies in management overseas. (3-0)

798 The Role of the Multinational Corporation in World Trade
(3 semester hours)*
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)

799 International Banking (3 semester hours)
The World Bank, various export-import banks, The Asian Development Bank; public and private international banks; representative offices. (3-0)

890 Commercial Japanese Language I (3 semester hours)
Oral and written Japanese, business vocabulary. (3-0)

891 Commercial Japanese Language II (3 semester hours)
Continuation of 890. (3-0)

892 Commercial Japanese Language III (3 semester hours)
Continuation of 891. (3-0)

893 Commercial Japanese Language IV (3 semester hours)
Continuation of 892. (3-0)

896 The Far East in the Modern World I (3 semester hours)*
The first course in a two-course sequence involving 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)*
Continuation of 896. (3-0)

990 Special Topics in International Business (3 semester hours) (3-0)
(May be repeated for credit)

991 Problems of Chinese 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; aspects of the Sino-Soviet Dispute in historical perspective; factors in the rapprochement with the U.S.; role in the United Nations.
Prerequisite: Permission of the instructor. (May be repeated for credit) (3-0)

*Not offered 1974-75
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Credit Hours</th>
<th>Repeatability</th>
</tr>
</thead>
<tbody>
<tr>
<td>992</td>
<td>Readings in International Business (3 semester hours)</td>
<td>Directed reading in areas of specific interest. (May be repeated for credit)</td>
<td>0-9</td>
<td></td>
</tr>
<tr>
<td>993</td>
<td>Seminar in International Business (3 semester hours)</td>
<td>Discussion of selected concepts and theories in international business. (May be repeated for credit)</td>
<td>3-0</td>
<td></td>
</tr>
<tr>
<td>908</td>
<td>Thesis (3 semester hours) (0-9)</td>
<td>(May be repeated for credit)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>909</td>
<td>Dissertation (3 semester hours) (0-9)</td>
<td>(May be repeated for credit)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Members of Faculty currently participating:

PROFESSORS: Raymond P. Lutz (Head) (Management Science), Lee H. Smith (Management Science), Howard Van Zandt (Management Science)

ASSISTANT PROFESSORS: Laurence A. Madeo (Management Science), Larry J. Merville (Management Science), David M. Raddock (Political Science), Klaus Truemper (Management Science)

LECTURERS: James E. Moore (Psychology), Eugene Payne (Management Science), Andrew B. Seidel (Management Science)

OBJECTIVES

Successful management and administrative "problem-solvers" must: (1) have a good foundation applicable to management and administration; (2) know the theory and use of the applied sciences relevant to management and administration; (3) possess a keen understanding of the basic functions involved in management and administration; (4) employ an innovative ability to accomplish administrative goals and 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(S)

[Prerequisites will be set so that an individual entering the program not only will be well-grounded, but also will possess an ability to read rapidly and comprehend effectively as well as have a good capability in English grammar and composition.]

[The student will be (1) rigorously grounded, (2) application-oriented but theoretically capable, and (3) motivated toward and capable of "problem-solving".]

[Beginning with these prerequisites, an individual specializing in...]

[An...Management and Information Systems will progress through a program which has three basic premises: (1) Mathematical and related concepts (both theory and applications) must be emphasized in classroom activities; (2) basic management and administrative concepts and relevant behavioral concepts can be mastered with minimal classroom exposure, augmented by well-structured integrated reading seminars; and (3) integration of all theory, concepts and appropriate applications can be achieved in various specializations (e.g., information science, data management, management in education, management in administration, management of financial institutions, planning of management systems, and management for transportation) through appropriately selected seminars in management systems (which emphasize innovative and creative applications of statistics, operations research, and computer sciences).]
The 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, and behavioral management science 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 Graduate Degrees [Candidates]," page [47].

**Specific-degree-requirements-for-students-int**

**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 a total of 36 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 a 33 credit hour program and upon completion of the course requirements, submit a Master's Thesis.

**BASIC CORE**

612 Quantitative Management Science II
632 Accounting II
641 Financial Management
652 Management Systems II
661 Behavioral Management Science I

**MANAGEMENT SCIENCE CORE**

613 Mathematical Programming I
642 Investment Management
653 Management Systems III
671 Readings in Management I

**ELECTIVES**

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.
Prerequisites are those of the M.S. program. Program course requirements consist of Core Courses (30 semester hours), Advanced Core Courses (12 semester hours), and Electives (42 semester hours). Core Courses 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 Stochastic Systems
- 745 Economic Models II
- 861 Man-Machine Decision Systems

Having completed Core and Advanced Core requirements, the student must pass written and oral qualifying examinations to be admitted to doctoral candidacy.
**ELECTIVES**

Elective Courses in the three areas of concentration (Management Science, Business Systems, Societal Systems) 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 advisor from the list of elective courses. General dissertation requirements are listed on pages...

**COURSE DESCRIPTIONS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>509</td>
<td>Special Topics/TAGE (3 semester hours) (3-0)</td>
</tr>
<tr>
<td>511</td>
<td>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)</td>
</tr>
<tr>
<td>512</td>
<td>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)</td>
</tr>
<tr>
<td>551</td>
<td>Algorithmic Processes (was 521) (9 semester hours) An introduction to algorithmic processes and computer sciences. Special attention is given to utilizing the FORTRAN programming language in management science applications. (3-0)</td>
</tr>
<tr>
<td>611</td>
<td>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 511, 512. (3-0)</td>
</tr>
<tr>
<td>612</td>
<td>Quantitative Management Sciences II (3 semester hours) A quantitative introduction to basic techniques in operations research, including the basic fundamentals of modeling, linear programming, duality and post optimality, transportation problems, network models, game theory, dynamic programming and inventory models. Prerequisite: MAS 551, 611, or permission from instructor. (3-0)</td>
</tr>
<tr>
<td>613</td>
<td>Mathematical Programming I (3 semester hours) A continuation of MAS 612. New topics include: queuing theory, matrix form of linear programming, integer programming, parametric...</td>
</tr>
</tbody>
</table>
A detailed discussion of optimization techniques of linear models. Topics include review of simplex method, revised simplex method, product 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, sensitivity analysis, parametric programming, upper bounds, separable programming, large scale problems, computer linear programming codes. Prerequisite: MAS 612 or permission from instructor. (3-0)

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 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 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

*Not offered 1974-75

Prerequisite: MAS 613 or permission from instructor. (3-0)

620 Stochastic Systems (3 semester hours)*
- Markov chains, Poisson processes, birth and death processes, renewal theory.

Prerequisites: MAS 612, 620, or permission from instructor. (3-0)

Stochastic systems and their properties. Included are random walk models, Poisson processes, birth and death processes, Markov chains, renewal theory.

Prerequisite: MAS 612 or permission from instructor. (3-0)

621 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 611 (3-0)

622 Queuing Theory (3 semester hours)*
- Queuing systems and their properties. Single-server and multi-server queues, priority queues, finite population case, busy period distribution, embedded Markov chain analysis for M/G/1 and G1/M/1, asymptotic behavior for almost saturated systems.

Prerequisite: MAS 612 or permission from instructor. (3-0)

625 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 612, 620, or permission from instructor. (3-0)

631 Accounting I (3 semester hours)
- Managerial and cost accounting with statistical and operations research applications.

Principles of managerial accounting. Detailed analysis of the profit and loss statement, balance sheet, cash budget, funds flow statement, and pro forma financial statements. Institutions of interest will not be restricted to business firms. (3-0)

632 Accounting II (3 semester hours)
- Role of accounting information in the process of management decision making and control in profit seeking and non-profit seeking organizations.

Prerequisite: MAS 631 or equivalent. (3-0)

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 631 or permission from instructor. (3-0)

*Not offered 1974-75
Financial Management (3 semester hours)
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)

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: WAS 641 or permission from instructor. (3-0)

Economic Models I (3 semester hours)
A quantitative development of the fundamental economic principles underlying the organization of a price system. Market structures; concepts of demand and revenues; costs of production in both the short- and long-run; investor theory and capital market equilibrium.
Prerequisite: MAS 511, 612, 613 or permission from instructor. (3-0)

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 651, or permission from instructor. (3-0)

Management Systems II (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, simulation, cybernetics, and systems theory. Students will program in higher-level languages. Prerequisite: MAS 651, or permission from instructor. (3-0)

Management Systems III (3 semester hours)
The study of the design, analysis, and development of computer-based management systems. Case studies utilizing computer data processing, statistics, operations research, economic analysis, and other relevant quantitative techniques. Prerequisites: MAS 652, 612, 631, 641. (3-0)

Behavioral Management Science I (3 semester hours)
Introduction to behavioral science, including organization theory and human motivation and behavior. (3-0)
Behavioral Management Science II (3 semester hours)
The analysis of the human's role in systems. Utilizes basic experimen-
tmental 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 cri-
teria, and paced and unpaced decision functions. Prerequisite:
662 (3-0)

Human Factors in System Design II (3 semester hours)
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 addi-
tion limitations of the human body in coping with stressful situ-
tions. Concepts to be included are: skeletal muscle physiology and
mechanics, skeletal articulation and mechanics, circulatory and pul-
monary system function and limitations, and nervous system control
and limitations. Prerequisite: 663 (3-0)

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)

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 in-
teractions between the two sets of information. (May be repeated for
credit.) (3-0)

Industrial Property (3 semester hours)*
Legal aspects of patents, trademarks, trade secrets, and proprietary
data and the relationship to business. (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 612 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 re-
search techniques, and computers are considered. Prerequisite:
MAS 621 (3-0)

*Not offered 1974-75
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 612 or permission from instructor. (3-0)

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 613 (3-0)

Economic Models II (3 semester hours)
Fluctuations and growth or economic activity in a modern complex 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 611, 645 or permission from instructor. (3-0)

Advanced Financial Management Systems (3 semester hours)
Selected topics from the functions of the financial management system are emphasized. Includes advanced problems in capital budgeting theory, working capital management, and capital structure decisions.
Prerequisite: MAS 641, 612. (3-0)

Advanced Investment Management (3 semester hours)
Special emphasis on computer-based decision models for the management of financial assets. Includes advanced work in financial information structure, security analysis, and portfolio building procedures in a systems decision framework.
Prerequisite: MAS 641, 612. (3-0)

Systems Simulation (3 semester hours)
Discrete simulation models and comparison of discrete change simulation languages. Simulation methodology including generation of random numbers and variates, design of simulation experiments [ref] for optimization, analysis of data generated by simulation experiments, and validation of simulation models and results. (Selected applications of simulation--Prerequisite: 652 (3-0)) Emphasis will be placed on the application of simulation.
Prerequisites: MAS 611, 651. (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 613 or permission from instructor. (3-0)

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. Prerequisites: MAS 612, 652 (3-0)

*Not offered 1974-75
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)

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)

Seminar on the Rural-Urban Interface (3 semester hours)*
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)*
Seminar or selected topics in optimal land use models and the environmental and economic trade-offs necessary for effective management. (3-0)

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 of limitations of each are investigated from a methodological and practical viewpoint. (3-0)

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)

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)

Colloquium in Management and Administrative Sciences (1 semester hour) (S-Y Grading)
(May be repeated for credit). (1-0)

*Not offered 1974-75
Readings in Management and Administrative Sciences (3-6 semester hours) (1-6 semester hours)
Investigation into the literature of topical areas of management and administration. (1-9-1-18) (May be repeated for credit) (1-variable)
A. Management Science
B. Management Information Systems
C. Behavioral Management Science
D. Business Systems: Distribution
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 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
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

Special Topics in Management and Administrative Sciences (3 semester hours) (May be repeated for credit) (3-0)
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

Research in Management and Administrative Sciences (1-12 semester hours) (May be repeated for credit) (1-variable)
A. Management Science
B. Management Information Systems
C. Behavioral Management Science
D. Business Systems: Distributional
E. Business Systems: Financial
F. Business Systems: Financial
G. Criminal Justice Systems
H. Educational Management Systems
I. Health Care Systems
J. Library Systems
K. Regional Planning
908 Thesis (3 semester hours) (0-9)
(May be repeated for credit)

909 Dissertation (3 semester hours) (0-9)
(May be repeated for credit)

[590--International-Management]**

[Course---------Description]

[590---Technical-Licensing-and-Management-I--(3-semester-hours)
Licensing-of-technology; management-of-branch-offices; joint-ventures-and-subsidies; recruitment-and-training-for-service-overseas-and-in-back-up-positions-in-the-home-office; international transfer-of-management-skills; communications---(3-0)]

[591---Technical-Licensing-and-Management-II--(3-semester-hours)
Continuation-of-590---(3-0)]

[592---East-Asia-and-Oceania-I--(3-semester-hours)
Flow-of-trade-and-investments-between-the-54-southeast-asian-countries in-the-area; cooperative-efforts-in-developing-countries; cooperative-efforts-in-communist-nations; tourism; air-and-sea-transportation---(3-0)]

[593---East-Asia-and-Oceania-II--(3-semester-hours)
Continuation-of-592---(3-0)]

[596---Comparative-Management-Methods-and-Gross-Cultural-Behavior-I
(3-semester-hours)
International-employment-practices; training; decision-making techniques; commercial-law; competitiveness; loyalties; work-ethics; productivity; research-and-development; preferred-industries; plans for-1970's and-1980's; politics-governmen-business-cooperation; adaptation-of-management-methods-to-foreign-situations---(3-0)]

[597---Comparative-Management-Methods-and-Gross-Cultural-Behavior-II
(3-semester-hours)
Continuation-of-596---(3-0)]

[598---Exporting-and-Importing-I--(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-treaty; exporting-and-marketing-abroad---(3-0)]

[599---Exporting-and-Importing-II--(3-semester-hours)
Continuation-of-598---(3-0)]

[690---Commercial-Geography-of-Oceania--(3-semester-hours)
Political; economic; ecologically-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)]

**Docket Footnote: Material transferred to new program in International Management Studies.
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 oil, forestation; racial and cultural regions; (3-0)

Psychology of Races in East Asia (3-semester hours)
Anglo-Saxon, Pacific, Islander, Japanese, Chinese, Russian, Southeast Asian, etc.; characteristic behavior; Xenophobia; Work ethic; (3-0)

China (3-semester hours)
Industry, agriculture, fisheries, mining, forestry, climate, races, population; problems, commerce, government, politics, overseas Chinese; foreign economic relations; (3-0)

Japan (3-semester hours)
Industry, agriculture, fisheries, mining, forestry, population problems, commerce, government, politics, foreign economic relations; (3-0)

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 hijacking, narcotics smuggling, terrorism; extradition agreements; (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)

United States and China Commercial Relations since the 1790's (3-semester hours)
First contacts via the northwest coast of America, trade through Canton and Macao, opening of Hong Kong and Shanghai, open door policy, World War II, anti-communist philosophy in the United States, detente, revival of relations; (3-0)

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 influence of business upon international political behavior, readings and discussion of recent and older works of theoretical significance, both empirical and normative; (3-0)

Introduction to International Finance and Monetary Systems (3-semester hours)
Foreign exchange, monetary reserves, gold reserves, float, upvaluation, devaluation, problem of surplus dollars, problem of nonconvertibility, Eurodollars, quotations in international currencies; (3-0)

Problems in International Management Using Case Study Method (3-semester hours)
Specific experiences of American, European, and other companies in management overseas; (3-0)
The Role of the Multinational Corporation in World Trade
(3-semester-hours)
American-European-and-Japanese-multinational-corporations-compared,
Problems-over-movement-of-capital-abroad,—Take-overs,—establishing-new-subsidiaries,—Political-relationships,—Effect-of
world-commerce.—(3-0)

International Banking—(3-semester-hours)
The-World-Bank,—various-export-import-banks,—The-Asian-Development
Bank,—public-and-private-international-banks,—representative-offices,—
(3-0)

Commercial Japanese Language I—(3-semester-hours)
Oral-and-written-Japanese,—business-vocabulary.—(3-0)

Commercial Japanese Language II—(3-semester-hours)
Continuation-of-890.—(3-0)

Special Topics in International Business—(3-semester-hours)
(May-be-repeated-for-credit)—(3-0)

Readings in International Business—(3-semester-hours)
Directed-reading-in-areas-of-specific-interest.—(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)

ASSOCIATE PROFESSORS: John W. Van Ness (Head) (Mathematical Sciences), James E. Midgley (Physics)

ASSISTANT PROFESSOR: Christopher A. Parr (Chemistry)

LECTURERS: Raj S. Chhikara (Mathematical Sciences), Donna K. Dunaway (Mathematical Sciences), Dal C. Gerneth (Mathematical Sciences), Carl M. Peters (Mathematical Sciences)

OBJECTIVES

The need for applied mathematics 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 mathematics program will concentrate on 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 equation, 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. This could lead to careers in mathematics, but it could also lead 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. In view of the above facts, 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 the mathematical sciences with options...
allowing the student considerable flexibility in choosing a track to suit his interests. The present program will train the student in the use of the tools of the mathematical sciences to solve problems in the other areas. [sciences—physics, biology, chemistry, geology, economics, environmental sciences—as well as in the management, administrative, and social sciences.]

**MASTER OF ARTS IN TEACHING (MAT)**

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) 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 will be upon obtaining an operational knowledge of an area of applied mathematics and upon training in the use of these methods in fields 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 graduate adviser. 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 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 LRD, UT Arlington or LHR 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 North Texas Regional Computer Center, serving UTD, UTA and UTHSCD, contains 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 [Candidates]", page 47. 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 MAT program must have undergraduate preparation equivalent to that described in the previous sentence or a teaching field in mathematics. [At-the discretion-of-the-Program-Head, a diagnostic preliminary examination may be required.—In order to earn the Master's Degree in Mathematical Sciences, a student..."

D - 113
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.

[Option-I]——A 36-hour plan leading to the degree of Master of Science—The option involves 36 hours of course work and the completion of a master's thesis (the student must be registered in a thesis course during the period in which he is writing the thesis). Of the 30 hours of course work, 24 must be in mathematical sciences and must include at least 9 hours in one of the following sets of courses:

**Core and Applied Mathematics**
- MMS 513, 514, 515, 516, 517, 518, or 613, 614, 615, 616

**Computer Sciences**
- 621, 622, 623, 624, 625, or

**Statistics**
- 631, 632, 633, 634, 635, 636

The student may take up to 6 hours in an approved area outside of Mathematical Sciences;

[Option-II]——A 36-hour plan leading to the degree of Master of Science—The option involves 33 hours of course work and 3 hours of applied problem-solving leading to a written report (Mathematics Sciences 901). Of the 33 hours of course work, 27 must be in mathematical sciences and must include at least 9 hours in each of two of the following sets of courses:

**Core and Applied Mathematics**
- MMS 513, 514, 515, 516, 517, 518, 613, 614, 615, 616

**Computer Sciences**
- 621, 622, 623, 624, 625, or

**Statistics**
- 631, 632, 633, 634, 635, 636

The student may take up to 6 hours in an approved area outside of Mathematical Sciences. A presentation of the report and a final comprehensive examination is required;

**MAJOR OF ARTS IN TEACHING:**

[A] This is a 36 hour plan, leading to the degree of Master of Arts in Teaching. The option is designed for persons who are teaching (or plan to teach) mathematics and/or mathematical sciences at the pre-college or college level. It involves 30 hours of mathematical sciences and 6 hours in professional education to be distributed as follows:

[18 hours of] MAT Core: MMS 501, 502, 505, 506, 513, 519, [541, 542, 641, 642, 643, 644]
- 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 908). This thesis is directed by a Supervising Professor and must be approved by the Mathematics 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 637, 638, 639 and one course from among MMS 640, 730, 731, 734, 735 and 738.

   TRACK 1A. APPLIED STATISTICS: Complete three courses not taken for the option core from among MMS 536, 640, 730, 731, 734, 735 and 738. Complete the required number of course hours by choosing MMS electives numbered 500 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 530, 534, 540, 545, 613, 614. Non-thesis students choose remaining electives from MMS courses numbered 500 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: 501, 502 or 501, 520 or 510, 511. Complete two additional ENV courses. Choose remaining electives from ENV courses and/or MMS courses numbered 500 or above. Recommended courses are MMS 536, 629, 731, 738. In addition GEO courses (particularly 500 and 543) may be taken.

   TRACK 1D. CHEMICAL STATISTICS: Designed to exploit on-going research in chemistry for areas of innovative application of statistics. The student must complete CHM 551 and one of 531 or 583 and one of 511, 514 or 585. Electives may be chosen from courses in chemistry, biochemistry, chemical physics or MMS courses numbered 500 and above.

   TRACK 1E. STATISTICS AND OPERATIONS RESEARCH: Complete MAS 612, 613 and two courses from MAS 614, 615, 616, 620, 622. Choose remaining electives from MAS or MMS courses numbered 500 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 the following five sets of courses: [642], [651, 652], [661, 662], [745]. Choose one additional MAS course at 600 level or above and remaining electives from MAS or MMS courses numbered 500 or above. MMS 730 is recommended.

TRACK 1G. APPLICATION OF STATISTICS IN BIOLOGY: Designed for those interested in the 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 520 and 530. Choose remaining electives from BIO or MMS courses numbered 500 or above.

TRACK 1H. PHYSICAL STATISTICS: Designed to exploit on-going research in physics for areas of innovative application of statistics. The student must complete PHY 513, 521, 530 and one course from among PHY 523, 560, 581 and 630. Electives may be chosen from PHY and/or MMS courses numbered 500 and above.

TRACK 1I. STATISTICS IN GEOSCIENCES: Designed to provide expertise in geoscience data handling and modeling problems. The student must complete GEO 500, 501, 502, 503 and one course from among GEO 534, 543, 561 and 584. Choose remaining courses from GEO, MMS and/or ENV courses numbered 500 or above. MMS 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 500 or above.

2. COMPUTER SCIENCE OPTION: The core requirements are four courses from among MMS 530, 534, 537, 540 and 543.

TRACK 2A. COMPUTER SOFTWARE: Choose three courses from among MMS 533, 545, 548, 635, 613 and 614. Take remaining electives from among MMS courses numbered 500 or above and/or PHY 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 523, 624, 625, 626. Take remaining electives from among PHY 624, 625, 626 or MMS courses numbered 500 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 501, 502 or 501, 520 or 510, 511. Complete two additional ENV courses. Choose remaining electives from ENV courses or MMS courses numbered 500 or above. Recommended courses are MMS 613 and 614. In addition GEO courses (particularly 500 and 543) may be taken.

TRACK 2D: COMPUTER SCIENCE AND OPERATIONS RESEARCH: Complete MAS 612, 613 and two courses from among 614, 615, 616, 620, 652, 653 and 751. Remaining electives may be chosen from MAS and MMS courses numbered 500 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 520 and 530. Choose remaining electives from BIO or MMS courses numbered 500 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 500 or above.

TRACK 2G. APPLICATION OF COMPUTERS IN CHEMISTRY: Designed to train people to integrate computers into on-going research in chemistry. The student must complete CHM 551 and one of 531 or 583 and one of 511, 514, or 585. Electives may be chosen from courses in chemistry, biochemistry, chemical physics or MMS courses numbered 500 and above.

3. APPLIED ANALYSIS OPTION: The core requirements are four courses from among MMS 521, 524, 536, 601, 602, 603, 604, 613, 614, 615, 616, 713 and 714, with at least one 2-semester sequence included.

TRACK 3A. APPLIED ANALYSIS: Complete three more courses from the above list and/or MMS 629, 701, 702, 705. Choose remaining electives from MMS courses numbered 500 and above. Non-thesis students may choose 6 hours of graduate courses outside of MMS.

TRACK 3B. RELATIVITY THEORY: Complete MMS 593, 594, 595 and 596. Choose remaining electives from among PHY and/or MMS courses numbered 500 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: 501, 502 or 501, 520 or 510, 511. Complete two additional MMS courses numbered 500 or above. Recommended courses are MMS 615, 616, 629, 713 and 714. In addition GEO courses (particularly 500 and 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 Mathematics 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 631, 632, 637, 638, 639, 640, 644 and some of the 700 level statistics courses. The remaining course work would depend on the thesis area.

2. COMPUTER SCIENCE OPTION: Most degree programs would include MMS 530, 534, 540, 543, 548, 613, 614, 655, 662 and 663.

3. APPLIED ANALYSIS OPTION: If the student plans to study relativity theory, he would probably take MMS 593, 594, 595, 596 and 697. In addition, depending on his needs, he would make an extensive selection of courses from such courses as MMS 513, 514, 601, 602, 603, 604, 605, 616, 701, 702, 713, 714. Similarly, if a student plans to study differential equation, he would take the various differential equations courses offered plus the necessary mathematical topics to support research in his chosen area.

Mathematical Sciences Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>501</td>
<td>Elementary Analysis I (3 semester hours)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Real numbers, functions of several variables, limits, continuity, differentiability, integrals, vectors and vector functions. Pre-requisite: one year of calculus.</td>
<td>(3-0)</td>
</tr>
<tr>
<td>502</td>
<td>Elementary Analysis II (3 semester hours)</td>
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</tr>
<tr>
<td></td>
<td>Infinite series, convergence tests, improper integrals, uniform convergence power series. Prerequisite: MMS 501.</td>
<td>(3-0)</td>
</tr>
<tr>
<td>503</td>
<td>Computer Science I (3 semester hours)</td>
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</tr>
<tr>
<td></td>
<td>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.</td>
<td>(3-0)</td>
</tr>
<tr>
<td>505</td>
<td>Higher Geometry (3 semester hours)</td>
<td></td>
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<tr>
<td></td>
<td>Affine, homogeneous and projective coordinates, projective transformations, projective line and plane coordinates, duality, cross ratios, conics.</td>
<td>(3-0)</td>
</tr>
<tr>
<td>506</td>
<td>Non-Euclidian Geometry (3 semester hours)</td>
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<tr>
<td></td>
<td>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 505.</td>
<td>(3-0)</td>
</tr>
<tr>
<td>509</td>
<td>Special Topics/TAGER (3 semester hours)</td>
<td></td>
</tr>
<tr>
<td>511-512</td>
<td>Basic-Advanced Mathematics I-II (3 semester hours)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>An introduction to elementary algebra including matrices, determinants, and vector spaces.</td>
<td>(3-0)</td>
</tr>
<tr>
<td>513</td>
<td>Modern Algebra I (3 semester hours)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Study of modern algebra involving groups, rings, and fields.</td>
<td>(3-0)</td>
</tr>
</tbody>
</table>
514 Modern Algebra II (3 semester hours)  
Continuation of 513. Prerequisite: MMS 513. (3-0)

515------Modern Analysis I (3 semester hours)  
Introduction to modern analysis involving formal set theory, elementary topology and Lebesque theory.—(3-0)

516------Modern Analysis II (3 semester hours)  
Continuation of 515.—(3-0)

517------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; Vectorial and Matrix Analysis; Probability and statistics.—(Previous exposure to most of the topics is assumed.)—(Same as Physics 501.)—(4-0)

518------Mathematical Methods of Physics II (4 semester hours)  
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 and group representations.—Normally follows 517.—(Same as Physics 502.)—(4-0)

519 Linear Algebra (3 semester hours)  
Linear transformations and matrices, solutions of linear equations, formulation of existence and uniqueness theorems, normal systems, linear equations with constant and variable coefficients. Applications. Prerequisite: One year of calculus. (3-0)

521 Applied Ordinary Differential 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, hyperbolic, elliptic and parabolic equations, initial and boundary value problems. Applications. Prerequisite: MMS 521. (3-0)

530 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 503. (3-0)

531 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 530. (3-0)

D - 119
533 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)

537 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 503 with MMS 530 recommended. (3-0)

540 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 530 and applied modern algebra. (3-0)

[541----------Analytical-For-Teachers-I]
The theory of calculus, including topics on sets, functions, partial derivatives, power series, theory of integration, line, surface, and multiple integrals. (Option III candidates only). (3-0)

[542----------Analytical-For-Teachers-II]
Prerequisites: Mathematical Sciences 541. Continuation of 541. (Option III candidates only). (3-0)

544 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)

545 Data Structures (3 semester hours)
Basic concepts: linear lists, string arrays, and orthogonal lists; storage systems and structures, and storage allocation; multilinked structures; symbol tables and structures, and storage allocation; multilinked structures; symbol tables and searching techniques; sorting techniques; formal specification of data structures. Application to scientific and business systems. Prerequisite: MMS 530 and applied modern algebra. (3-0)

548 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 540 and 545. (3-0)

*Not offered 1974-75
551 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)

552 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 551. (3-0)

558 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 552. (3-0)

561 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)

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)

594 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. Prerequisites: MMS 593. (3-0)

595 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; Schwarzschild's solution, plane waves, and some other exact solutions. (3-0)

*Not offered 1974-75
596 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 595. (3-0)

601 Real Analysis I (3 semester hours)
Point set topology in metric and general spaces. Theory of measure and integration. Prerequisite: Advanced calculus. (3-0)

602 Real Analysis II (3 semester hours)
Continuation of 601. Prerequisite: MMS 601. (3-0)

603 Theory of Complex Functions I (3 semester hours)*
Complex integration, Cauchy's theorem, calculus of residues, power series, entire functions, Riemann mapping theorem, Riemann surfaces, conformal mapping with applications. Prerequisite: Advanced calculus. (3-0)

604 Theory of Complex Functions II (3 semester hours)*
Continuation of 603. Prerequisite: MMS 603. (3-0)

606 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 502. (3-0)

613 Numerical Methods 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 matrix-inversion; the solution of linear systems. Prerequisites: Linear algebra and advanced calculus. (3-0)

614 Numerical Methods Analysis II (3 semester hours)
Continuation of MMS 613. (3-0)

615 Differential Equations I (3 semester hours)
The theory of differential equations with emphasis on modern methods of solution. Prerequisite: Advanced calculus. (3-0)

616 Differential Equations II (3 semester hours)
Continuation of MMS 615. Prerequisite: MMS 615. (3-0)

[621] Computer Science I (3-semester-hours)
The theory of computer science; computers, and algorithmic processes. (3-0)

[622] Computer Science II (3-semester-hours)
Continuation of 621. (3-0)

[623] Computer Languages I (3-semester-hours)
A study of machine languages and various programming languages. (3-0)

[624] Computer Languages II (3-semester-hours)
Continuation of 623. (3-0)

[625] Advanced Computer Science (3-semester-hours)
Advanced topics in computer science. (3-0)

*Not offered 1974-75
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 551. (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 552 or MMS 551 and MMS 638. MMS 601 should be taken before or concurrently. (3-0)

Statistical Inference II (3 semester hours)*

Continuation of 631. Prerequisite: MMS 631 and MMS 644 should be taken before or concurrently. (3-0)

Experimental Design I (3 semester hours)

Introduction to Experimental Design. (3-0)

Experimental Design II (3 semester hours)

Intermediate studies in Experimental Design. (3-0)

Sampling I (3 semester hours)

Introduction to sampling theory and techniques. (3-0)

Sampling II (3 semester hours)

Intermediate study in sampling and sampling techniques. (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. (3-0)

Advanced Statistical Methods II (3 semester hours)

Continuation of 637. Prerequisite: MMS 637. (3-0)

Linear Statistical Models (3 semester hours)

Experimental design, regression, analysis of variance and covariance. Prerequisite: MMS 552 or MMS 638. (3-0)

Linear Statistical Models II (3 semester hours)

Continuation of MMS 639. Prerequisite: MMS 639. (3-0)

*Not offered 1974-75
644 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 601. (3-0)

655 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 540. (3-0)

658 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 530. (3-0)

659 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 530, PHY 523 or instructor's consent. (3-0)

662 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 530. (3-0)

663 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 530 and modern algebra. (3-0)

666 Computer Graphics (3 semester hours)*

701 Differential Geometry I (3 semester hours)
Classical differential geometry of curves and surfaces by vector methods, tensor methods. Prerequisite: Advanced calculus. (3-0)

702 Differential Geometry II (3 semester hours)
Tensors, Riemannian geometry, exterior calculus, applications to general relativity. Prerequisite: MMS 701. (3-0)

*Not offered 1974-75
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)

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 602. (3-0)

714 Partial Differential and Integral Equations II (3 semester hours)
Continuation of 713. Prerequisite: MMS 713. (3-0)

719 Functional Analysis in Applied Mathematics I (3 semester hours)*
Covers those areas of functional analysis most relevant to modern
applied mathematics. Prerequisite: MMS 602. (3-0)

720 Functional Analysis in Applied Mathematics II (3 semester hours)*
Continuation of 719. Prerequisite: MMS 719. (3-0)

730 Decision Theory (3 semester hours)
This course is important for developing statistical maturity. The
elegant statistical decision theory and Bayesian inference is de-
veloped at an intermediate mathematical level. Great controversy in
statistics is centered around Bayesian inference and one cannot un-
derstand modern statistical development without knowledge of this
area. Prerequisites: advanced calculus and either MMS 552 or MMS
638. (3-0)

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 in-
ference. Among others, topics of order statistics, theory of rank
tests and goodness of fit are emphasized. The mathematical level is intermediate. Prerequisite: MMS 552 or MMS 638. (3-0)

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 com-
pared to the fixed sample size approach may be considered more appro-
priate in decision making process. The theory of sequential prob-
ability ratio tests constitutes one of the important branches of
statistics. Prerequisite: MMS 552 or MMS 638. (3-0)

*Not offered 1974-75
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>738</td>
<td>Time Series Analysis (3 semester hours)</td>
<td>(3-0)</td>
<td>This course studies correlated observations observed sequentially in time. Stationary processes, power spectra, stationary models fitting, correlation analysis, regression. Prerequisite: MMS 552 or MMS 629 or MMS 638.</td>
</tr>
<tr>
<td>901</td>
<td>Seminar in Advanced Problems (3 semester hours)</td>
<td>(3-0)</td>
<td>A course designed to provide the student an opportunity to perform creative mathematics or scholarly-historical exposition; student is expected to submit and defend a report on completion of the course.</td>
</tr>
<tr>
<td>902</td>
<td>Topics in Computer Science (3 semester hours)</td>
<td>(3-0)</td>
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<tr>
<td>903</td>
<td>Topics in Statistics (3 semester hours)</td>
<td>(3-0)</td>
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<tr>
<td>904</td>
<td>Topics in Mathematics (3 semester hours)</td>
<td>(3-0)</td>
<td></td>
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<tr>
<td>905</td>
<td>Topics in Relativity Theory (3 semester hours)</td>
<td>(3-0)</td>
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</tr>
<tr>
<td>907</td>
<td>Research in Mathematical Sciences (1-12 semester hours)</td>
<td>(0-9)</td>
<td>Open to students with advanced standing subject to approval of the Graduate Adviser.</td>
</tr>
<tr>
<td>908</td>
<td>Thesis (3 semester hours)</td>
<td>(0-9)</td>
<td>(May be repeated for credit). [0-12]</td>
</tr>
<tr>
<td>909</td>
<td>Dissertation (3 semester hours)</td>
<td>(0-9)</td>
<td>May be repeated for credit.</td>
</tr>
</tbody>
</table>
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), D. James McCorquodale (Biology), Claud S. Rupert (Biology)

ASSOCIATE PROFESSORS: Edmund W. Guttes (Biology), Herbert Gutz (Biology), Michael H. Patrick (Biology), Harold Werbin (Biology)

ASSISTANT PROFESSORS: Richard G. Cutler (Biology), Donald M. Gray (Biology), 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.
FACILITIES:

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-Loebl microdensitometer; Hewlett-Packard desk computer; two Coulter counters, a variety of electrophoresis units; Beckman amino-acid analyzer; 200-liter and 10-liter fermentors; Harvey biological material oxidizer; batch lyophilizer; 150-kilovolt 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, Amino-Chance duochromator, and Bonet-Maury [biospectrophotometer]). 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 Computer Services Center (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 [candidates]", page 47). 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 [candidates]", page 47). 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 35, 36).
## MOLECULAR BIOLOGY COURSES

### Core Curriculum

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
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</table>
| 501      | Introduction to Quantitative Biology (4 semester hours) Staff  
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. (Prerequisite: calculus, general physics) (4-0) |
| 510      | Biological Chemistry (4 semester hours) Staff  
Chemistry and metabolism of cellular constituents: proteins, nucleic acids, carbohydrates, lipids, vitamins, and cofactors. (4-0) |
| 520      | Molecular Genetics (4 semester hours) Staff  
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) |
| 530      | Macromolecular Physical Chemistry (4 semester hours) Staff  
Analysis of the nature and properties of macromolecules; thermodynamics of macromolecular solutions, transport processes, interaction with electromagnetic radiations. (Prerequisite: 501 or equivalent.) (4-0) |
| 540      | Cell Physiology Biology (4 semester hours) Staff  
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) |
| 550      | Methods in Molecular Biology-I (4 semester hours) Staff  
Individual laboratory instruction in biological, biophysical, and biochemical techniques. Supplementary lectures and demonstrations. (S-U grading) (2-4) |
| 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) |
| 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.
Course | Description
---|---
509 | Special Topics/TAGER (3 semester hours) (3-0)
591 | Science and Human Values (1 semester hour) Staff
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)
601 | Scientific Writing (2 semester hours) Jagger
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
---|---
511 | Chemistry of Macromolecules (4 semester hours) Staff
The structure, synthesis, function and properties of biologically important molecules: nucleic acids, proteins, polysaccharides, lipids, steroids. (4-0)
521 | Molecular Basis of Heredity (4 semester hours) Staff
Introduction to microbial genetics. The sequence hypothesis, genetic code, DNA replication, mutation and recombination. Protein synthesis and its regulation. (Prerequisite BIO 511) (4-0)
541 | Molecular and Cell Biology (4 semester hours) Staff
Mendelian genetics of eukaryotes. Cytogenetics, chromosome structure and chromosomal rearrangements. Replication, transcription, and translation in eukaryotic cells. Prerequisite BIO 521. (4-0)
542 | Biology of Differentiation (3 semester hours) Staff
Cellular differentiation in plants and animals. Membrane structure and function. Plant and animal viruses. Theories of oncogenesis. (3-0)

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.

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 specialty and interests.

Topics in Biological Chemistry
Bremner, [Gettes, Gray, Getts,] Harris, McCorquodale, Patrick, Werbin

General Electives

Course | Description
---|---
611 | Macromolecular Biosynthesis (4 semester hours) Staff
Mechanisms of DNA, RNA, and protein biosynthesis by viruses, bacteria, and eukaryotes. (4-0)
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)

Enzymology (4-semester-hours)
[The development of enzyme kinetics from basic principles; activation, inhibition, cooperativity, pH, ionic strength, temperature; effects of reaction mechanisms; prosthetic groups and active sites;]
(4-0)

Special Electives

Nucleic Acids (4 semester hours) Staff
Chemical and physical properties of nucleic acids and their constituent nucleotides, nucleosides, sugars, and bases. (S-U grading) (May be repeated for credit) (4-0)

Proteins (4 semester hours) Harris
Chemical and physical properties of proteins: primary, secondary, 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)

Enzymology (4 semester hours) Werbin
The development of enzyme kinetics from basic principles; activation, inhibition, cooperativity, pH, ionic strength, temperature effects; reaction mechanisms; prosthetic groups and active sites. (S-U grading) (May be repeated for credit) (2-4)

Industrial-Microbiology (4-semester-hours)
[Typical and potential uses of microorganisms in industry; techniques for large-scale growth of microorganisms;]

Transcription of Bacteriophage Templates (4 semester hours) Bremer
Purification and properties of bacterial RNA polymerase, methods for 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)

Regulation of Phage Development (4 semester hours) McCorquodale
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)

Colloquium in Biological Chemistry (2-5 semester hours) Staff

Biophysical Chemistry of Nucleic Acids (4 semester hours) Patrick
Relationship between different aspects of DNA structure and biological function especially with respect to replication, recombination, and repair. (S-U grading) (May be repeated for credit) (2-4)

Topics in Genetics

[Bremer,] Clowes, Cutler, [Guttes,] Gutz, Harm, Kemper, McCorquodale
General Electives

Course               Description

623 Molecular Genetics of Eukaryotes (4 semester hours) Staff
Molecular and quantitative approach to structure, replication, transcription and translation of genetic material of eukaryotic cells and their viruses. (4-0)

626 General Genetics of Eukaryotes (4 semester hours) Staff
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)

627 Bacterial and Phage Genetics (4 semester hours) Staff
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

624 Fungal Genetics (4 semester hours) Staff
Genetics of Ascomycetes and Basidiomycetes, including cytoplasmic inheritance, genetics of development. (S-U grading) (May be repeated for credit) (2-4)

625 Extrachromosomal Factors (4 semester hours) Clowes
Genetics, structure, replication and expression of bacterial plasmids; sex factors, colicin factors, infectious drug-resistance factors. (S-U grading) (May be repeated for credit) (2-4)

628 Lysogeny and Transduction (4 semester hours) Kemper
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)

629 Colloquium in Genetics (2-5 semester hours) Staff

726 Yeast Genetics (4 semester hours) Gutz
Genetic regulation of life cycles: mechanisms of meiotic and mitotic recombination; isolation and characterization of mutants; extranuclear inheritance. (S-U grading) (May be repeated for credit) (2-4)
Topics in Biophysics

[Cutler.] Gray, Harm, Jagger, Lang, Patrick, Rupert

General Electives

Course Description

[630] Instrumentation and Techniques of Molecular Biology (4 semester hours)
[Basic theory and applications of major instruments and techniques]
[Instruments and demonstrations (4-0)]

[634] Radiation Biology (4 semester hours)
[Interactions of ionizing, ultraviolet, and visible radiations with]
[matter, radioisotopes, biological effects, cellular repair of]
[radiation damage; biological photoreceptors (4-0)]

730 Biopolymers (4 semester hours) Staff
Structure and properties of biologically important macromolecules. Biophysical approaches. (4-0)

731 Radiobiology and Photobiology (4 semester hours) Staff
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

632 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)

633 Theoretical Biophysics (4 semester hours) Staff
Equilibrium and nonequilibrium thermodynamics; atomic and molecular spectroscopy; quantum biochemistry; excitation and bonding of organic molecules. (S-U grading) (May be repeated for credit) (4-0)

635 Molecular Photobiology (4 semester hours) Jagger
[Action of far-ultraviolet radiation on proteins, nucleic acids, and]
[cells; cellular repair of far-ultraviolet damage; effects of near-
[ultraviolet-radiation on molecules and cells; photosensitization]
[endophotodynamic action; sunburn and skin cancer. (Prerequisite) (2-4)]

Survey of phenomena and molecular mechanisms of biological effects of far and near-ultraviolet radiation (carcinogenesis, killing, mutation, growth inhibition, photosensitization, and visible light (photodynamic action, photosynthesis, phototropism, photosynthesis, vision). (S-U grading) (May be repeated for credit) (2-4)

636 Biophysics of Polymers (4 semester hours)
[Hydrostatic, hydrodynamic, and optical approaches to determination]
[of structure and function of biologically important polymers (2-4)]
637 Analysis of Instrumental Design (4 semester hours)
Optical and electronic instruments; computer interfacing. (2-4)

638 Colloquium in Biophysics (2-5 semester hours) Staff

736 Biophysical Mechanisms of DNA Repair (4 semester hours) Rupert
Specific mechanisms for DNA restoration and their interactions (photoenzymatic repair, excision-reassembly, recombinational and other processes). (S-U grading) (May be repeated for credit) (2-4)

737 Recovery of Viruses and Cells from Radiation Damage (4 semester hours) Harm
Description, analysis and biological significance of recovery phenomena, their genetic control, interaction and experimental modification. Biological consequences of unrepaired damage. (S-U grading) (May be repeated for credit) (2-4)

738 Optical Properties of Biological Macromolecules (4 semester hours) Gray
Survey of information available on biological macromolecules from measurements of optical properties (absorption and circular dichroism). (S-U grading) (May be repeated for credit) (4-0)

Topics in Cell Biology
Bremer, Cutler, Guttes, Hatzi, Jagger, McCorquodale, Rupert

General Electives

642 Cellular Excitation and Response (4 semester hours)
Membrane structure and dynamics; specific transport processes; biochemical phenomena; excitation and conduction; synaptic transmission; trophic influences; secretion. (4-0)

644 Developmental Biology (4 semester hours) Staff
Cellular differentiation; synthesis and regulation in protozoa and multicellular organisms; organelle synthesis and assembly; macromolecular synthesis and regulation in differentiating cells; differentiation in specific cells; multicellular morphogenesis in protozoa and multicellular organisms. Regulation of macromolecular synthesis during early cleavage. Selected examples of developmental processes in plants (e.g., phytohormones, response to external factors, phytochrome systems, internal growth rhythms). (4-0)

740 Microbiology and Virology (4 semester hours) Staff
Survey of major groups of microorganisms with special emphasis on their physiology and role in nature. An introduction to representative viruses of mammalian, plant, and insect tissues, with an emphasis on tumor viruses. (4-0)
Special Electives

Bioenergetics (4 semester hours)
[Ultrastuctural-functional-mechanisms-for-energy-transfer-storage-and] (may be repeated for credit) (S-U grading) (2-4)
[transduction-of-energy-for-biosynthesis-transport-electrochemical-processes] (S-U grading) (2-4)
[mechanochemical-activity-regulatory-mechanisms-rhythmical-phenomena] (S-U grading) (2-4)

Cytopathology (4 semester hours)
[Genetic-defects-of-cell-structure-and-function-cellular-responses] (S-U grading) (May be repeated for credit) (2-4)
[to-physiological-chemical-or-biological-stress-immune-responses-cell] [transformation-animal-and-plant-viruses] (S-U grading) (2-4)

646 Cellular Gerontology (4 semester hours) Cutler
[Cellular-gerontology-of-aging-processes-models-implications] (S-U grading) (2-4)
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)

647 The Cell Cycle (4 semester hours) Cuttles
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)

Developmental Biology of Plants (4 semester hours)
[Growth-and-differentiation-of-single-cells-plants-ands-tissues] (S-U grading) (2-4)
[Plants-phytohormones-response-of-plants-to-external-factors-plant] [Cells-climatic-plant-regulation-of-rhythms-movements] (S-U grading) (2-4)

649 Colloquium in Cell Physiology (2-5 semester hours) Staff

General Courses

691 Seminar in Molecular Biology (1 semester hour) (S-U grading)
692 Readings in Molecular Biology (3 to 6 semester hours)
693 Colloquium in Molecular Biology (1 semester hour) (S-U grading)
694 Papers in Molecular Biology (1 semester hour) (S-U grading)
695 Recent Trends in Molecular Biology (1 semester hour) (S-U grading)
696 New Research in Molecular Biology (1 to 3 semester hours)
901 Research in Molecular Biology (1 to 12 semester hours)
908 Thesis (3 semester hours) (May be repeated for credit)
909 Dissertation (3 semester hours) (May be repeated for credit)
[GRADUATE PROGRAM IN PHYSICS]

(M.S., Ph.D.)

Members of Faculty currently participating:

PROFESSORS: Ervin J. Fenyves (Engineering and Applied Sciences),
William B. Hanson (Physics), Walter J. Heikkila (Physics),
Francis S. Johnson (Physics), Polya Karp Kusch (Physics),
Istvan Ozsvath (Mathematical Sciences), Donald Rapp (Physics),
Wolfgang A. Rindler (Mathematical Sciences), Ivor Robinson
(Mathematical Sciences)

VISITING PROFESSOR: Chun C. Lin (Physics)

ASSOCIATE PROFESSORS: Carl B. Collins, Jr. (Head) (Physics), John H. Hoffman
(Physics), James E. Midgley (Physics), Brian A. Tinsley
(Physics)

ASSISTANT PROFESSORS: Edward L. Breig (Physics), Roy C. Chaney (Physics),
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 de-
velop 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 Pro-
gram: Applied Physics and Instrumentation; Atmospheric and Space Physics; Atomic
and Molecular Physics; Chemical Physics; Plasma Physics; Quantum Electronics; Rel-
ativity 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 tandem 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 institution requirements (see page ) and in addition he must have an overall grade-point average of 3.0 and have obtained a B or 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.

Basic Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
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</thead>
</table>
| 500    | Quantum Mechanics I (4 semester hours)  
Fundamental principles of quantum theory with applications to one and three dimensional systems under various potentials: free particle; bound 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. (501 concurrently, 505 concurrently). (4-0) |
| 501    | 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) |
| 521    | Electromagnetism I (4 semester hours)  
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 501.) (4-0) |

Supplementary Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
</table>
| 502    | Mathematical Methods of Physics II (4 semester hours)  
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 501.) (4-0) |
Computer Organization and Usage (3 semester hours)
Machine language, symbolic coding; data acquisition, representation, and transfer; control functions. (3-0)

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 equations and numerical integration. (3-0)

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 500.) (3-0)

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)

Special Topics/TAGER (3 semester hours) (3-0)

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)

Statistical Mechanics (3 semester hours)
Classical and quantum statistical mechanics; localized and nonlocalized 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)

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 521.) (3-0)

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.

Concepts of Physics II (3 semester hours)
Continuation of 541. Electromagnetism, waves, optics, wave-particle duality, and quantum phenomena.
<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electromagnetic Theory (3 semester hours)</td>
<td></td>
<td>Development of time dependent electromagnetic theory using the four-vector formalism of special relativity; Lorentz potentials; radiation reaction; radiation from relativistic particles; synchrotron, Cherenkov, bremsstrahlung radiation; multipole radiation. (Normally follows 521.) (3-0)</td>
</tr>
<tr>
<td>Quantum Mechanics II (4 semester hours)</td>
<td></td>
<td>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 500.) (4-0)</td>
</tr>
<tr>
<td>Physics Seminar (1 semester hour)</td>
<td></td>
<td>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)</td>
</tr>
<tr>
<td>Special Topics in Mathematical Physics (3 semester hours)</td>
<td></td>
<td>Topics vary from semester to semester. (May be repeated for credit). (3-0)</td>
</tr>
<tr>
<td>Chemical Physics</td>
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<tr>
<td>Special Topics in Chemical Physics (3 semester hours)</td>
<td></td>
<td>Topics vary from semester to semester. (May be repeated for credit). (3-0)</td>
</tr>
<tr>
<td>Research in Chemical Physics (3-12 semester hours)</td>
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<tr>
<td>Applied Physics</td>
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<tr>
<td>Elements of Digital Circuits (3 semester hours)</td>
<td></td>
<td>Introduction to digital hardware; theory and operation of discrete and integrated logic circuits; logic families; MOS devices; simplification of logic functions; logic design of counters, shift registers, and arithmetic circuits. Lab fee required. (2-2)</td>
</tr>
<tr>
<td>Logic Design and Digital Systems (3 semester hours)</td>
<td></td>
<td>Analysis and synthesis of digital systems; random access, sequential and read only memory systems; synchronous and non synchronous logic systems; fixed and microprogrammable logic systems; computing systems, input-output devices; parallel and serial devices. Lab fee required. (Normally follows 523.) (2-3)</td>
</tr>
<tr>
<td>Data Acquisition and Computer Interfacing (3 semester hours)</td>
<td></td>
<td>Real time data acquisition; linear-digital conversions, nonlinear systems, sampling systems; instrumentation techniques; feedback theory, stability, monitoring and control functions. Lab fee required. (Normally follows 523.) (2-3)</td>
</tr>
<tr>
<td>Operating Systems for Data Acquisition (3 semester hours)</td>
<td></td>
<td>Organization and programming of executive control systems for data acquisition; multiprogramming; time-sharing; access control; parallel processing; resource allocation. (3-0)</td>
</tr>
</tbody>
</table>
Special Topics in Applied Physics (3 semester hours)
Topics may vary from semester to semester. (May be repeated for credit). (3-0)

Research in Applied Physics (3-12 semester hours)

Quantum Electronics

Introduction to Quantum Electronics (3 semester hours)
Classical treatment of the interaction of radiation with matter; resonant structures and normal modes; stimulated emission; non-linear optics. (3-0)

Physics of Lasers (3 semester hours)
Advanced topics in the physics of quantum electronics and lasers; gas lasers and excitation transfer reactions; line narrowing and induced transparency superradiance and liquid lasers; high energy pulsed lasers. (Normally follows 530.) (3-0)

Statistical Optics (3 semester hours)
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)
Topics vary from semester to semester. (May be repeated for credit). (3-0)

Research in Quantum Electronics (3-12 semester hours)

Atomic and Molecular Physics

Quantum Theory of Atoms and Molecules (3 semester hours)
Application of quantum mechanics to atomic and molecular structure, 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 collisions. (Normally follows 600.) (3-0)

Atomic and Molecular Spectroscopy (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)

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 651.) (3-0)

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 653.) (3-0)
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)

Special Topics in Atomic Physics (3 semester hours)
Topics vary from semester to semester. (May be repeated for credit.) (3-0)

Research in Atomic & Molecular Physics (3-12 semester hours)

Plasma Physics

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)

Plasma Waves and Radiation (3 semester hours)
Magnetotonic 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 663.) (3-0)

Plasma Theory (3 semester hours)
Statistical behavior of plasmas; distribution functions; Boltzmann equation, kinetic theory; magnetohydrodynamic theory; Fokker-Planck and Vlasov equations. (3-0)

Special Topics in Plasma Physics (3 semester hours)
Topics vary from semester to semester. (May be repeated for credit.) (3-0)

Research in Plasma Physics (3-12 semester hours)

Solid State Physics

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)

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)

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)
Special Topics in Solid State Physics (3 semester hours)
Topics vary from semester to semester. (May be repeated for credit.)

Research in Solid State Physics (3-12 semester hours)

Atmospheric and Space Physics

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)

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, meteoroids 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)

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 propagation; diffusion, eddy mixing and heat balance; satellite drag. (Normally follows 581.) (3-0)

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 581, 663.) (3-0)

Special Topics in Space Physics (3 semester hours)
Topics will vary from semester to semester. (May be repeated for credit.) (3-0)

Research in Atmospheric and Space Physics (3-12 semester hours)

Relativity

Mach's principle and the abolition of absolute space; the principle of relativity; the principle of equivalence; basic cosmology; four-vector calculus; special relativistic kinematics, optics, mechanics, and electromagnetism; basic ideas of general relativity. (3-0)

Relativity and Cosmology (3 semester hours)
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 591.) (3-0)

Relativistic Quantum Mechanics (3 semester hours)
Relativistic formalism: one particle relativistic wave equations; 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 500.) (3-0)
Special Topics in Relativity (3 semester hours)
Topics vary from semester to semester. (May be repeated for credit.)
(3-0)

Research in Relativity (3-12 semester hours)
Thesis and Dissertation

Thesis (3 semester hours) (0-9)

Dissertation (3 semester hours) (0-9)

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 underlined.

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied</td>
<td>1</td>
<td>500, 501, 505, 608, 920</td>
<td>521, 523, 503, 920</td>
</tr>
<tr>
<td>Physics</td>
<td>2</td>
<td>507, 624</td>
<td>920</td>
</tr>
<tr>
<td>Atmospheric and Space</td>
<td>1</td>
<td>500, 501, 505, 608, 980</td>
<td>521, 513, 581, 980</td>
</tr>
<tr>
<td>Atomic and Molecular</td>
<td>1</td>
<td>500, 501, 505, 608, 950</td>
<td>521, 513, 600, 950</td>
</tr>
<tr>
<td>Molecular</td>
<td>2</td>
<td>652, 653, 950</td>
<td>654, 631, 950</td>
</tr>
<tr>
<td>Chemical</td>
<td>1</td>
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<td>910</td>
</tr>
<tr>
<td>Physics</td>
<td>2</td>
<td>521, 651, Ch3, 910</td>
<td>652, Ch4, Ch5, 910</td>
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<tr>
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<td>1</td>
<td>500, 501, 505, 608, 960</td>
<td>521, 513, 560, 960</td>
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<td>Physics</td>
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<td>Quantum</td>
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<td>521, 513, 600, 930</td>
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<td>Electronics</td>
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<td>630, 631, 930</td>
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<tr>
<td>Relativity</td>
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<td>521, 592, 500, 990</td>
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<tr>
<td>Solid</td>
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<td>502, 697, 990</td>
<td>513, 990</td>
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<tr>
<td>State</td>
<td>1</td>
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<td>521, 671, 600, 970</td>
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<tr>
<td>State</td>
<td>2</td>
<td>502, 513, 673, 970</td>
<td>503, 970</td>
</tr>
</tbody>
</table>
Members of Faculty currently participating:

PROFESSORS: Walter Harm (Biology), Daniel Harris (Biology), Donald Rapp (Physics), Wolfgang A. Rindler (Mathematical Sciences)

ASSOCIATE PROFESSORS: Richard A. Caldwell (Chemistry), James L. Carter (Geosciences), Edmund W. Gutes (Biology), Herbert Gutz (Biology), William I. Manton (Geosciences), James E. Middley (Physics), Richard M. Mitterer (Geosciences), Emile A. Pessagno, Jr. (Geosciences), Dean C. Presnall (Geosciences), James R. Urban (Head) (Geosciences), Harold Werbin (Biology)

ASSISTANT PROFESSORS: Roy C. Chaney (Physics), Stephen M. Curry (Physics), 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, full-time 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 a 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, Geological Sciences, 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

1. 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 501, SCE 502, and 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, Geological Sciences, 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.

   D. 3-12 semester hours of electives to complete the required minimum of 36 semester hours.

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

### REQUIRED COURSES IN PRIMARY AREA OF SPECIALIZATION

Table 1

<table>
<thead>
<tr>
<th>MOLECULAR BIOLOGY</th>
<th>CHEMISTRY</th>
<th>ENVIRONMENTAL SCIENCES</th>
<th>GEOLOGICAL SCIENCES</th>
<th>PHYSICS</th>
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<tbody>
<tr>
<td>BIO 511</td>
<td>CHEM 581</td>
<td>ENV 501</td>
<td>GEO 500 and GEO 507 (Lab)</td>
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<tr>
<td>BIO 521</td>
<td>CHEM 583</td>
<td>ENV 502</td>
<td>GEO 510 and GEO 511 (Lab)</td>
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</tr>
<tr>
<td>BIO 541</td>
<td>CHEM 585</td>
<td>ENV 510</td>
<td>GEO 512</td>
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</tr>
<tr>
<td>BIO 542</td>
<td>CHEM 587</td>
<td>ENV 511</td>
<td>GEO 575</td>
<td></td>
</tr>
</tbody>
</table>

*Select two courses from this list.

### REQUIRED COURSES IN SECONDARY AREA OF SPECIALIZATION

Table 2

<table>
<thead>
<tr>
<th>MOLECULAR BIOLOGY</th>
<th>CHEMISTRY</th>
<th>ENVIRONMENTAL SCIENCES</th>
<th>GEOLOGICAL SCIENCES</th>
<th>PHYSICS</th>
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<td>BIO 511</td>
<td>CHEM 581, 583, 585</td>
<td>ENV 501, 502, 510</td>
<td>GEO 500 and GEO 507 (Lab), 510</td>
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<tr>
<td>BIO 542</td>
<td>and 587</td>
<td></td>
<td>GEO 511 (Lab)</td>
<td></td>
</tr>
</tbody>
</table>

*Select two courses from this list.
<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
</table>
| SCE 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) |
| SCE 502 | Theory of Learning (3 semester hours) Staff  
Topics vary. Suggested topics include systematic approach to instruction, human variability and classroom learning, goal setting and measurable achievement, psychology of learning, and the role of the teacher. (3-0) |
| SCE 503 | Seminar: Teaching of Science (3 semester hours) Staff  
Selection and analysis of concepts peculiar to various topics in the sciences taught in secondary schools and community colleges. (3-0) |
Members of Faculty currently participating:

PROFESSOR: Patrick L. Odell (Acting Head) (Mathematical Sciences)

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 hypothetic-deductive approach within a neuroscientific base to better prepare individuals to educate children who, because of physical, mental, social or emotional differences, 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. 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.

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.

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 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 .

Specific requirements in special education include:

A. A prerequisite broad knowledge in the behavioral sciences (i.e., psychology, sociology and education).

*Program will begin no later than September, 1975; however, students may initiate application at any time, but no later than January, 1975.
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 500, SED 501, SED 502, SED 503, SED 504, SED 506, SED 901 and SED 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.

<table>
<thead>
<tr>
<th>TABLE I. CORE COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Required of all students)</td>
</tr>
<tr>
<td><strong>Area 1</strong></td>
</tr>
<tr>
<td>Learning Theory</td>
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<tr>
<td>SED 500</td>
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<table>
<thead>
<tr>
<th>TABLE II. ADVANCED ELECTIVES</th>
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<tbody>
<tr>
<td>(Student may select eleven credits from the following list of courses.)</td>
</tr>
<tr>
<td><strong>Area 1</strong></td>
</tr>
<tr>
<td>Learning Theory</td>
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<tr>
<td>SED 510</td>
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<tr>
<td>SED 512</td>
</tr>
<tr>
<td>SED 513</td>
</tr>
</tbody>
</table>
SED 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)

SED 515 Individual Testing and Supervised Practicum in Testing
(3 semester hours)
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)

SED 520 Regular Classroom Placement: Issues and Trends (1 semester hour)
Analyses of educational problems related to classroom placement of exceptional children.

SED 521 Teachers’ Roles in Parent Services (1 semester hour)
Understanding techniques for teachers to employ in parent interviews, conferences and referrals. (1-0)

SED 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)

SED 523 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)

SED 524 Internship in Affective Dysfunction in Children (1-3 semester hours)
Supervised and directed experiences in affective dysfunction. (0,2-6)

SED 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)

SED 526 Internship in Multihandicapped Children’s Program (1-3 semester hours)
Supervised and directed experiences in a multihandicapped children’s program. (0,2-6)

SED 527 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)

SED 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. (0-3)
**SED 902** Assessment and Evaluation 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 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. (0-3)

**SED 903** Seminar in Exceptional Children (1-3 semester hours)

| 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) |

**SED 904** Independent Study (1-3 semester hours)
(0,3-9)

**SED 905** Demonstration Projects (3 semester hours)
(0-9)

**SED 908** Thesis (3 semester hours)
(0-9)
FACULTY

BREIG, EDWARD L.  
Assistant Professor, Physics  

BREMER, HANS  
Professor, Biology  
Vordiplom, Univ. of Heidelberg, 1949; Ph.D., Univ. of Goettingen, 1957

BURROUGHS, JUDITH RAY  
Assistant Professor, Communication Disorders  

Caldwell, Richard A.  
Associate Professor, Chemistry;  
Head, Graduate Program in Chemistry;  
[Acting] Director, Institute for Chemical Sciences  
B.S., Massachusetts Institute of Technology, 1961; Ph.D., Univ. of California, Berkeley, 1965

Carter, James L.  
[Assistant] Associate Professor, Geosciences  
B.S., Texas Western College, 1961; Ph.D., Rice Univ._[ersity], 1965

Chaney, Roy C.  
Assistant Professor, Physics  
B.S., Univ. of Oklahoma, 1965; M.S., Univ. of Oklahoma, 1967; Ph.D., Univ. of Oklahoma, 1971

Chhibara, Raj S.  
Lecturer, Mathematical Sciences  
B.A., Panjab Univ., Chandigarh, India, 1961; M.A., Delhi Univ., Delhi, India, 1964; Ph.D., Oklahoma State Univ., 1972

Crowson, Royston C.  
Professor, Biology;  
Head, Graduate Program in Biology;  
Director, Institute for Molecular Biology  
B.S., Univ. of Birmingham, 1942; Ph.D., Univ. of Birmingham, 1951;  
B.Sc., Univ. of Birmingham, 1965

Collins, Carl E., Jr.  
Associate Professor, Physics;  
Head, Graduate Program in Physics  
B.S., Univ. of Texas at Austin, 1960; M.S., Univ. of Texas at Austin, 1961; Ph.D., Univ. of Texas at Austin, 1963

Crowson, James L.  
Lecturer, Political Science  
Vice President  

Cunningham, Augustine James  
Assistant Professor, Physics  
B.Sc, Queens Univ._[ersity], Belfast, 1966; Ph.D., Queens Univ._[ersity], Belfast, 1969

Curry, Stephen M.  
Assistant Professor, Physics  
B.S., Southern Methodist Univ., 1967; M.S., Stanford Univ., 1969;  
Ph.D., Stanford Univ., 1972

Cutler, Richard G.  
Assistant Professor, Biology  
B.S., California State College, 1961; M.S., Univ. of Houston, 1966;  
Ph.D., Univ. of Texas at Austin, 1966

Daly, David D.  
Professor, Communication Disorders  
B.A., Stanford Univ._[ersity], 1940; B.S., Univ._[ersity] of Minnesota, 1942; M.D., Univ._[ersity] of Minnesota, 1944; Ph.D., Univ._[ersity] of Minnesota, 1951

Dodson, James T.  
Associate Professor,  
Education and the Communication Arts;  
University Librarian  
B.S., Denison Univ., 1954; M.A., Ohio State Univ., 1961; M.S., Case Western Reserve Univ., 1962

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DORMAN, H. JAMES  
Professor, Geosciences  
B.A., Carleton College, 1949; M.S., Northwestern Univ., 1951; Ph.D., Columbia Univ., 1961  

DUNAWAY, DONNA K.  
Lecturer, Mathematical Sciences  

EWING, WILLIAM MAURICE  
Professor, Geosciences  
B.A., Rice Institute, 1926; M.A., Rice Institute, 1927; Ph.D., Rice Institute, 1931  

FENYVES, ERVIN J.  
Professor, Engineering and Applied Sciences  
M.S., Roland Botvos Univ. of Budapest, 1946; Ph.D., Roland Botvos Univ. of Budapest, 1950; Dr. Physical Sciences, Hungarian Academy of Sciences, 1960  

FIELDER, ROBERT E.  
Lecturer, Education and the Communication Arts; Assistant to Vice President for Academic Affairs [Special Projects]  
B.S., Texas Tech Univ.; M.A., Hardin Simmons Univ.; Ed.D., East Texas State Univ., 1971  

GERKEN, GEORGE M.  
Associate Professor, Communication Disorders  
B.S., Massachusetts Institute of Technology, 1955; Ph.D., Univ. [emty] of Chicago, 1959  

GERNETH, DAL C.  
Lecturer, Mathematical Sciences  
B.S., Univ. of Texas at Austin, 1946; M.S., Oklahoma State Univ., 1947; Ph.D., Oklahoma State Univ., 1953  

GERLO, ARAM  
Professor, Communication Disorders  
B.S., Atlantic Union College, 1931; M.D., Loma Linda Univ. [emty], 1938  

GRAY, DONALD M.  
Assistant Professor, Biology  
B.A., Susquehanna Univ., 1960; M.S., Yale Univ., 1967; Ph.D., Yale Univ., 1967  

GUTTEN, EDMUND W.  
Associate Professor, Biology  
Ph.D., Univ. of Bonn, 1953  

GUTZ, HERBERT  
Associate Professor, Biology  
Diplom[s]Vorpruefung in Biology, Free Univ. of Berlin, 1951; Ph.D., Free Univ. of Berlin, 1955  

HALES, ANTON L.  
Visiting Professor, Geosciences  
Director, Research School in Earth Sciences, Australian National University  
B.S., Univ. of Cape Town, 1929; M.S., Univ. of Cape Town, 1930; B.A., St. John's College, Cambridge, 1933; Ph.D., Univ. of Cape Town, 1936; M.A., Cambridge Univ., 1952  

HALPERN, MARTIN  
Associate Professor, Geosciences  
B.A., McGill Univ., 1959; M.S., Univ. of Wisconsin, 1961; Ph.D., Univ. of Wisconsin, 1963  

HAMMER, EDMUND K.  
Assistant Professor, Communication Disorders  
B.S., Univ. of Texas at Austin, 1956; M.A., Univ. of Kansas, 1966; Ph.D., Univ. of Texas at Austin, 1969  

HANSON, WILLIAM B.  
Professor, Physics; Director, Institute of Physical Sciences  
B.S., Univ. of Minnesota, 1944; M.S., Univ. of Minnesota, 1949; Ph.D., George Washington Univ., 1954
HARM, WALTER  
Professor, Biology  
Diplom[er] Biology, Humboldt Univ., Berlin, 1949; Ph.D., Free Univ. of Berlin, 1951

HARRIS, DANIEL L.  
Professor, Biology  
A.B., Univ. of Minnesota, 1936; Ph.D., Univ. of Pennsylvania, 1942

HEIKKILA, WALTER J.  
Professor, Physics  
B.A., Univ. of Toronto, 1950; M.A., Univ. of Toronto, 1952; Ph.D., Univ. of Toronto, 1954

HELSLEY, CHARLES E.  
Professor, Geosciences; Head, Graduate Program in Geological Sciences; Director, Institute for Geological Sciences  
B.S., California Institute of Technology, 1956; M.S., California Institute of Technology, 1957; Ph.D., Princeton Univ., 1960

HOFFMAN, JOHN H.  
Associate Professor, Physics  
B.S., St. Mary's College, 1951; M.S., Univ. of Minnesota, 1954; Ph.D., Univ. of Minnesota, 1958

JAGGER, JOHN  
Professor, Biology  
B.S., Yale College, 1949; M.S., Yale Univ., 1953; Ph.D., Yale Univ., 1954

JOHNS, DONNELL F.  
[Associate Professor]  
Lecturer, Communication Disorders  
B.S., Ohio Univ. [ermistry], 1962; M.S., Florida State Univ. [ermistry], 1963; Ph.D., Florida State Univ. [ermistry], 1968

JOHNSON, FRANCIS S.  
Professor, Physics; Executive Director, Center for Advanced Studies; Cecil H. and Ida M. Green Honors Chair in the Natural Sciences  
B.S., Univ. of Alberta, 1940; M.A., Univ. of California, Los Angeles, 1942; Ph.D., Univ. of California [et], Los Angeles, 1958

JORDAN, BRYCE  
System Professor, History of Music; President  
B.Mus., Univ. of Texas at Austin, 1948; M.Mus., Univ. of Texas at Austin, 1949; Ph.D., Univ. of North Carolina, 1956

KEMPER, JOST  
Assistant Professor, Biology  
Ph.D., Univ. of Cologne, 1964

KUSCH, POLYKARP  
Professor, Physics  
Eugene McDermott University of Texas System Chair  
B.S., Case Institute of Technology, 1931; M.S., Univ. of Illinois, 1933; Ph.D., Univ. of Illinois, 1936; Nobel Prize in Physics (jointly with Willis E. Lamb, Jr., 1955)

KYLE, EUGENIA MARY JANE  
Associate Professor, English and Comparative Literature; Executive Dean of Undergraduate Studies  
B.A., Regis College, 1963; M.A., Harvard Univ. [ermistry], 1965; Ph.D., Harvard Univ. [ermistry], 1971

LANDISMAN, MARK  
Professor, Geosciences  
A.B., Columbia College, 1949; Ph.D., Columbia Univ., 1959

LANG, DIMITRIJ A.  
Professor, Biology  
M.S., Univ. of Frankfurt/Main, 1953; Ph.D., Univ. of Frankfurt/Main, 1959

LATHAM, GARY V.  
Professor, Geosciences  
B.S., Pennsylvania State Univ., 1958; Ph.D., Columbia Univ., 1963

LEAB, DANIEL J.  
Associate Professor, History (August 1975)  

LEE, G. FRED  
Professor, Engineering and Applied Sciences  
Director, Institute for Environmental Sciences  
B.S., San Jose State College, 1955; M.S.P.H., Univ. of North Carolina, 1957; Ph.D., Harvard, 1960
LIN, CHUN C.  
Visiting Professor, Physics
B.S., Univ. of California, Berkeley, 1951; M.A., Univ. of California, Berkeley, 1952; Ph.D., Harvard Univ., 1955

LUNDELL, CYRUS LONGWORTH  
Professor, Biology
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B.A., Southern Methodist Univ., 1932; M.A., Univ. of Michigan, [Ann Arbor] 1934; Ph.D., Univ. of Michigan, [Ann Arbor] 1936

LUTZ, NANCY C. 
Lecturer, Education and the Communication Arts
B.S., Univ.[ersity] of New Mexico, 1958; M.A., Univ.[ersity] of New Mexico, 1965; Ed.D., New Mexico State Univ.[ersity], 1969

LUTZ, RAYMOND P.  
Professor, Management Science
Head, Graduate Program in Management and Administrative Sciences; Director, Institute for Management and Administrative Sciences; Acting Head, Graduate Program in International Management Studies
B.S.M.E., Univ. of New Mexico, 1958; M.B.A., Univ. of New Mexico, 1962; Ph.D., Iowa State Univ., 1964

MADEO, LAURENCE A.  
Assistant Professor, Management Science

MANTON, WILLIAM I.  
Assistant Professor, Geosciences
B.S., Univ. of Witwatersrand, 1959; M.S., Univ. of Witwatersrand, 1963; Ph.D., Univ. of Witwatersrand, 1968

McCULL, KENNETH B.  
Lecturer, Mathematical Sciences
B.S., Univ. of Texas at Arlington, 1964; M.S., North Texas State Univ., 1966; Ph.D., North Texas State Univ., 1973

McCORQUODALE, D. JAMES  
Professor, Biology
B.A., Univ. of British Columbia, 1950; Ph.D., Univ. of Wisconsin, 1955

NELSON, LYNN A.  
Assistant Professor, Chemistry
B.S., California Institute of Technology, 1966; Ph.D., Harvard Univ., 1972

MERVILLE, LARRY J.  
Assistant Professor, Management Science
B.A., Vanderbilt Univ., 1965; M.B.A., Univ. of Texas at Austin, 1968; Ph.D., Univ. of Texas at Austin, 1971

MIDGLEY, JAMES E.  
Associate Professor, Physics
B.S., Univ. of Michigan, 1956; Ph.D., California Institute of Technology, 1963

MITTERER, RICHARD M.  
Assistant Professor, Geosciences
B.S., Franklin & Marshall College, 1960; Ph.D., Florida State Univ., 1966

MOORE, JAMES E.  
Lecturer, Psychology
B.S. Univ. of Illinois, 1959; M.A., Univ. of Illinois, 1962; Ph.D., Purdue Univ., 1965

MOUSHEGIAN, GEORGE  
Professor, Communication Disorders
B.S., Wayne Univ.[ersity], 1947; M.A., Wayne Univ.[ersity], 1951; Ph.D., Univ. of Texas at Austin, 1957

ODELL, PATRICK L.  
Professor, Mathematical Sciences
Executive Dean of Graduate Studies; Acting Head, Graduate Program in Special Education
B.S., Univ. of Texas at Austin, 1952; M.S., Oklahoma State Univ., 1958; Ph.D., Oklahoma State Univ., 1962
[GUALLINE, CHARLES M., JR. ------------------ Lecturer, Mathematical Sciences]
[Byr., Rice U., 1948; B.S., U. of Texas, 1951; Ph.D., U. of Texas, 1955]

OZSVATH, ISTVAN
Professor, [Mathematics] Mathematical Sciences
Diploma (Mathematics, Physics, and Astronomy), Univ. of Budapest, 1951; Ph.D., Univ. of Hamburg, 1960

PARR, CHRISTOPHER A.
Assistant Professor, Chemistry
B.S., Univ. of California, Berkeley, 1962; Ph.D., California Institute of Technology, 1969

PATRICK, MICHAEL H.
Associate Professor, Biology
A.B., Univ. of California, Santa Barbara, 1958; Ph.D., Univ. of Chicago, 1964

PAYNE, EUGENE F.
Lecturer, Management Science
B.S., Texas A&M Univ., 1964; M.S., Texas A&M Univ., 1965; Ph.D., Univ. of Oklahoma, 1970

PESSAGNO, EMILE A., JR.
Associate Professor, Geosciences

PETERS, CARL M.
Lecturer, Mathematical Sciences
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APPENDIX A

RULES AND REGULATIONS FOR
DETERMINING RESIDENCE STATUS

Pursuant to Title 3,
Texas Education Code

Effective January 20, 1973

I. Minors

Statute: Section 54.052(b) An individual, under eighteen [18] 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 eighteen [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.

A. Death or Divorce of Parents

The legal residence of a minor under eighteen [18] years of age is usually that of the father. Upon the death of the father, the legal residence of the minor is that of the mother. Upon divorce or legal separation of the parents, the residence of the minor is determined by the residence of the parent with whom the minor is making his home at the time of registration.

B. Custody by Court Order

If the custody of the minor has been granted by court order (e.g., divorce decree, child custody action, guardianship or adoption proceedings) to some person other than the parent, the residence of that person shall control; provided, however, that such grant of custody was not ordered during or within a year prior to the minor's enrollment in an institution of higher education (defined as any public junior college, public senior college or university, medical or dental unit or other agency of higher education) and was granted under circumstances indicating that such guardianship was not for the purpose of obtaining status as a resident student.

If the minor is not making his home with either parent, and there is no court-appointed guardian, the residence of the parent with whom the minor last resided shall be presumed to control. If, however, the minor has made his home with, and has been dependent upon a grandparent for more than a year prior to enrollment in an institution of higher education, the residence of that natural guardian shall be regarded as his residence. The residence of a person other than a parent or a natural or legal guardian, who may furnish funds for payment of tuition, fees, or living expenses shall in no way affect the residence classification of a minor.
C. Abandoned Child

In the case of an abandoned child, the residence of a person who has stood in loco parentis for a period of time may determine the residence of such abandoned child. The fact of abandonment must be clearly established and must not have been for the purpose of affecting the residence of the minor, and the minor must have actually resided in the home of such person for two years immediately prior to registering in an institution of higher education in Texas and must have received substantially all of his support from such person. In the event that the in loco parentis relationship has not existed for the full two year period, a lesser period of time is acceptable in unusual hardship cases, such as death of both parents.

D. Orphan

An orphan who has lived for longer than a year in an established orphan's home in Texas operated by a fraternal, religious, or civic organization and has been graduated from the orphan's home shall be considered a resident of Texas provided he remains in Texas from the time of such graduation until he enters an institution of higher education.

E. Emancipated Child

Under certain circumstances, a minor may become emancipated or freed from parental control. If the minor's parents have ceased to exercise parental control and responsibility, if the minor is responsible for all of his or her own decisions and affairs, and if the minor is financially independent of parents, the minor may establish emancipation. A minor is financially independent if he or she receives less than $600 a year from parents, and if the parents do not claim the minor as a dependent. If emancipation is clearly proven, the residence classification of the minor is determined by the residence of the minor rather than the residence of the parents, and after 12 months in Texas under such circumstances, the minor may be classified as a resident, if he or she otherwise satisfies the statutory requirements applicable to those over [24]18 (e.g., see presumption arising from residence while a student). Proof of emancipation is the responsibility of the minor.

F. Married Minors

A minor who is married shall have the power and capacity of a single person of full age and is entitled to select his or her own place of legal residence. After 12 months' residence in Texas under such circumstances, the minor may be classified as a resident if he or she otherwise satisfies the statutory requirements applicable to those over [24]18 years of age. The residence classification for tuition purposes of a nonresident who marries a Texas resident shall be governed by the provisions of the tuition statute (Texas Education Code, § 54.056) and of these rules and regulations as hereinafter set out.

G. Minors Whose Parents Moved to Another State or Foreign Country

If the parents of a minor who is enrolled as a resident student move their legal residence to another state or foreign country on, or after August 15, 1971, the minor shall be classified as a nonresident at all subsequent registration periods. Under the provisions of Section 54.055, the minor will be entitled to pay the resident tuition fee as long as he remains continuously enrolled in a regular session in a public institution of higher education. The minor student must re-enroll for the next available regular semester immediately following the parents' change of legal residence to another state.
If the parents of a minor move to another state or foreign country, or reside outside the state or in a foreign country at the time of enrolling in an institution of higher education, but claim legal residence in Texas, conclusive evidence must be presented that the father is still claiming legal residence in the State of Texas and that he has the present intent to return to the state. A certificate from the employer of the parents that the move outside the state was temporary and that there are definite plans to return the parents to Texas by a determinable future date may be considered in this connection.

If a minor whose parents have moved their legal residence to another state or foreign country resides in Texas for 12 consecutive months following his 18th birthday and by his actions clearly indicates that his intention is to establish permanent residence in the state, he may be classified as a resident student effective with the beginning of the term or semester following his 18th birthday despite the fact that his entire period of residence in Texas has been as a student.

When the parents of a minor who have established their legal residence in another state or foreign country return and reestablish their legal residence in Texas the minor must be classified as a nonresident until the first registration after the parents have resided in the state for a 12-month period following their return.

II. Residence of Individuals Over Twenty-One

Statute: Section 54.052(d) An individual twenty-one or over who moves into the state 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 twenty-one 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 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.

Establishment of Residence

Any individual twenty years of age or over who moves into the state and who is gainfully employed within the state for a period of 12 months prior to enrolling in an educational institution (defined as any institution of higher education, public or private, above the high school level), is entitled to classification as a resident. If such 12 months’ residence, however, can be shown not to have been for the purpose of establishing legal residence in the state but to have been for some other purpose, the individual is not entitled to be classified as a resident. Any student registering in an educational institution prior to having resided in the state for 12 months shall be classified as a nonresident for tuition purposes.
A person classified as a nonresident student upon his first enrollment in an institution of higher education is presumed to be a nonresident for the period during which he continues as a student. If such nonresident student withdraws from school and resides in the state while gainfully employed for a period of 12 months, upon re-entry into an institution of higher education he will be entitled to be reclassified as a resident for tuition purposes. Accumulations of summer and other vacation periods do not satisfy this requirement. A student is not entitled to reclassification after a residence in the state for 12 months merely on the basis of his or her wife's employment, registration to vote, registration of a motor vehicle and payment of personal property taxes thereon, or the securing of a Texas driver's license. The presumption of a "nonresident" is not a conclusive presumption, however, and other facts may be considered to determine if the presumption has been overcome. Material to this determination are business or personal facts or actions unequivocally indicative of a fixed intention to reside permanently in the state including, but not limited to, the length of residence and full-time employment prior to registering in the institution, the fact of full-time employment and the nature of such employment (regular industrial, business or professional employment as distinguished from student-type employment) while a student, purchase of a homestead with substantial down-payment, and marriage to a resident of Texas. All of these facts are weighed in the light of the fact that a student's residence while in school is primarily for the purpose of education and not to establish residence, and that decisions of an individual as to residence are generally made after the completion of an education and not before.

### III. 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.

**Nonresident Who Marries**

A Resident of Texas

The nonresident male or female student who marries a resident of Texas is entitled to pay the resident tuition at the registration period next following the date of marriage upon submission of evidence of such marriage and of the spouse's legal residence in Texas. Such marriage evidence is a certified copy of the marriage license or other certified documentary evidence of marriage as filed with the county clerk. The legal residence of a husband and wife are normally presumed to be the same; however, it is possible for either the husband or wife to establish a residence different from the other spouse. In such a situation, the normal standards are followed. (See II.) In the event a nonresident student marries a resident of Texas and subsequently is divorced within 12 months, such nonresident student shall be classified as a nonresident for all enrollment periods subsequent to the date of such divorce; provided, however, the nonresident may establish Texas residence pursuant to normal standards. (See II.)

### IV. Military Personnel and Veterans

**Statute: Section 54.058(a)**

Military personnel are classified as provided by this section in the following manner:

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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, Navy, Navy Reserve, 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 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 regulations may not be exempted from nonresident tuition by virtue of that training status nor may out-of-state Army, Air Force, Navy, Marine Corps, or Coast Guard Reserve 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.

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 immediately following assignment to duty in Texas are entitled to pay the tuition fees and other fees or charges provided for Texas residents.

If nonresident military personnel are attending an institution of higher education under a contract between the institution and any branch of the Armed Forces of the United States, in which the tuition of the member of the military is paid in full by the United States Government, the student shall pay the nonresident tuition fee.

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.

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

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 in the State.

A. Certification of Assignment to Duty in Texas

Subsection (b) provides that military personnel assigned to duty within the State of Texas, their husband or wife as the case may be and their children, shall be entitled to pay the same tuition as a resident of Texas regardless of the length of their physical presence in the state. To be entitled to pay the resident tuition fees, such military personnel shall submit at the time of each registration a statement from his commanding officer or personnel officer certifying that he is then assigned to duty in Texas and that same will be in effect at the time of such registration in an institution of higher education. This subsection also provides that a nonresident member of an out-of-state National Guard unit who is temporarily training with a Texas National Guard unit will not be entitled to pay the resident tuition.
B. Spouse and Children of Member of Armed Services

Subsection (c) provides that the spouse and children of a member of the armed forces assigned to duty outside the State of Texas immediately after assignment in Texas may be entitled to pay the resident tuition as long as they reside continuously in Texas.

Subsection (g) provides that the spouse and children of a member of the armed forces who is assigned to duty outside the State of Texas and sends his family to the State of Texas may be entitled to pay the resident tuition if they file with the institution of higher education at which the student intends to register a letter of intent, an affidavit or other evidence satisfactory to the institution stating that they intend to become permanent residents of Texas.

Subsection (f) provides that a member of the immediate family (which shall include spouse or children) of a member of the armed forces who dies or is killed in action while in military service may qualify to pay the resident tuition if they become residents of Texas within 60 days of the date of death. To qualify under this provision, the student shall submit to the institution of higher education satisfactory evidence establishing the date of death and residence in Texas.

The military personnel spouse and children enumerated in (b), (c), (f), and (g) are classified as nonresidents but shall be entitled to pay the resident tuition regardless of their length of residence in Texas if they comply with the provisions of the statute and these rules and regulations.

C. Nonresident Military Personnel Attending College Under Contract

Subsection (d) provides that nonresident military personnel attending an institution of higher education under a contract with any branch of the armed forces where the tuition is paid in full under the provisions of such contract shall be charged nonresident tuition even though such military personnel may be assigned to duty pursuant to military orders at an institution of higher education.

D. Nonresidents Attending College Under Federal Benefits Programs for Veterans

Subsection (e) provides that the institution of higher education may charge the nonresident tuition fee for a nonresident veteran to the United States Government under the provisions of any federal law or regulation authorizing educational or training benefits for veterans.

E. Legal Residence of Person in Military Service

A person in military service is presumed to maintain during his entire period of active service the same legal residence which was in effect at the time he entered military service. A person stationed in a state on military service is presumed not to establish a legal residence in that state because his presence is not voluntary but under military orders. It is possible for a member of the military service to abandon his domicile of original entry into the service and to select another, but to show establishment of a new domicile during the term of active service, there must be clear and unequivocal proof of such intent. An extended period of service alone is not sufficient. The purchase of residential property is not conclusive evidence unless coupled with other facts indicating an intent to put down roots in the community and to reside there after termination of military service. Evidence which will be considered in determining this requisite intent includes, but is not limited to a substantial investment in a residence and the claiming of a homestead exemption thereon, registration to vote, and voting in local elections, registration of an automobile in Texas and payment of personal property taxes thereon, obtaining a Texas driver's license, maintaining checking accounts, savings accounts, and safety deposit boxes in Texas banks, existence of
wills or other legal documents indicating residence in Texas, change of home-of-
record and designation of Texas as the place of legal residence for income tax pur-
poses on military personnel records, business transactions or activities not norm-
ally engaged in by military personnel, membership in professional or other state
organizations, and marriage to a resident of Texas. Purchase of property during
terminal years of military service preceding retirement generally is given greater
weight than a similar purchase made prior to such terminal period.

F. Residence Classification of Veterans Upon Separation from Military Service

A person who enrolls in an institution of higher education following separa-
tion from military service must be classified as a nonresident student unless, (1)
the individual was a legal resident of Texas at the time of entry into military
service and has not relinquished that residence, (2) the individual can prove that
during military service he or she has, in fact, established a bona fide, legal resi-
dence in Texas at a time at least 12 months prior to registration, or (3) the in-
dividual has resided in Texas other than as a student for 12 months prior to regis-
tration and subsequent to discharge from service. The nonresident classification
is a presumption, however, which can be overcome pursuant to the guidelines and
standards for establishing Texas residence. (See II.)

V. Employees of Institutions of Higher
Education Other Than Students

Statute: Section 54.059 A teacher, professor, or other employees of a Texas in-
stitution 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.

A person employed at least half-time on a regular monthly salary basis (not an
hourly employee) by any public institution of higher education, with an effective
date of employment on the 12th class day of a regular semester or the 4th class day
of a summer term, may pay the same tuition as a resident of Texas for self, husband
or wife as the case may be and their children, regardless of the length of residence
in the state. To be entitled to pay the resident tuition fees such employee must
submit prior to the time of each registration a statement certifying employment from
the Director of Personnel or a designated representative of the institution of high-
er education by which he is employed.

VI. Student Employees

Statute: Section 54.051(a) 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 fee and other fees or charges re-
quired for Texas residents, without regard to the length of time he had re-
-sided in Texas; provided that said student employee is employed at least
one-half time in a position which relates to his degree program under rules
and regulations established by the employer institution. This exemption shall
continue for students employed two consecutive semesters through the summer
session following such employment if the institution is unable to provide
employment and, as determined under standards established by the institution,
if the employee has satisfactorily completed his employment.
A student employed at least half-time by any public institution of higher education in a position which relates to his degree program, with an effective date of employment on or before the 12th class day of a regular semester, or the 4th class day of a summer term, may pay the same tuition as a resident of Texas for himself, his husband or wife as the case may be, and their children regardless of the length of residence in the state. The institution which employs the student shall determine whether or not the student's job relates to his degree program. If a student is employed by an institution of higher education for consecutive Fall and Spring semesters and he was further eligible to pay the tuition charged to Texas residents during those Fall and Spring semesters because of the provisions of this subsection, then the student may continue to pay the resident tuition rate during the summer session following the Spring employment if the institution is unable to provide employment and if the student has satisfactorily completed his employment.

VII. 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.

An official scholarship committee or committees of a public institution of higher education may award competitive scholarships in amounts of $200 or more for the academic year, the summer session or both. If a nonresident student obtains one of these competitive scholarships, he may pay the same tuition as a resident of Texas during the Registration period in which the scholarship is in effect. The student must present a statement from the official scholarship committee certifying that such scholarship will be in effect at the time of registration.

VIII. 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.

Citizens of any country other than the United States of America who are in this country on a student visa or a visa other than one entitling them to immigrant status and who enroll in an institution of higher education covered by Section 54.051 of the Texas Education Code shall be classified as "...students who are citizens of any country other than the United States of America,..." for purposes of Section 1(a)(7) of Article 2654c, V.T.C.S. Such a student who is in this country on an immigrant visa can be classified as a resident student if he has resided in the state for a period of 12 months under circumstances indicating his intention to reside permanently in Texas and not merely to complete his education. To this extent a citizen of any country other than the United States of America residing in Texas on an immigrant visa shall be in no different position than the citizen of the United States who has been a resident of another state. A citizen of any country other than the United States of America residing in the United States of America in a State other than Texas on an immigrant visa and has established his intent to reside permanently in such other State shall be classified as a nonresident.
IX. 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.

X. Student Responsibilities

A. Student Responsibility to Register Under Proper Classification

The responsibility of registering under the proper residence classification is that of the student, and if there is any question of his right to classification as a resident of Texas, it is his obligation, prior to or at the time of his registration, to raise the question with the administrative officials of the institution in which he is registering and have such officially determined.

B. Notification Upon Becoming a Nonresident

Every student who is classified as a resident student but who becomes a nonresident at any time by virtue of a change of legal residence by his own action or by the person controlling his domicile is required to notify the proper administrative officials of his institution at once.

XI. Official Change of Resident Status

A. Application for Reclassification

Every student classified as a nonresident student shall be considered to retain that status until such time as he shall have made written application for reclassification in the form prescribed by the institution and shall have been officially reclassified in writing as a resident of Texas by the proper administrative officers of the institution.

B. Reclassification as a Nonresident

Every person who has been classified as a resident of Texas shall be reclassified as a nonresident whenever he shall report, or there is found to exist, circumstances indicating a change in legal residence to another state. If any student who has been classified as a resident of Texas shall be found to have been erroneously so classified, he shall be reclassified as a nonresident and shall be required to pay the difference between the resident and nonresident fees for such semesters in which he was so erroneously classified. In addition, he shall be required to pay back all monies borrowed from the Texas Opportunity Plan Fund.

C. Reclassification as a Resident

If any student has been erroneously classified as a nonresident student and subsequently proves to the satisfaction of the appropriate officials of an institution of higher education that he should have been classified as a resident student, he shall be reclassified as a resident of Texas and shall be entitled to a refund of the difference between the resident and nonresident fees for the semester in which he was so erroneously classified.
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.

Student Compliance with Institution Rules and Regulations

Each institution has been authorized by statute to assess and collect from each nonresident student failing to comply with the provisions of the tuition statute and with these interpretations concerning nonresident fees a penalty not to exceed $10.00 a semester. In addition, if a student has obtained residence classification by virtue of deliberate concealment of facts, or misrepresentation of fact, he may be subject to appropriate disciplinary action, in accordance with the rules and regulations that may be adopted by the governing boards of the respective institutions of higher education.
Chancellor Charles A. LeMaistre
The University of Texas System
501 Colorado Street
Austin, Texas 78701

Dear Chancellor LeMaistre:

The docket for the June 14, 1974 meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.

Sincerely,

Arliegh D. Templeton
President
The following gifts have been received by The University of Texas at El Paso. I recommend acceptance and that expressions of thanks and appreciation of the Board be sent the donors by the Secretary. In the case of scholarships where the recipient is designated by the donor, it has been determined that the donor is a public or charitable institution and that the donation does not constitute an evasion of taxes.

<table>
<thead>
<tr>
<th>Donor</th>
<th>Purpose and Condition</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ASARCO Foundation</td>
<td>For the Department of Metallurgical Engineering</td>
<td>$5,000.00</td>
</tr>
<tr>
<td>2. International Business Machines Corporation</td>
<td>IBM Graduate Scholarships Program for Mechanical and Electrical Engineering</td>
<td>$6,000.00</td>
</tr>
<tr>
<td>3. Patricia Hewitt Silence Trust</td>
<td>Patricia Hewitt Silence Memorial Fund</td>
<td>$6,419.77</td>
</tr>
</tbody>
</table>

El Paso, Texas 79980

Mr. Carl E. Ryan, Assistant Trust Officer
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. Contract No. V34Gv-2375, dated February 1, 1974, whereby the Veterans Services Officer, V. A. Regional Office, 1400 North Valley Mills Drive, Waco, Texas 76710, authorizes the University to furnish private individual tutoring for such veteran students as have been determined by the Veterans Administration to require tutoring service for the period January 31, 1974 through January 30, 1975. The rate of payment is not to exceed $3.75 per hour. The majority of the expenditures from this award will be made in El Paso County.

2. Contract No. V34Gv-2376, dated February 1, 1974, whereby the Veterans Services Officer, V. A. Regional Office, 1400 North Valley Mills Drive, Waco, Texas 76710, authorizes the University to furnish private individual reader service for such veterans as have been determined by the Veterans Administration to require Reader Service for the period February 1, 1974 through January 31, 1975. The rate of payment will not exceed $3.00 per hour. The majority of the expenditures from this award will be made in El Paso County.

3. Modification No. A00005, dated February 5, 1974, to Contract No. DAADOT-72-C-0027, whereby the Contracting Officer, Procurement Directorate, 8700-PR-A, Building 1830, White Sands Missile Range, New Mexico 88002, provides $7,705.84 for accomplishing the scope of work described in Modification A00001, and $13,016.00 in reference to our proposal dated January 16, 1974, obligating the total negotiated amount of $18,723.84. The majority of expenditures from this award will be made in El Paso County.

4. Modification No. A00001, dated March 25, 1974, to Contract No. DAADOT-73-C-0193, whereby the Contracting Officer, Procurement Directorate, 8700-PR-A, Building 1830, White Sands Missile Range, New Mexico 88002, obligates $7,500.00 for Options 5 and 6 of the Contract changing the total amount of the Contract from $16,206.00 to $23,706.00. Delivery of the added items is to be completed on or before 180 days after the date of this Modification. The majority of the expenditures from this award will be made in El Paso County.

5. Letter Agreement, dated February 25, 1974, whereby the Executive Director, The Robert A. Taft Institute of Government, 420 Lexington Avenue, New York, New York, 10017, awards $14,800.00 of which $3,044.85 is carried over from last year's unexpended balance, to conduct a seminar on the basic principles of constitutional government in the United States, of the American two-party system, and the process of government at all levels. The majority of the expenditures from this award will be made in El Paso County.

6. Contract No. DAADOT-74-C-0102, dated March 1, 1974, whereby the Contracting Officer, Procurement Directorate, 8700-PR-A, Building 1830, White Sands Missile Range New Mexico 88002, provides for government owned equipment and facilities in support of research conducted under other government contracts for the period March 1, 1974 through December 31, 1975.

7. Order No. DAS201-74-D-3716, dated March 15, 1974, to Basic Agreement No. DAADOT-74-A-0002, whereby the Contracting Officer, Procurement Division, DIO, P. O. Box 6278, Fort Bliss, Texas 79906, requests that 51 students be enrolled for 215 credit hours in the in-house program during the Spring Semester, 1974, for which the government undertakes the total obligation of $21,912.50. The majority of the expenditures from this award will be made in El Paso County.

8. Contract No. V34Gv-2365, dated January 1, 1974, whereby the Director, V. A. Regional Office, 1400 North Valley Mills Drive, Waco, Texas 76710, authorizes the payment of $38,680.65 for the administration and interpretation of standardized examinations and psychological tests, and the counseling of an average of 60 veterans per month during the period January 1, 1974 through December 31, 1974. The majority of the expenditures from this award will be made in El Paso County.

EP-3
9. Grant No. GW-8635, dated March 15, 1974, whereby the Grants Officer, National Science Foundation, Washington, D.C. 20550, awards $18,411.00 for an Implementation Project entitled "Implementation of BSCS in a Quarter System on a Modular Basis", for the period March 15, 1974 through August 31, 1975. The majority of the expenditures from this award will be made in El Paso County.

10. Grant No. GW-8651, dated March 15, 1974, whereby the Grants Officer, National Science Foundation, Washington, D.C. 20550, awards $15,965.00 for an Implementation Project entitled "Awareness of Under Roof Dome and Sky in El Paso", for the period March 15, 1974 through July 31, 1975. The majority of the expenditures from this award will be made in El Paso County.

11. Grant No. GY-11295, dated March 15, 1974, whereby the Grants Officer, National Science Foundation, Washington, D.C. 20550, awards $7,670.00 for an Undergraduate Research Participation Program, under the direction of Dr. Jack Dowdy, Professor of Mechanical Engineering, and Dr. Anthony Tarquin, Professor of Civil Engineering, for the period March 15, 1974 through May 31, 1975. The majority of the expenditures from this award will be made in El Paso County.

12. Modification P00001, dated April 1, 1974, to Contract No. F41609-74-C-0001, whereby the Contracting Officer, Aerospace Medical Division (AFSC), Attn: PMR, P.O. Box 35448, Brooks Air Force Base, Texas 78235, obligates $5,171.00 changing the Estimated Total Amount of Contract from $99,329.00 to $104,500.00. The original document is kept on file at Brooks Air Force Base as per attached letter. The majority of the expenditures from this award will be made in El Paso County.

13. Delivery Order No. DABT61-74-D-5005 MR, dated April 9, 1974 to Contract No. DAKF49-74-A-0093, whereby the Contracting Officer, Procurement Division, DIO, P.O. Box 6078, Fort Bliss, Texas 79906, authorizes three named students to be enrolled in the complete Summer Session, 1974, at an estimated cost of $1,626.00. The majority of the expenditures from this award will be made in El Paso County.

EDUCATIONAL AND GENERAL
RESIDENT INSTRUCTION
COLLEGE OF BUSINESS ADMINISTRATION
Business
1. Change the status of Lawrence P. Blanchard (tenure) from Associate Professor (Full-time) to Associate Professor (1/3 Time) effective January 16, 1974 for the 1974 Spring Semester, at his full-time nine-months rate of $16,544.00 and lapse to Unallocated Salaries - Faculty $5,515.00 budgeted for this position. He will also serve as Dean, Ad Interim (2/3 Time) in the Office of the Dean - College of Business Administration. (RBC 300)

Office of the Dean - College of Business Administration
2. Appoint Lawrence P. Blanchard as Dean, Ad Interim (2/3 Time) effective January 16 through May 31, 1974, at his full-time nine-months rate of $16,544.00 as Associate Professor of Business with the necessary funds in the amount of $5,515.00 to come from Unallocated Salaries - Other. He will also serve as Associate Professor (1/3 Time) in the Department of Business. (RBC 301)

COLLEGE OF EDUCATION
Educational Administration and Supervision
3. Reappoint Ronald J. Barber (non-tenure) as Assistant Professor (Visiting) (1/4 Time) effective January 16, 1974 for the 1974 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 the appropriation for Teaching Assistants. (RBC 298)
4. Reappoint Charles W. Benson (non-tenure) as Assistant Professor (Visiting) (1/4 Time) effective January 16, 1974 for the 1974 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 the appropriation for Teaching Assistants. (RBC 299)
5. Accept the resignation of Alonzo N. Foster (tenure), Professor, effective January 31, 1974, and lapse to Unallocated Salaries - Faculty $5,514.70 budgeted for this position. Dr. Foster retired effective this date. (RBC 308)

COLLEGE OF LIBERAL ARTS
Drama and Speech
6. Appoint Ron Dawson (non-tenure) as Adjunct Assistant Professor effective May 1, 1974. He will serve without salary from the University. (RBC 304)
7. Appoint Mary Knott (non-tenure) as Adjunct Assistant Professor effective May 1, 1974. She will serve without salary from the University. (RBC 305)
8. Appoint Glen Carrigan (non-tenure) as Adjunct Assistant Professor effective June 1, 1974. He will serve without salary from the University. (RBC 306)

Music
9. Change the status of C. K. Stribling (non-tenure) from Instructor (92/100 Time) to Instructor (Full-time) effective January 16, 1974 for the 1974 Spring Semester, at his nine-months rate of $8,686.00 with the necessary additional funds in the amount of $343.00 to come from the appropriation for Instructors, Part-time. (RBC 297)

Philosophy
10. Transfer of Funds:
    From: Maintenance and Operation  $80.05
    To: Wages 80.05
    For: Transfer between dissimilar appropriations to allow the department to service its needs more effectively. (RBC 307)

COLLEGE OF SCIENCE
Biological Sciences
11. Accept the resignation of William de Socarraz, Graduate Laboratory Assistant (1/4 Time), effective December 31, 1973, and lapse to Unallocated Salaries - Other $694.48 budgeted for this position. (RBC 296)
CONTRACT RESEARCH AND SERVICES
NASA Contract NAS-1-12289 - Atmospheric Temperature Sensor

12. Appoint Murray D. Hirsh as Associate Research Scientist (3/8 Time) effective January 29 through May 31, 1974, at a full-time annual rate of $7,333.00 with the necessary funds in the amount of $938.77 to come from budgeted salaries for this contract. (RBC 290)

AUXILIARY ENTERPRISES

Intercollegiate Athletics
13. Accept the resignation of Tommy J. Hudspeth, Assistant Manager of Intercollegiate Athletics, effective April 15, 1974, and lapse to unencumbered salaries $8,625.05 budgeted for this position. (RBC 302)

Housing System

Barry Hall
14. Accept the resignation of Glenn L. DeBissi, Dormitory Director (Part-time), effective March 4, 1974, and lapse to unencumbered salaries $287.10 budgeted for this position. (RBC 303)
May 7, 1974

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

Dear Chancellor LeMaistre:

The docket for the June 14, 1974, meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.

Sincerely,

B. H. Amstead
President
RECOMMENDED AMENDMENTS TO THE 73-74 BUDGET

GENERAL ADMINISTRATION:

Purchasing Division

1. Transfer $2544.37 from Classified Salaries, Vice President for Business Affairs to Classified Salaries, Office of the Director of Purchasing to provide funds for Mrs. Sherry Lynn Valencia as Senior Clerk (Code 9070) from 2/18/74 - 8/31/74. (RBC #186)

2. Transfer $386.65 from Unallocated Salaries, General Institutional Expense and $3000.47 from Administrative Salaries, Office of the Director of Purchasing to Classified Salaries, Office of the Director of Purchasing to provide funds for Mrs. Willie Lou McKinney, as Administrative Assistant (Code 9020) from 4/1/74 - 8/31/74. (RBC #191)

RESIDENT INSTRUCTION:

Faculty, College of Management

3. Appoint Mr. William M. Grass (without tenure) as Lecturer of Economics, (Code 0050) for the period of 2/12/74 - 5/31/74 at 22.5% time at an academic rate of $11,200.00 for 9 months. Source of Funds: Faculty Salaries. (RBC #187)

4. Appoint Dr. Eugene Adolph Nini as Professor and Chairman of Accounting, (without tenure), at .5000 time for period of 3/15/74 - 5/31/74 at a full time academic rate of $21,000. Source of Funds: Faculty Salaries. (RBC #188)

5. Appoint Mr. Robert H. Latta as Lecturer of Economics (Code 0050) without tenure, for the period of 2/1/74 - 3/31/74 at .1250 time at an academic rate of $12,600.00 for 9 months. Source of Funds: Faculty Salaries. (RBC #189)

Faculty, College of Science and Engineering

6. Appoint Dr. James H. Butler (without tenure) as Lecturer of Earth Science (Code 0050) for the period of 1/14/74 - 5/31/74 at .1250 time at an academic rate of $8,000.00 for 9 months. Source of Funds: Unallocated Faculty Salaries. (RBC #171)

7. Appoint Dr. Jack Elam (without tenure) as Lecturer of Earth Science (Code 0050) for the period of 1/14/74 - 5/31/74 at .1250 time at an academic rate of $8,000.00 for 9 months. Source of Funds: Unallocated Faculty Salaries. (RBC #172)

Faculty, College of Arts and Education

8. Appoint Miss Ann Arick (without tenure) as part-time Lecturer in Art (Code 0050) for the period of 1/14/74 - 5/31/74 at .3000 time at an academic rate of $12,000.00 for 9 months. Source of Funds: Faculty Salaries. (RBC #176)
THE UNIVERSITY OF TEXAS OF THE PERMIAN BASIN
June 14, 1974 Meeting

RECOMMENDED AMENDMENTS TO THE 73-74 BUDGET

SERVICE DEPARTMENTS:

Support Services Division

9. Transfer $3006.50 from Classified Salaries, Office of the Vice President for Business Affairs, and $3006.50 from Classified Salaries, Support Services Division, to Administrative Salaries, Support Services Division to provide funds needed for the appointment of Mrs. Alice Helen Brown as Director (Code 1000), Support Services Division from 2/1/74 - 8/31/74 at her same salary rate of $10,308. (RBC #190)

OTHER FISCAL ITEMS

SCHEDULE OF ADDITIONAL (OR CHANGES IN) FUNDING OF CONSTRUCTION PROJECTS

<table>
<thead>
<tr>
<th>Project No.</th>
<th>Project Title</th>
<th>Source of Funds</th>
<th>FROM (New or Additional Appropriation)</th>
<th>TO</th>
<th>Amount</th>
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<tbody>
<tr>
<td>501-311</td>
<td>Site Drainage</td>
<td></td>
<td>TRB</td>
<td></td>
<td>$350,000</td>
</tr>
<tr>
<td>501-283</td>
<td>Water Distribution System</td>
<td></td>
<td>TRB</td>
<td></td>
<td>650,000</td>
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</tbody>
</table>

Legend
TRB - Tuition Revenue Bonds
Dear Chancellor LeMaistre:

The docket for the June 14, 1974 meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.

Yours very truly,

[Signature]

PETER T. FLAWN
GIFTS: Acceptance is recommended for the following gifts which have been received:

<table>
<thead>
<tr>
<th>Donor</th>
<th>Purpose and Conditions</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bell &amp; Howell 318 Nakoma San Antonio, Texas 78216</td>
<td>Two (2) Model 520-A microfiche readers to be used in student records system.</td>
<td>$198.00</td>
</tr>
<tr>
<td>2. Houston Endowment, Inc. c/o Mr. J. H. Creekmore President P. O. Box 52338 Houston, Texas 77052</td>
<td>Contribution toward support of the activities of the Institute of Texan Cultures.</td>
<td>$20,000.00</td>
</tr>
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LABORATORY FEES: Approval is recommended for the following fees effective Summer Semester, 1974:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology 525</td>
<td>Experimental Reproductive Physiology and Endocrinology</td>
<td>$8.00</td>
</tr>
<tr>
<td>Biology 560</td>
<td>Invertebrate Physiology</td>
<td>$8.00</td>
</tr>
<tr>
<td>*Biology 582A</td>
<td>Biology of Parasitism</td>
<td>$8.00</td>
</tr>
<tr>
<td>Biology 583</td>
<td>Cytogenetics</td>
<td>$4.00</td>
</tr>
<tr>
<td>Biology 631</td>
<td>Terrestrial Ecology</td>
<td>$8.00</td>
</tr>
<tr>
<td>Biology 642</td>
<td>Clinical Laboratory History and Cytology</td>
<td>$8.00</td>
</tr>
<tr>
<td>Biology 643</td>
<td>Diagnostic Microbiology</td>
<td>$8.00</td>
</tr>
<tr>
<td>Biology 681</td>
<td>Animal Behavior</td>
<td>$8.00</td>
</tr>
<tr>
<td>Earth Science 533</td>
<td>Field Geology</td>
<td>$5.00</td>
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<tr>
<td>Earth Science 534</td>
<td>Minerals and Rocks</td>
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<td>Earth Science 535</td>
<td>Oceanography</td>
<td>$5.00</td>
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<td>Earth Science 536</td>
<td>Environmental Geology</td>
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</tr>
<tr>
<td>Earth Science 537</td>
<td>Paleontology</td>
<td>$5.00</td>
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</tbody>
</table>

*Item for the record. Change in course number only (582 to 582A); laboratory fee previously approved for 582. 

BUSINESS CONTRACTS AND AGREEMENTS: Ratification is requested for the following:

1. Lease agreement UTS-6301-L-San Antonio, between Koger Properties, Inc. and The University of Texas at San Antonio, to lease 18,365 square feet of space at the rate of $0.4366 per square foot per month, located in the San Jacinto Building, 4242 Piedras Drive East, San Antonio, Texas, for the period of June 1, 1974 through December 31, 1975, at the total monthly cost of $8,018.15. This is a renewal of lease agreement U-2392-L.

2. Approval is requested for the vending machine contract between Snappy Snack and The University of Texas at San Antonio, signed by Vice President E. M. Mahon and approved by officers of System Administration, for the period July 1, 1974 through August 31, 1975.
GRANTS, CONTRACTS AND AGREEMENTS (NON-GOVERNMENTAL): Approval is requested for the following:

The Moody Foundation
Galveston, Texas 77550

1. Grant No. 74-82
   Institute of Texan Cultures Grant for Texas Folklife Festival 1974
   To assist in staging the third Texas Folklife Festival in San Antonio.
   R. Henderson Shuffler
   Executive Director
   Institute of Texan Cultures
   April 1, 1974 through March 31, 1975
   $15,000.00
   Bexar County
GRANTS, CONTRACTS, AND AGREEMENTS (STATE): Approval is requested for the following:

1. Amendment No. 1 to Interagency Cooperation Contract No. IAC(74-75)-0547 between The University of Texas at San Antonio and The House of Representatives, signed by Vice President E. M. Mahon, to extend contract period through January 31, 1974.
Approval is requested for the following:

U. S. Department of Interior
National Park Service
Harpers Ferry Center

1. Change Order No. 1 to Purchase Order No. PX-1100-3-1819
   LBJ Old Ranch
   Extend ending date from January, 1974 to December, 1975, with no increase in funds.

2. Memorandum of Understanding between The University of Texas at San Antonio and The United States Air Force (Kelly Air Force Base, Texas), dated April 25, 1974, in which the United States Air Force agrees to furnish to The University of Texas at San Antonio, space and services for educational programs. The University of Texas at San Antonio agrees to provide the necessary faculty and services to conduct degree directed courses in academic areas mutually acceptable.
RESIDENT INSTRUCTION

College of Multidisciplinary Studies

Division of Environmental Studies

1. Appoint Dr. Jose N. Uranga, Jr. (non-tenure), as Lecturer (22% time), at an academic salary rate of $10,800.00 for nine months, effective January 16, 1974 through May 31, 1974. (RBC 66 - Revised)

BUDGET TRANSFERS

Transfer of Funds

2. Amount of Transfer: $48,517.20

From: Management Information Systems, Administrative and Professional Salaries $ 4,999.65

Miscellaneous General Expense, Official Publications 4,000.00
Division of Music, Maintenance and Operation 3,000.00
Office of the Dean, College of Sciences and Mathematics, Maintenance and Operation 500.00
Division of Mathematics and Systems Design, Classified Salaries 357.72
Lutcher Center, Classified Salaries 3,000.00
Physical Plant, Unallocated 1,684.47
Unallocated - Including Special Equipment 30,975.36

To: Office of the President, Classified Salaries $ 2,969.31
Personnel Office, Classified Salaries 522.00
Purchasing, Classified Salaries 429.47
Management Information Systems, Classified Salaries 11,984.42
Travel 600.00
News and Information Office, Maintenance and Operation 4,000.00
College of Fine and Applied Arts, Office of the Dean, Maintenance and Operation 3,000.00
Division of Art and Design, Classified Salaries 378.00
Division of English, Classics, and Philosophy, Travel 450.00
Division of Foreign Languages, Maintenance and Operation 1,000.00
Travel 450.00
Division of Environmental Studies, Maintenance and Operation 300.00
Division of Earth and Life Sciences, Maintenance and Operation 6,500.00

SA-6
2. (Continued)

To: Division of Mathematics and Systems Design, Maintenance and Operation
Office of Instructional Services, Classified Salaries $ 500.00
Lutcher Center, Wages 234.00
General Institutional Expense, Maintenance and Operation 3,000.00
Center for Studies in Business, Economics, and Human Resources, Maintenance and Operation 5,000.00
Travel 3,700.00

Physical Plant, General Services, Maintenance and Operation 1,500.00
Physical Plant, Building Maintenance, Maintenance and Operation 1,000.00

For: To provide these departments with the necessary operating funds required to meet their operational responsibilities. (RBC 85, 86, 88)

OTHER FISCAL ITEMS

SCHEDULE OF ADDITIONAL (OR CHANGES IN) FUNDING OF CONSTRUCTION PROJECTS

<table>
<thead>
<tr>
<th>Project No.</th>
<th>Project Title</th>
<th>Source of Funds</th>
<th>FROM (New or Additional Appropriation)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>401-315</td>
<td>Surge Building - Laboratory</td>
<td>TRB</td>
<td>$ 800,000</td>
<td></td>
</tr>
<tr>
<td>401-153</td>
<td>Additional Building Contingency</td>
<td>TRB</td>
<td>500,000</td>
<td></td>
</tr>
<tr>
<td>401-313</td>
<td>Teaching Equipment</td>
<td>TRB</td>
<td>1,000,000</td>
<td></td>
</tr>
</tbody>
</table>

Legend:
TRB - Tuition Revenue Bonds
Dear Chancellor LeMaistre:

The docket for the June 14, 1974 meeting of the Board of Regents is submitted for your recommendation and presentation to the Board. I recommend approval.

Sincerely,

[Signature]

Charles C. Sprague, M.D.
President
GIFTS

DALLAS MEDICAL SCHOOL

<table>
<thead>
<tr>
<th>Donor</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>American College of Physicians</td>
<td></td>
</tr>
<tr>
<td>4200 Pine Street</td>
<td></td>
</tr>
<tr>
<td>Philadelphia, Pennsylvania 19104</td>
<td></td>
</tr>
<tr>
<td>* 1. Purpose and Condition. Support of a course given at the school under the direction of Donald W. Seldin, M.D., Department of Internal Medicine.</td>
<td>$8,424.69</td>
</tr>
<tr>
<td>Smith Kline &amp; French Laboratories</td>
<td></td>
</tr>
<tr>
<td>1500 Spring Garden Street</td>
<td></td>
</tr>
<tr>
<td>Philadelphia, Pennsylvania 19101</td>
<td></td>
</tr>
<tr>
<td>2. Purpose and Condition. Support for research program in gastroenterology under the direction of John S. Fordtran, M.D., Department of Internal Medicine.</td>
<td>$6,000.00</td>
</tr>
<tr>
<td>Southwestern Medical Foundation</td>
<td></td>
</tr>
<tr>
<td>1601 Republic National Bank Building</td>
<td></td>
</tr>
<tr>
<td>Dallas, Texas 75201</td>
<td></td>
</tr>
<tr>
<td>3. Purpose and Condition. Support of the program in Human Growth and Development under the direction of Dr. Heinz Eichenwald, Department of Pediatrics.</td>
<td>$21,000.00</td>
</tr>
</tbody>
</table>

GRANTS, CONTRACTS, AND AGREEMENTS (NON-GOVERNMENTAL)

DALLAS MEDICAL SCHOOL

| The J. B. Williams Company, Inc.                 |              |
| 767 Fifth Avenue                                 |              |
| New York, New York 10022                         |              |
| 1. Research Grant "Frequency of Iron Deficiency in Women and Its Correction by Daily Ingestion of Small Doses of Iron." |              |
| Jack A. Pritchard, M.D., Department of Obstetrics and Gynecology | $6,000 additional support |
| National Cystic Fibrosis Research Foundation     |              |
| 3379 Peachtree Road, N.E.                        |              |
| Atlanta, Georgia 30326                           |              |
| 2. Supplemental Grant Dallas Cystic Fibrosis Care and Teaching Center | $10,000.00   |
| Robert I. Kramer, M.D., Department of Pediatrics | March 1, 1974 through February 28, 1975 |

* Original Award Letter Not Received
Parke Davis  
2800 Plymouth Road  
Ann Arbor, Michigan 48106

3. Research Grant  
James P. Luby, M.D., Department of Internal Medicine  
March 1, 1974 through March 31, 1975  
$10,500.00

4. Research Grant  
Support for work on Protocol 673-66.  
James P. Luby, M.D., Department of Internal Medicine  
$5,000.00

Sterling-Winthrop Research Institute  
Rensselaer, New York 12144

* 5. Research Grant  
"Research on Aspirin and Related Compounds." This award represents the second and final payment on the grant and an additional award of $1,600 for the project.  
Ivan Danhof, M.D., Ph.D., Department of Physiology  
$11,600.00

Southwestern Medical Foundation  
1601 Republic National Bank Building  
Dallas, Texas 75201

6. Research Grant  
"Computer Analysis of Electroencephalographic Recordings."  
Clinical research for computer analysis of EEG recordings.  
Roger N. Rosenberg, M.D., Department of Neurology and M. H. Aung, M.D., Department of Neurology  
$7,000.00

The Upjohn Company  
Kalamazoo, Michigan 49001

* 7. Research Grant  
"Studies on the Use of Orinase." Additional support.  
Roger Unger, M.D., Department of Internal Medicine  
$5,000.00

Original Award Letter Not Received

HD-3
2. Interagency Cooperation Contract IAC (74-75)-0837 whereby The University of Texas Health Science Center at Dallas, School of Allied Health Sciences, agrees to plan, coordinate and administer a conference for the representatives of the forty-seven (47) agencies and facilities in Texas that are funded through the Texas Department of Mental Health and Mental Retardation, Office of Developmental Disabilities. The conference will be held on April 4th and 5th, 1974 under the direction of Dr. Raymond O. Henke for remuneration to not exceed $4,546.00.
THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT DALLAS

FEDERAL CONTRACTS AND GRANTS

BOARD OF REGENTS MEETING - JUNE 14, 1974

DALLAS ALLIED HEALTH SCIENCES SCHOOL

Department of Health, Education and Welfare
Social and Rehabilitation Service

1. Training Grant 45-P-3036616-01
"Implementing the Rehabilitation Act of 1973 - Fiscal and Staff Development Procedures." Short-term training conferences for supervising personnel of state vocational rehabilitation agencies.
Raymond O. Henke, Ph.D., Department of Rehabilitation Science
April 1, 1974 through August 1, 1974
$8,171.00
Dallas County

DALLAS MEDICAL SCHOOL

Department of Health, Education and Welfare
Public Health Service

1. Supply Allowance 5 F03 GM55560-02
"Special Supply Allowance."
Duane S. Bietz, M.D., Department of Surgery
January 1, 1974 through June 30, 1974
$500.00
Dallas County

2. Health Professions Scholarship I.D. Number 06L480044 74 BHL10
F. Douglas Lawrason, Acting Dean
July 1, 1973 through June 30, 1975
$20,174 additional scholarship funds
Dallas County

3. Development Award - Research Career Program 5 KO4 HD46345-05
"Membrane Biogenesis in Mammalian Growth." A continuation grant. Studies in membrane development.
Heinz F. Eichenwald, M.D., Department of Pediatrics
May 1, 1974 through April 30, 1975
$25,000.00
Dallas County

4. Training Grant 3 T01 AI00030-14S1
"Graduate Training: Infectious Disease and Immunology."
Supplemental award.
April 1, 1974 through June 30, 1974
$1,640.00
Dallas County

5. Training Grant 3 T01 HL05812-06S1
"Cardiopulmonary Physiology and Pathophysiology." A continuation grant.
Robert L. Johnson, Jr., M.D., Department of Internal Medicine
April 1, 1974 through June 30, 1975
$174,384.00
Dallas County

* Original Award Letter Not Received

HD-5
Department of Health, Education and Welfare

Public Health Service

6. Training Grant 3 TO1 NS05600-06S1
"Otolaryngology Graduate Training Grant." Supplemental award.
Jack P. Gunter, M.D., Department of Surgery
July 1, 1973 through June 30, 1974
$4,671.00
Dallas County

7. Research Grant 1 R01 AI11396-01A1
"Enteroinvasive and Enterotoxigenic E. Coli Diarrheas."
Study of comparison of modes of action of strains of E. Coli.
John D. Nelson, M.D., Department of Pediatrics
April 1, 1974 through March 31, 1975
$27,415.00
Dallas County

8. Training Grant 3 TO1 HL05469-14S1
"Biochemical Orientation of Cardiovascular Investigation."
A continuation grant. Training grant to prepare trainees for academic positions in clinical departments in nephrology.
Donald W. Seldin, M.D., Department of Internal Medicine
April 1, 1974 through June 30, 1975
$143,109.00
Dallas County

9. Training Grant 3 TO1 HL05396-14S1
"Cardiopulmonary Physiology." A continuation grant.
William F. Miller, M.D., Department of Internal Medicine
April 1, 1974 through June 30, 1975
$36,695.00
Dallas County

10. Research Grant 5 R01 HD06832-03
"Chromosome Mutations in Infants and Children." A continuation grant. Study of chromosome mutation in infants and children exposed to diagnostic x-rays.
Mary E. Gaulden, M.D., Department of Radiology
May 1, 1974 through April 30, 1975
$38,235.00
Dallas County

11. Training Grant 3 T12 CA08062-08S1
"Clinical Cancer Training Program." Supplemental award.
Robert F. Jones, M.D., Department of Surgery
July 1, 1973 through June 30, 1974
$15,384.00
Dallas County

12. Research Grant 1 R01 RR00938-01
"Diagnosis and Control of Mammalian Encephalitozoonosis."
Study of methods for the positive identification of animals with encephalitozoonosis.
John A. Shadduck, D.V.M., Department of Pathology
April 1, 1974 through March 31, 1975
$29,344.00
Dallas County

* Original Award Letter Not Received
13. **Training Grant 3** TO1 AM05490-09S1 "Graduate Training in Gastroenterology and Liver Disease."
   Supplemental award.
   John S. Fordtran, M.D., Department of Internal Medicine
   April 1, 1974 through June 30, 1975
   $12,906.00
   Dallas County

14. **Development Award - Research Career Program 1** KO4 HL70667-01 "Role of Bacterial Infection in Experimental COPD."
    Revised award.
    Waldemar G. Johanson, Jr., M.D., Department of Internal Medicine
    June 1, 1973 through May 31, 1974
    $25,000.00
    Dallas County

15. **Research Grant 3** R22 AI1478-01S1 "Control of Bacterial Toxins by Viruses and Plasmids."
    Supplemental award.
    Randall K. Holmes, M.D., Department of Internal Medicine
    May 1, 1974 through August 31, 1974
    $2,265.00
    Dallas County

16. **Research Grant 1** RO1 HD08407-01 "Reproduction in Women Whose Red Cells Contain Hemoglobin."
    Study of the effects of HLS on pregnancy and complications both in the mother and the fetus.
    Jack A. Pritchard, M.D., Department of Obstetrics and Gynecology
    April 1, 1974 through March 31, 1976
    $48,311.00
    Dallas County

17. **Research Grant 2** RO1 AM13757-17A1 "Hepatic Excretory Function."
    Study of the various aspects of hepatic excretory function.
    Burton Combes, M.D., Department of Internal Medicine
    April 1, 1974 through March 31, 1975
    $54,231.00
    Dallas County

18. **Research Grant 5** PO1 AM09989-09 "Immunologic and Other Aspects of the Rheumatic Diseases."
    Revised award.
    Morris Ziff, Ph.D., Department of Internal Medicine
    September 1, 1973 through August 31, 1974
    $12,721.00 additional funds
    Dallas County

19. **Research Grant 5** RO1 AM13443-06 "Studies on the Enzymes of Methylamine Metabolism."
    A continuation grant. An enzyme study.
    Louis B. Hersh, Ph.D., Department of Biochemistry
    May 1, 1974 through April 30, 1975
    $20,601.00
    Dallas County

**No Letter of Transmittal**
FEDERAL CONTRACTS AND GRANTS - Continued

DALLAS MEDICAL SCHOOL - Continued

Department of Health, Education and Welfare
Public Health Service

20. Research Grant 2 R01 AM06912-12
"Estrogen Production from Plasma Precursors in Humans."
Revised award.
Paul C. MacDonald, M.D., Department of Obstetrics and Gynecology
January 1, 1974 through December 31, 1974
-$6,000.00 additional funds
Dallas County

21. Training Grant 3 T01 AM05154-16S1
"Training in Basic and Clinical Immunology." A continuation grant.
Morris Ziff, M.D., Department of Internal Medicine
April 1, 1974 through June 30, 1975
$32,385.00
Dallas County

22. Training Grant 5 T01 CA05136-13
"Graduate Training in Radiation Biology and Radiological Physics." A continuation grant.
Mary E. Gaulden, Ph.D., Department of Radiology
July 1, 1974 through June 30, 1975
$34,806.00
Dallas County

23. Research Grant 5 R01 AM03612-15
"Thyroid Function and Iodine Metabolism." Revised award.
Alvin M. Taurog, Ph.D., Department of Pharmacology
December 1, 1973 through November 30, 1974
$53,955.00
Dallas County

24. Research Grant 5 R01 AM10073-09
"Neurohumoral Control of the Anterior Pituitary." Revised award.
Samuel M. McCann, M.D., Department of Physiology
September 1, 1973 through August 31, 1974
-$7,032.00 additional funds
Dallas County

25. Training Grant 3 T01 CA05136-12S1
"Graduate Training in Radiation Biology and Radiological Physics." Supplemental award.
Mary E. Gaulden, Ph.D., Department of Radiology
July 1, 1973 through June 30, 1974
$3,876.00
Dallas County

26. Training Grant 3 T01 AM05028-18S1
"Diabetes Renal and Metabolic Disorders." Supplemental award.
Donald W. Seldin, M.D., Department of Internal Medicine
April 1, 1974 through June 30, 1975
$16,230.00
Dallas County
FEDERAL CONTRACTS AND GRANTS - Continued

DALLAS MEDICAL SCHOOL - Continued

Department of Health, Education and Welfare
Public Health Service

27. Training Grant 5 T01 AI00030-15
"Graduate Training: Infectious Disease and Immunology."
A continuation grant.
Jay P. Sanford, M.D., Department of Internal Medicine
July 1, 1974 through June 30, 1975
$65,426.00
Dallas County

28. Research Grant 5 R01 AM16194-03
"Structure and Function of Phosphofructokinase." A continuation grant.
Kosaku Uyeda, Ph.D., Department of Biochemistry
May 1, 1974 through April 30, 1975
$19,996.00
Dallas County

29. Research Grant 1 RO1 HD07746-01
"Lymphoid Cell Function and Aging." Study of macrophages and lymphoid cells in aged animals.
Joseph J. LoSpalluto, Ph.D., Department of Biochemistry
June 1, 1974 through May 31, 1975
$54,327.00
Dallas County

30. Research Grant 1 RO1 AM16601-01A1
"Intestinal Lipid Absorption." Basic physiology of membrane permeation of lipids in the intestine.
Verney L. Sallee, Ph.D., Department of Physiology
May 1, 1974 through April 30, 1975
$28,022.00
Dallas County

31. Research Grant 5 RO1 AM03108-15
"Intestinal Absorption and Metabolism of Lipids." Revised award.
John M. Johnston, Ph.D., Department of Biochemistry
September 1, 1973 through August 31, 1974
$3,035.00 additional funds
Dallas County

32. Research Grant 2 RO1 HL14055-04
Tracy C. Linn, Ph.D., Department of Biochemistry
May 1, 1974 through April 30, 1975
$29,536.00
Dallas County

33. Research Grant 5 RO1 AM13866-05
"Basement Membrane Derangements in Diabetes Mellitus." Revised award.
Daniel W. Foster, M.D., Department of Internal Medicine
January 1, 1974 through December 31, 1974
$3,090 additional funds
Dallas County
34. Research Grant 5 R01 AM16386-02
"Mechanism of Fat and Steroid Absorption by the Gut."
Revised award.
John M. Dietschy, M.D., Department of Internal Medicine
September 1, 1973 through August 31, 1974
$2,500.00 additional funds
Dallas County

35. Research Grant 5 R01 HL13619-05
"Microsomal Electron Transport in Liver and Heart."
Study of electron transport in various animals.
Bettie S. Masters, Ph.D., Department of Biochemistry
May 1, 1974 through April 30, 1975
$26,447.00
Dallas County

36. Research Grant 2 R01 NS09975-02
"Ion Transport Mechanisms in Seizure." Study of ionic and synaptic mechanisms in cats.
Robert M. Lebovitz, Ph.D., Department of Physiology
May 1, 1974 through April 30, 1976
$43,349.00
Dallas County

37. Research Grant 1 R01 AI11621-01
"Controlling Role of Thymocytes in Antibody Synthesis."
Edward J. Moticka, Ph.D., Department of Cell Biology
May 1, 1974 through April 30, 1975
$14,185.00
Dallas County

38. Regional Medical Library Grant 5 G04 LM01737-02
"Regional Medical Library Support." Revised award.
Donald D. Hendricks, Ph.D., Library
June 1, 1973 through May 31, 1974
$13,339 (same as original award)
Dallas County

39. Contract N01-LM-3-4720; Modification No. 1
Modification to extend the current subject contract for an additional one year period making the new expiration date May 31, 1975 with all other terms and conditions of the contract to remain unchanged.
$14,644.00 additional funds

40. Contract No. FDA 72-312, Modification No. 5
"Comparative Pharmacologic Evaluation of Antibiotic-Induced Adverse Drug Interaction." Modification to extend the period of performance to June 28, 1975 and to increase the total amount of this contract by $99,535.00.
41. Purchase Order/Invoice No. PLD-2808-74
"Effects of 7, 8 Dihydroxy Chlorpromazine on the Cornea."
Contract to perform studies involving the effects of 7, 8-
dihydroxychlorpromazine on corneal structures of the
rabbit eye for the period October 15, 1973 to April 1, 1974
for remuneration in the amount of $2,460.00 under the
direction of H. Richard Adams, D.V.M., Ph.D., Department of
Pharmacology.

42. Contract No. NIH-74-C-743
Partial travel support to assist approximately 125 American
scientists to attend the Fifth International Congress of the
Transplantation Society to be held in Jerusalem, Israel on
August 25-30, 1974; the period of the contract will begin
April 15, 1974 and will not extend beyond November 1, 1974
for funds to not exceed $450.00 to any one individual with the
total for all awardees to not exceed $50,000.00.

* Original Contract Not Received
HD-11
HOSPITAL ADMINISTRATION

Clinical Associate Professor — without salary, without tenure

1. James A. Maxwell
2. Claude McCain, Jr.
3. James R. Shafer
4. John R. Willis
5. Elizabeth Wright

Clinical Assistant Professor — without salary, without tenure

1. Robert E. Clark
2. Barbara S. Drobies
3. Glenys Entwistle
4. Billie D. Martinets
5. J. C. Montgomery, Jr.
6. Thelma L. Patrick
7. Nancy A. Watt

Clinical Instructor — without salary, without tenure

1. Christine Bayless
2. Darlene Carpenter
3. Stephanie Chojnacki
4. Wilma Fitzgerald
5. Adrienne T. Foote
6. Elizabeth Gillett
7. Beth Goodman
8. Doris E. Gresham
9. Joyce Holbrook
10. Kathryn A. Huber
11. A. Lurlene Lamb
12. Marie D. Lee
13. Rebecca McKown
14. Doris M. Nelson
15. Jennifer Newstead
16. Bobbie A. Redmon
17. M. Sue Reed
18. Doreen Reynolds
19. Helen J. Rice
20. Anna L. Robinson
21. Patricia Schrader

DALLAS MEDICAL SCHOOL

ANESTHESIOLOGY

Clinical Associate Professor — without salary, without tenure

1. Harriette Livingston
Clinical Assistant Professor -- without salary, without tenure

1. Oliver F. Bush
2. Raymond F. Courtin
3. Ivey E. Lamberth, Jr.
4. Marvin J. Noble
5. Vayden F. Stanley
6. Charles C. Tandy
7. Joe B. Wood
8. Cecil C. Yarbrough

Clinical Instructor -- without salary, without tenure

1. Thomas W. Harris
2. Homer D. Smith

Clinical Assistant Instructor -- without salary, without tenure

1. Richard F. Allen
2. Virginia R. Allen
3. Richard D. Ankele
4. William D. Baird
5. Jack H. Bankead
6. George P. Beck
7. John R. Bennett
8. Harold C. Boehning
9. Normand M. Bremner
10. Donovan Campbell
11. Perry Carroll, Jr.
12. Philip G. Cochran
13. Charles A. Cohen
14. Robert L. Cohn
15. Frank Coufal, Jr.
16. John R. Deen
17. George E. Emmett
18. Harold E. Gaspar
19. George S. Gieszl, Jr.
20. Monica M. Ginderske
21. Gordon I. Goldstein
22. Jack A. Gray
23. Emmett W. Greif
24. Henry C. Guynes
25. Minor L. Huck
26. Jackie H. Hunt
27. Raymond J. Jerome
28. Charles L. Malmbourg
29. Franz W. Matos
30. Billy J. McIntosh
31. Shirlie A. Moore
32. James M. Morgan
33. Donald D. Morrison
34. Gerald G. Mullikin
35. Rupert M. Pollard
36. Louis H. Porter
37. M. K. Rao
38. Edward R. Roberts
39. Karl F. Roehrig
CLINICAL FACULTY APPOINTMENTS - Continued

DALLAS MEDICAL SCHOOL - Continued

ANESTHESIOLOGY - Continued

Clinical Assistant Instructor -- without salary, without tenure

40. Robert Romero
41. Charles M. Sloan
42. Law Sone, Jr.
43. Martine G. Tirmenstein
44. Pedro E. Vidal
45. Bruns A. Watts, Jr.
46. John T. Whitley
47. Oscar B. Williams
48. L. R. Wilson, Jr.
49. Robert A. Yeary

BIOCHEMISTRY

Clinical Professor Emeritus -- without salary, without tenure

1. Herbert C. Tidwell

Clinical Professor -- without salary, without tenure

1. John J. Banewicz
2. Harold A. Jeskey

Clinical Associate Professor -- without salary, without tenure

1. Edward Biehl

Clinical Assistant Professor -- without salary, without tenure

1. Edward Bellion

BIOPHYSICS

Clinical Professor -- without salary, without tenure

1. J. Ross MacDonald

CELL BIOLOGY

Clinical Professor Emeritus -- without salary, without tenure

1. Charles G. Duncan

INTERNAL MEDICINE

Clinical Professor Emeritus

1. Gilbert E. Brereton
2. David W. Carter, Jr.
3. Howard C. Coggshall
4. Everett C. Fox
5. Tate Miller
6. Cecil O. Patterson
7. Wilford O. Rouse
8. Jesse Shelmire, Sr.
### Clinical Faculty Appointments - Continued

**Dallas Medical School - Continued**

**Internal Medicine - Continued**

**Clinical Professor -- without salary, without tenure**

1. John T. Binion
2. Drury S. Blair
3. David M. Bornstein
4. Donald S. Brown
5. George H. Carman
6. William M. Daily
7. W. L. Edwards
8. Winfrey W. Goldman
9. Marion J. Greve
10. T. Haynes Warvill
11. E. Russell Hayes
12. Howard E. Heyer
13. J. Morris Horn
14. James B. Howell
15. Coleman Jacobson
16. George M. Jones
17. Jacob S. Krakusin
18. Billy B. Oliver
19. John B. Pierce
20. C. Jack Price
21. Arthur G. Schoch
22. Maurice M. Scurry
23. Samuel Shelburne, Sr.
24. Elias Strauss
25. Paul J. Thomas
26. William O. Tschumy
27. Arthur S. Weston
28. Julius Wolfram

**Clinical Associate Professor -- without salary, without tenure**

1. Lee J. Alexander
2. John B. Allen
3. Robert B. Allison
4. James O. Armstrong
5. Charles L. Austin
6. B. Orland Baker
7. Robert K. Bass
8. Wallace H. Bassett
9. Richard E. Block
10. John G. Brau
11. Stuart M. Brown
12. Robert D. Campbell
13. Robert S. Capper
14. Henry F. Carman
15. John P. Cheek
16. Edwin M. Cleveland
17. Paul W. Cochran
19. Richard L. Eddy
20. John P. Fischer
22. William A. Godfrey
23. James E. Goode
24. Arvel E. Haley
25. C. Farrell Hamilton

**HD-15**
CLINICAL FACULTY APPOINTMENTS - Continued

DALLAS MEDICAL SCHOOL - Continued

INTERNAL MEDICINE - Continued

Clinical Associate Professor -- without salary, without tenure

26. William O. Hargrove
27. Hubert F. Hawkins
28. James H. Herndon
29. Richard G. Hosford
30. Richard B. Hunter
31. Fred P. Johnston, Jr.
32. Arnold H. Kassanoff
33. John L. Kestel, Jr.
34. William L. Kraus
35. James S. Lowry
36. Morris E. Magers
37. Charles L. Mahaney
38. Porter K. Mason
40. Benjamin A. Merrick
41. Henry B. Mobley
42. Murray Pizette
43. Daniel E. Polter
44. Robert K. Portman
45. Robert J. Potts
46. Timothy D. Reedy
47. Joseph Riddell, Jr.
48. Edwin L. Rippy
49. Albert D. Roberts
50. Joseph E. Rothschild
51. R. Neal Schneiderman
52. George S. Schools
53. Jack C. Sellman
54. David E. Streitmatter
55. J. Shirley Sweeney
56. Bobby L. Temple
57. John J. Walker
58. James T. Wheeler
59. Russell E. Wilson

Clinical Assistant Professor -- without salary, without tenure

1. David S. Alkek
2. Michael J. Anigian
3. John S. Bagwell
4. Herbert A. Bailey
5. Brian J. Baldwin
6. James M. Blain
7. Bussel N. Blanton
8. James Y. Bradfield
9. Martin S. Buehler
10. Anton E. Caroe
11. Franklin L. Casey
12. Zaven H. Chakmakjian
13. Joseph B. Cobb
14. Leonard J. Comess
15. Chester E. Cook
16. Robert R. Craig
17. Ivan E. Cushing, Jr.
18. Richard A. Dathe
20. Tom M. Dees
## Clinical Assistant Professor — without salary, without tenure

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.</td>
<td>George T. DeVanev</td>
</tr>
<tr>
<td>22.</td>
<td>Donald N. Dubrow</td>
</tr>
<tr>
<td>23.</td>
<td>John A. Emmert</td>
</tr>
<tr>
<td>24.</td>
<td>Stephen Eppstein</td>
</tr>
<tr>
<td>25.</td>
<td>Charles R. Everett</td>
</tr>
<tr>
<td>26.</td>
<td>Maynard F. Eaton</td>
</tr>
<tr>
<td>27.</td>
<td>Stanley Feld</td>
</tr>
<tr>
<td>28.</td>
<td>Leonard J. Flohr</td>
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<td>Carey King, Jr.</td>
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<td>Michael M. Markowitz</td>
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<td>Lawrence B. Meyerson</td>
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<td>Harry Renken, Jr.</td>
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<td>Eugene Schoch, Jr.</td>
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<td>Jesse Shelmire, Jr.</td>
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<td>Walter M. Skinner</td>
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<td>Rolando M. Solis</td>
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<td>Andrew C. Stenhouse</td>
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<td>Martin L. Stephenson</td>
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<td>76.</td>
<td>Richard C. Stone</td>
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</table>
Clinical Assistant Professor -- without salary, without tenure

77. Hsi C. Teng
78. F. Warren Tingley, Jr.
79. E. G. Troutman
80. Frederick Veninga
81. Jose Viroslav
82. Kenneth L. Walgren
83. David R. Weakley
84. Wilson Weatherford
85. Ann West
86. John W. Wheeler
87. Philip Whittlesey
88. Owen D. Williams
89. Henry M. Winans, Jr.
90. Turner A. Wood
91. Buck J. Wynne, Jr.

Clinical Instructor -- without salary, without tenure

1. John C. Bagwell
2. Thomas S. Barnes
3. James F. Biggart
4. James P. Brennan
5. Alan L. Brodsky
6. Gerald A. Casid
7. W. Crockett Chears, Jr.
8. Don E. Cheatum
9. Martin B. Cohen
10. John A. Collyns
11. Franklin L. Crawford
12. John A. Dickinson
13. Michael M. Ditto
14. Amado E. Dominguez
15. Samuel Y. Dorfman, Jr.
16. Francis C. Douglas
17. Walter P. Dyck
19. Richard T. Ellington
20. Allen M. Fain
21. John W. Fisher
22. E. Nelson Forsyth, Jr.
23. Hanes M. Fowler
24. Stuart A. Frank
25. Sol J. Freeman
26. Jose A. Garcia
27. Joseph M. Glicksman
28. Joseph D. Goldstrich
29. C. Leroy Goodman
30. John Grammer
31. Russell F. Griffith
32. Guillermo Guzman
33. Elizabeth Haaland
34. Max B. Hagedorn
35. David A. Haymes
36. Norwood O. Hill
37. David W. Hines
38. Robert E. Jones III
39. Bertram Kahn
CLINICAL FACULTY APPOINTMENTS - Continued

DALLAS MEDICAL SCHOOL - Continued

INTERNAL MEDICINE - Continued

Clinical Instructor — without salary, without tenure

40. Ira Kassanoff
41. William M. Kelly
42. Harold W. Kimmerling
43. Fernan F. Lara
44. Jan E. Loudermilk
45. Peter Louis
46. John S. Marietta
47. Eugene E. Mason
48. Stuart A. Mason
49. James R. McAlister
50. Michael L. McCulloch
51. Arch J. McNellis
52. Jerold D. Michaelson
53. Ervin R. Miller
54. Robert Mitz
55. Edwin M. Montell
56. Sterling E. Moore
57. Melvin D. Morgan
58. M. Gayle Mullanax
59. Donald W. Munseil
60. Joseph B. Murphy
61. Joseph R. Mussell
62. Donald G. Pansegrau
63. Fred G. Popkess
64. Allan E. Price
65. Paul M. Rattan
66. Norwin G. Ray
67. Lloyd M. Reedy
68. Sanford M. Reich
69. Paul L. Richburg
70. Tom Ray Roberts
71. Herman Rose
72. William Rosenblatt
73. Robert E. Rossman
74. Gus Schreiber
75. Leonard B. Schultz
76. Robert A. Scott
77. David S. Shelmire
78. Wilma F. Shields
79. Charles L. Sledge
80. Joseph Somer
81. David S. Sowell III
82. Roy E. Spencer
83. Richard E. Swint
84. Siyad A. Taha
85. Herman Ulevitch
86. Kerfoot P. Walker
87. John M. Whitfill

Clinical Assistant Instructor — without salary, without tenure

1. Naon J. Harris

Clinical Lecturer — without salary, without tenure

1. Peter G. Gaupp
CLINICAL FACULTY APPOINTMENTS - Continued

DALLAS MEDICAL SCHOOL - Continued

NEUROLOGY

Clinical Associate Professor -- without salary, without tenure
1. Leonard R. Carney
2. Ludlow M. Pence
3. Hanna K. Ulatowska

Clinical Assistant Professor -- without salary, without tenure
1. John W. Conwell
2. Ashby T. Harris
3. Preston E. Harrison
4. Donnell F. Johns
5. Shaff D. Olinger, Jr.
6. Bruce J. Van Dyne

Clinical Instructor -- without salary, without tenure
1. Stuart B. Black
2. Joseph S. Jenike
3. Allan L. Naarden

OBSTETRICS AND GYNECOLOGY

Clinical Professor -- without salary, without tenure
1. Frank C. Council
2. William P. Devereux
3. James T. Downs
4. Charles F. Guerriero III
5. Donald G. Harrel
6. Harwin B. Jamison
7. Herman I. Kantor
8. Oran V. Prejean
9. William K. Strother
10. Jules W. Vieaux

Clinical Associate Professor -- without salary, without tenure
1. Marvin Gerard
2. James H. Goodson
3. Hodgie C. Henderson, Jr.
4. Ernest T. Herndon
5. J. Russell Jordan
6. William G. Langston
7. Luis Leib
8. Donald E. McGuire
9. Evri Bear Mendal
10. Grover C. Nabors
11. Pelham P. Staples, Jr.
12. Stacy R. Stephens
13. Sheldon A. Weinstein

Clinical Assistant Professor -- without salary, without tenure
1. Jay M. Beck
2. Fred W. Bone
3. David M. Bookout
4. Stanley H. Boulas
Clinical Assistant Professor -- without salary, without tenure

5. Robert L. Brannon
6. Edmond M. Brophy
7. Duck J. Choi
8. Robert N. Cluck
9. Stephen W. Cobb
10. Vanda A. Davidson
11. Allan S. Disraeli
12. Warren F. Dixon
13. Robert W. Dowling
14. B. Henry Estess, Jr.
15. Dennis J. Factor
16. Donald F. Fangman
17. Joseph L. Godat, Jr.
18. Jack B. Griffin
19. Marianna Hood
20. Ben Keith Howard
21. Mary Agnes Jennings
22. Peter J. Julian
23. Jack H. Kasholz
24. H. Louis Kaye
25. Irwin J. Kerber
26. James K. Knott
27. Tracy L. Kobs
28. Maurice V. Korkmas
29. Robert M. Kuhne
30. Michael Kurilecz
31. Kenneth Leggett, Jr.
32. Ronald B. Mason
33. J. Patrick McCarty
34. James A. McCullough
35. Bruce W. Meek
36. Ellis L. Minton
37. Hugh D. Murrey
38. Philip D. Newell
39. Graham L. Pierce, Jr.
40. Dudley V. Powell
41. Herbert Rumsfeld, Jr.
42. Richard A. Sparr
43. Stuart R. Stone
44. W. Kemp Strother III
45. George H. Sullivan
46. Kenneth M. Talkington
47. G. Douglas Tatum, Jr.
48. Bruce S. Terrill
49. Robert M. Todd
50. Jack L. Turner
51. Julian A. Wells
52. Joseph E. Wilke
53. J. O. Williams, Jr.
54. John R. Woodward

Clinical Instructor -- without salary, without tenure

1. Roland E. Black
2. Max H. Blend
3. Fred H. Braan, Jr.
4. Donald J. Coney

HD-21
OBSTETRICS AND GYNECOLOGY - Continued

Clinical Instructor -- without salary, without tenure
1. Darwin L. Fielder, Jr.
2. Dorothy G. Finley
4. C. Vera Lutan
5. Richard D. Martin
6. Jean M. Matheson
7. Max R. McGinnis
8. Frank C. Morrone
9. Robert L. Prince
10. Bruce J. Roberts
12. Myron H. Watkins

OPHTHALMOLOGY

Clinical Professor -- without salary, without tenure
1. Carroll W. Browning
2. Kelly L. Cox
3. Kenneth Foree
4. Seymour B. Gostin
5. Lester H. Quinn
6. William B. Snyder
7. W. Maxwell Thomas

Clinical Associate Professor -- without salary, without tenure
1. Jerome L. Byers
2. William S. Chambliss
3. John E. Eisenlohr
5. Marion R. Harrington
6. John Lippas
7. Hal W. Maxwell
8. Thomas M. McCrory
9. Everett A. Moody
10. William L. Phelps
11. David R. Stager
12. Albert Vaiser
13. Thomas P. Wood

Clinical Assistant Professor -- without salary, without tenure
1. Dan Brannin
2. Donald P. Brotherman
3. R. Grady Bruce
4. Jack C. Cooper
5. James M. Copps
6. Ruby K. Daniel
7. Lawrence O. Gahagan
8. William S. Harris
9. George E. Holladay
10. William L. Hutton, Jr.
11. Charles B. Key
12. Mary A. Lancaster
13. Oscar M. Marchman, Jr.
CLINICAL FACULTY APPOINTMENTS - Continued

DALLAS MEDICAL SCHOOL - Continued

OPHTHALMOLOGY

Clinical Assistant Professor -- without salary, without tenure

14. Don M. Smart
15. Bruce C. Taylor
16. Jerald L. Tennant

Clinical Instructor -- without salary, without tenure

1. Rhufus E. Allen
2. Robert E. Baker
3. F. Gene Braun
4. Bert C. Bryan
5. Ronald M. Burnside
6. Allen D. Campbell
7. Arthur M. Clements
8. Jerry B. Cotner
9. John A. Ehrhardt
10. Jerald Feldman
11. Gordon D. Frank
12. Ward J. Mahowald
13. Jerry C. McGrew
15. Robert C. Middendorf
17. Norris L. Newton
18. Paul A. Richter
19. Barry W. Uhr
20. Elizabeth Vaughan

PATHOLOGY

Clinical Professor -- without salary, without tenure

1. Charles T. Ashworth
2. John Childers
3. Anthony N. D'Agostino
4. John L. Goforth
5. Morvin H. Grossman
6. Joseph M. Hill
7. William B. Kingsley
8. James E. McCarty
9. Fred S. Preuss

Clinical Associate Professor -- without salary, without tenure

1. Thomas H. Capers
2. Marcelo Garza, Jr.
3. Edwin Jenevein, Jr.
4. Thomas H. McConnell III
5. Gerard Noteboom
6. Robert R. Rember

Clinical Assistant Professor -- without salary, without tenure

1. T. E. Adams
2. William Crofford, Jr.
3. James R. Daniel
5. J. Morris Gilbert
PATHOLOGY - Continued

Clinical Assistant Professor -- without salary, without tenure

6. G. Curtis Hoskins
7. Dudley D. Jones
8. James B. Ketchersid
9. Eufrozyna Kozlowski
10. Joseph F. Lawrence
12. H. Reginald McDaniel
13. James M. O'Brien
14. H. Richard Pascoe
15. George E. Peacock
16. Marie L. Shaw
17. George W. Sickel
18. Van Q. Telford
19. Fernando Vargas-Cortes
20. Harold H. Varon

Clinical Lecturer -- without salary, without tenure

1. F. Lamont Jennings

PEDIATRICS

Clinical Professor Emeritus -- without salary, without tenure

1. Percy E. Luecke, Sr.

Clinical Professor -- without salary, without tenure

1. Anthony L. Alfieri
2. John L. Baskin
3. Salmon R. Halpern
4. H. Otis Krempin
5. Percy E. Luecke, Jr.
6. Robert L. Moore
7. S. Halcuit Moore, Jr.
8. Floyd A. Norman

Clinical Associate Professor -- without salary, without tenure

1. Richard D. Bates
2. Robert Bondy, Jr.
3. George R. Branch
4. Sergio M. Fantony
5. Martha H. Hale
6. William C. Hawkins
7. Samuel L. Hunt
8. M. Dean Jacoby
10. Richard B. Johnson
11. Hugo A. Klint
12. Ben P. McCarley
13. Logan U. Mewhinney
14. Thomas P. Murphy
15. Frank C. Payne, Jr.
CLINICAL FACULTY APPOINTMENTS - Continued

DALLAS MEDICAL SCHOOL - Continued

PEDIATRICS - Continued

Clinical Associate Professor -- without salary, without tenure

16. Milam B. Pharo
17. Joseph G. Roach
18. Patrick Rose
19. William A. Sellars
20. Joel B. Steinberg
21. John S. Terrell
22. A. Gordon Worsham

Clinical Assistant Professor -- without salary, without tenure

1. Ruth I. Allen
2. James A. Ball
3. Albert Blakes, Jr.
4. Truett C. Boles
5. Theron E. Brooks III
6. Milton Cardwell, Jr.
7. Norman H. Chandler
8. Pierre G. Craig
9. William D. Crane
10. E. S. Cunningham
11. William B. Dean
12. Ben W. Denny
13. Ben F. Dildy
14. James J. Farnsworth
15. Ross L. Finkelman
16. John W. Griffin
17. Ernest E. Hobbibaugh
18. William B. Johnson
19. Kem Kelly
20. Glen V. Leland, Jr.
21. George J. Liebes
22. James M. McKinney
23. Hugh L. Moore III
24. Gary C. Mochower
26. Florencio Roig
27. Elaine P. Schoelzel
28. Roger O. Schriemer
29. Doris V. Spegal
30. Irene M. Stayer
31. Nancy R. White
32. Joan Windmiller

Clinical Instructor -- without salary, without tenure

1. Walter W. Barret
2. Munir F. Bishara
3. James A. Boger
4. George W. Brasher
5. Souren Chakmakjian
6. Mollie A. Combes
7. Marcia L. Craig
8. Frances B. Crane
9. Malcolm D. Davidson
10. Anthony Deharo
11. William R. Fackler
Clinical Instructor -- without salary, without tenure

12. Francis M. Gilbert
14. Gerson Gran
15. Larry E. Gray
16. Carlton E. Hardey
17. Joseph G. Holt
18. Jerry B. Hutton
19. Wendell A. Jones
20. Marjorie S. Keele
21. Shirley J. Kindberg
22. Aaron L. Kreisler
23. Frances P. Lankford
24. Michael P. Longley
25. Billie McCanally
26. Alan N. Miller II
27. George A. Monroe
29. Donald K. Nelms
30. Donna J. Parks
31. Larry H. Patron
32. Carl A. Pevoto
33. Joseph Pflanzer
34. Joe C. Piranio
35. Alice I. Pita
36. Renate M. Reimold
37. Michael F. Romaine
38. Carter F. Rubane
39. Allen T. Segal
40. Elliott R. Shindler
41. James E. Speier
42. Gerschon Suster
43. David C. Usrey
44. Thomas W. Wilson

Clinical Assistant Instructor -- without salary, without tenure

1. Ona Mae R. Austin
2. Bennie C. Slaughter

Pharmacology

Clinical Associate Professor -- without salary, without tenure

1. James Holman

Clinical Assistant Professor -- without salary, without tenure

1. Gregory G. Dimijian
2. Olfeo J. Lorenzetti
3. Clark C. Watts

Physical Medicine and Rehabilitation

Clinical Professor -- without salary, without tenure

1. Edward M. Krusen
DALLAS MEDICAL SCHOOL - Continued

PHYSICAL MEDICINE AND REHABILITATION - Continued

Clinical Assistant Professor -- without salary, without tenure
1. Alfredo C. Bacani
2. James W. Caldwell
4. Jewel S. Daughety
5. Billy B. Hoover

PHYSIOLOGY

Clinical Professor Emeritus -- without salary, without tenure
1. Robert W. Lackey

Clinical Professor -- without salary, without tenure
1. George Moushegian
2. Frank J. Palas

Clinical Associate Professor -- without salary, without tenure
1. David A. Anderson

Clinical Assistant Professor -- without salary, without tenure
1. Bright A. Lowry

Clinical Instructor -- without salary, without tenure
1. Stuart A. Bergman

PSYCHIATRY

Clinical Professor -- without salary, without tenure
1. Howard M. Burkett
2. Luis M. Cowley
3. Frederick Davis
4. Robert H. Dovenmuehle
5. Robert S. Glen
6. Don P. Morris
7. James K. Peden
8. Jack R. Strange
9. Perry C. Talkington

Clinical Associate Professor -- without salary, without tenure
1. William R. Beavers
2. Stanely Blumberg
3. Henry L. Burks
4. Lawrence Claman
5. Harold B. Crasilneck
6. Burton C. Einspruch
7. Donald W. Giller
8. John H. Gladfelter
9. Clarence S. Hoekstra
10. Jerry M. Lewis
11. Jack Martin
CLINICAL FACULTY APPOINTMENTS - Continued

DALLAS MEDICAL SCHOOL - Continued

PSYCHIATRY - Continued

Clinical Associate Professor -- without salary, without tenure

12. John C. Montgomery
14. Claude R. Nichols
15. George I. Nicolaou
16. Robert W. Webb

Clinical Assistant Professor -- without salary, without tenure

1. Eugene L. Aten
2. Glenn A. Bacon
3. Wallace W. Blocker
4. James D. Carpenter
5. Doyle I. Carson
6. Paul H. Chesmore
7. Gregory G. Dimijian
8. Irvin A. Ebaugh, Jr.
9. Rhoda S. Frenkel
10. L. Arden Gifford
11. Richard B. Gould
12. James P. Grigson
13. James A. Hall
14. Francis T. Harrington
15. Robert J. Herbert
16. Austin J. Jernigan
17. Larry R. Kimsey
18. Juanita F. Kirby
19. Joseph L. Knapp
20. Joseph S. Kugler
21. David H. Lipeher
22. Ferald D. Lipsher
23. James S. May
24. Sophia B. May
25. Leo A. McCandlish
27. William T. Moore
28. Martin S. Posner
29. John R. Price
30. Ann Race
31. John H. Reitmann
32. Jean L. Roberts
33. Gerald A. Schneider
34. Stanley L. Seaton
35. William P. Shelton
36. Charles L. Smith
37. Robert M. Souda
38. Kenneth R. Timken
39. Anita M. Titone
40. Larry E. Tripp
41. James D. Uloth

Clinical Instructor -- without salary, without tenure

1. Constance Adler
2. Gonzalo A. Aillon
3. James W. Black, Jr.
4. Robert L. Brien
5. Patrick H. Buchanan
Clinical Instructor -- without salary, without tenure

6. Judith R. Burroughs
7. Allen J. Cahill
8. Henry L. Charles
9. Frank Crumley
10. Horace A. Deford
11. Marvin H. Dodson
12. Ila L. Eichelberger
13. C. Edward Foucheroussé, Jr.
14. E. Clay Griffith
15. Robert H. Hodge
16. Frances C. Houck
17. Delbert E. Hughes
18. Waunell M. Hughes
19. Ronald E. Johnstone
20. Joseph W. King
21. Charles R. Lett
22. Ray K. McNamara
23. Duane C. Miller
24. Margaret Moulton
25. Dan A. Myers
26. Samuel E. Neely
27. Walter E. Penk
28. Jose A. Pleitez
29. F. Curtis Reese
30. Carl E. Renfro
31. Glen W. Rollins
32. Edith M. Rossi
33. Judith G. Samson
34. Mary A. Shaw
35. Herbert H. Shore
36. Belvin A. Simmons
37. Charles M. Smith
38. Santiago A. Somodevilla
39. K. Steven Staneff
40. Betty J. Synar
41. Douglas E. Torrie
42. Edward W. Tuthill
43. Opal H. White
44. Agnes V. Whitley
45. Thomas A. Woods
46. Richard D. Yentis

Radiology

Clinical Professor Emeritus -- without salary, without tenure

1. Charles L. Martin

Clinical Professor -- without salary, without tenure

1. Mortimer M. Elkind
2. Robert E. Hodges
3. John Jagger
4. Robert W. McConnell
5. Jarrell E. Miller
6. Dimitry Morkovin
7. Louis A. Rayburn
8. Claude S. Rupert
Clinical Faculty Appointments - Continued

Dallas Medical School - Continued

Radiology - Continued

Clinical Associate Professor -- without salary, without tenure

1. Leonard M. Diana
2. Ronald M. Humphrey
3. James A. Martin
4. Oscar L. Morphis
5. James E. Nunnally
6. Joseph Selman
7. Hendrik Vaandrager

Clinical Assistant Professor -- without salary, without tenure

1. Jerome H. Arndt
2. Douglas E. Bibby
3. John S. Bradfield
5. Glenn Carlson
6. Richard E. Collier
7. Robert B. Connor
8. Fred H. Dunn
9. William G. Greenough
10. Joe Hawkins
11. Michael J. Healy
12. Robert M. Lockwood
13. Chester A. Mateja, Jr.
15. Betty J. McConnell
16. John D. McNutt
17. Murry D. Schonfeld
18. Alvin D. Sears
19. Herman C. Sehested
21. Chun Tseng
22. F. Joseph Vendrell

Clinical Instructor -- without salary, without tenure

1. William H. Barekman
2. Robert J. Barner
3. William J. Bufkin
4. Robert R. Burns
5. Alonza B. Chapman
6. James W. Pinney
7. Frank Gomez
8. Anges M. Guthrie
9. Frederick Hager
10. Stanely E. Hodges
11. Albert H. Keene
12. Vernon V. Kirby
14. Jack G. Maxfield
15. Ottis L. McCluskey
16. Helmut A. Mueller
17. Madge A. Parker
18. Billy J. Parnell
19. Robert W. Perrin
20. George E. Plum
21. Lee Roy Radford
CLINICAL FACULTY APPOINTMENTS - Continued

DALLAS MEDICAL SCHOOL - Continued

RADIOLOGY - Continued

Clinical Instructor -- without salary, without tenure

22. Glenn A. Stokdyk
23. James M. Syler, Jr.
24. Joan M. Winandy

Clinical Lecturer -- without salary, without tenure

1. Marion C. Baldwin
2. Vincent P. Collins
3. Robert D. Moreton
4. Wayne Ramsey, Jr.
5. Bernard Rosen

SURGERY

Clinical Professor Emeritus -- without salary, without tenure

1. Donald A. Corgill
2. Albert P. D'Errico
3. John P. North
4. Frank A. Solecman
5. John D. Singleton
6. Charles H. Warren
7. Ozro T. Woods

Clinical Professor -- without salary, without tenure

1. Jo. C. Alexander
2. Welden E. Bell
3. D. Lamar Byrd
4. C. Max Cole
5. Milton V. Davis
6. John W. Duckett
7. James H. Dunlap
8. Morris J. Fogelman
9. C. Foster Fuqua
10. Percy M. Girard
11. Aram Glorig
12. John V. Goode
13. Robert H. Holland
15. Leroy J. Kleinsasser
16. Ben F. Mitchel, Jr.
17. Phelps J. Murphey
18. Donald L. Paulson
19. Robert J. Rowe
20. Robert S. Sparkman
21. Harry M. Spence
22. Jesse E. Thompson
23. P. Earle Williams
24. Claude D. Winborn

Clinical Associate Professor -- without salary, without tenure

1. Maurice Adam
2. Jack J. Addison
3. Kenneth O. Adwan
4. George N. Aldredge
5. Billie L. Aronoff

HD-31
Clinical Associate Professor -- without salary, without tenure

6. Dale J. Austin
7. Alvin Baldwin, Jr.
8. James L. Baldwin
9. William D. Barnett
10. Audrey N. Bell
11. Allan Bookatz
12. John L. Bradfield
13. Brandon Carrel
14. Herschel G. Carter
15. J. Harold Cheek
16. Marvin Culbertson, Jr.
17. John L. Denman
18. Jon W. Eberle
19. Myron G. Fine
20. Dan C. Gill
21. Wayne H. Gossard
22. Ben P. Harrison
23. Robert P. Hays
24. Glenn R. Hillin
25. William W. Hoffman
26. George E. Hurt
27. Clinton C. Johnson
28. Melvin C. Kadesky
29. Jack G. Kerr
30. Frank H. Kidd, Jr.
31. Dean G. Kipp
32. Louis A. Kregel
33. L. L. Lankford
34. Shields O. Livingston
35. Robert Londeree, Jr.
36. Ludwig A. Michael
38. Charles R. Morris
39. Edward A. Newell
40. Harold A. O'Brien
41. Casey E. Patterson
42. Ernest Poulos
43. Morris Sanders
44. James B. Seaman
45. Willard Sellman, Jr.
46. Manning Shannon, Jr.
47. Andrew E. Small
48. Jack Stern
49. Harold G. Urschel
50. Theodore P. Votteler
51. Elgin W. Ware, Jr.
52. Francis L. Ware
53. Clark C. Watts
54. David O. Weiner
55. Edward White, Sr.
56. G. Raworth Williams
57. Paul C. Williams
58. Hugh E. Wilson III
59. Jack I. Woolf
Clinical Assistant Professor -- without salary, without tenure

1. Walter Anthony, Jr.
2. William M. Ashe
3. Henry H. Beckering
4. Grant F. Begley
5. Jerald L. Blum
6. Thetford B. Boone
7. Dorliska W. Brown
8. Theodore W. Bywaters
9. James P. Carney
10. Dolphus E. Compere
11. Charles A. Crenshaw
12. William M. Crutcher
13. Jack F. Dean
14. Edward P. Dosher
15. Guy K. Driggs
16. Percival A. Duff
17. E. Frank Dunton
18. Dick C. Ellis
19. Robert J. Frank
20. Melvin R. Franklin
21. Charles S. Fromm
22. William N. Fuqua
23. Amos D. Garner
24. William C. Garre
25. Ronald F. Garvey
26. John B. Gateswood
27. Edward R. Geneceov
28. Max P. Goodfried
29. Russell B. Graham
30. Warren M. Greene
31. Bonnie C. Halley
32. William C. Head
33. David J. Henry
34. T. Wiley Hodges
35. Clifford S. Huggins
36. Gary C. Hutchison
37. Adil Iliya
38. Mary Ruth Jackson
39. George T. James
40. John L. Jenkins
41. Donnell F. Johns
42. Carroll E. Kern
43. Marvin P. Knight
44. Joseph P. Lambert
45. John C. Lane
46. Lee R. Lawson
47. Eugene P. Legg
48. Irwin Lehman
49. Mark L. Lemmon
50. Donald J. Logan
51. Albert O. Loiselle
52. Forrest E. Lumpkin
53. Trevor E. Mabery
54. Mark D. Marshall
55. Daniel M. Martinez
56. Harold A. Mattson
Clinical Assistant Professor -- without salary, without tenure

57. Henry G. Montgomery
58. Ken Mooney
59. James W. Moore
60. Philip R. Morrow
61. Tom M. Nash
62. John W. O'Rear
63. Ralph D. Patman
64. Peter J. Paulus
65. Lito Porto
66. Merle R. Pounds
67. Lewis A. Raney
68. Noah H. Range
69. William J. Rea
70. David D. Reisman
71. Edward R. Richardson
72. Robb H. Rutledge
73. Robert H. Saxton
74. Ben Schnitzer
75. Michael H. Schweinsberg
76. Marvin G. Shepard
77. Charles W. Simpson
78. Ralph Smith
79. Robert D. Stewart
80. Robert D. Stillman
81. Robert L. Stockton
82. Jerry F. Sudderth
83. George G. Susat
84. H. Earl Taylor
85. Lawrence E. Thomas
86. Lewis R. Thompson, Jr.
87. Nathan Tobey
88. Eugene T. Tragus
89. Robert G. Tromly
90. Brice D. Vanderpool, Jr.
91. Margaret Watkins
92. Mark L. Welch
93. Robert H. Wilkins
94. Larry M. Wolford
95. Bernard L. Yollick

Clinical Instructor -- without salary, without tenure

1. Carlos Acosta, Jr.
2. Movses G. Andreassian
3. Duane N. Andrews
4. Thomas L. Arnold
5. Wallace Bailey
6. Donald R. Balaban
7. Ronald E. Barnes
8. Samuel B. Bashour
9. George S. Bayoud
10. Herbert W. Beutel
11. James E. Bland
12. Jack Bolton
13. William T. Bowers
14. William M. Branch
15. William C. Brooks
Clinical Instructor — without salary, without tenure

16. Byron L. Brown
17. Robert J. Burkett
18. Jackson E. Cagle, Jr.
19. Robert A. Callewart
20. Calvin M. Caramela
21. Preston J. Chandler
22. Chul R. Chung
23. James B. Clayton
24. James T. Coggins
25. Joseph M. Connally
26. Jerald D. Copeland
27. Stonie R. Cotten
28. William L. Cox
29. Philip L. Damstra
30. Richard B. Dulaney
31. Javad Fiuzaat
32. George F. Fosmire
33. Alan L. Freeman
34. James B. Frost
35. Charles H. Fuller
36. William D. Gaither
37. James R. Gatt
38. Erskin A. Gaston II
39. Gerald F. Geisler
40. Allan D. Gilbert
41. Jim E. Gilmore
42. Lon Michael Goldstein
43. John L. Gough
44. Leonard Graivier
45. Melvin Gross
46. John B. Gunn
47. Don H. Gustafson
48. Herman L. Hampton, Jr.
49. Sam T. Harara
50. Andrew J. Harrell
51. Horace T. Hayes
52. George K. Hempel
53. Onesimo Hernandiz
54. James E. Holmes
55. Jay M. Hoppenstein
56. Don G. Hunt
57. Clive R. Johnson
58. Donald E. Johnson
59. Sydney R. Jones III
60. Massashi Kawasaki
61. Ridlon J. Kiphart
62. Donald R. Klein
63. Cary J. Lambert
64. Hugh Lamensdorf
65. Bennie W. Lane
66. Frank A. Lang
67. John W. Laminus
68. William F. Larkin
69. Martin L. Lazar
70. Milton Leventhal
71. Z. H. Lieberman
72. Clyde W. Ligon
73. William E. Little
74. Dennis C. Luedke
CLINICAL FACULTY APPOINTMENTS — Continued

DALLAS MEDICAL SCHOOL — Continued

SURGERY — Continued

Clinical Instructor — without salary, without tenure

75. Richard L. Mabry
76. Charles M. Mann, Jr.
77. James G. Martin
78. Donald N. Matheson
79. Richard H. Mathews
80. W. Malcolm McNatt
81. H. Thomas McSwain
82. Fouad N. Metni
83. Elliott S. Middleton
84. Yondell E. Moore
85. Rebekah A. Naylor
86. Joseph C. Neel
87. Felix P. Peppard
88. Alfred V. Persson
89. Suvir Pita
90. Allen S. Plotkin
91. Harlan Pollock
92. James E. Puckett
93. John G. Quarry
94. William F. Radman
95. Maruf A. Razzuk
96. Patterson Reaves
97. Thomas P. Reilly
98. Leonard J. Robison
99. Ross J. Roesser
100. Adrian J. Sampeck
101. James H. Sandin
102. Arthur L. Sarris
103. Gerald W. Schofield
104. Hasmukhla Shah
105. Jimmie Shiu
106. George Shropulos
107. Sydnie G. Smith
108. Frank F. Splann, Jr.
109. Robert D. Sutherland
110. James L. Sweat II
111. William W. Taylor
112. Johannes P. Thiele
113. Eugene R. Todd
114. Robert D. Vandermeer
115. Donald W. Vanderpool
116. Nathaniel Watts
117. Thomas P. Webb
118. S. Kendrick West
119. C. Gene Wheeler
120. Edward White, Jr.
121. Otto L. Willbanks, Jr.
122. Charles D. Williams
123. Phillip E. Williams, Jr.
124. William S. Wolff
125. Donald G. Wolford
126. Richard E. Wood
127. David W. Young
Clinical Assistant Instructor -- without salary, without tenure

1. Robert L. Allred
2. Gordon P. Baker
3. Phil H. Berry, Jr.
4. Ronald H. Blum
5. Robert E. Bunata
6. T. W. Bywaters, Jr.
7. James P. Evans
8. Bruce Faust
9. M. Gayle Glidewell
10. Charles E. Graham
11. Carl L. Highgenboten
12. William K. Jackson
13. Delton K. Longley
14. Charles A. McAdams
15. Allen J. Meril
16. Charles D. Mitchell
17. William M. Osborne
18. David K. Selby
19. Richard A. Shirley
20. Wynne M. Snoots
21. Robert B. Stone
22. James R. Thornhill
23. Kenneth J. Wagner
24. David R. Webb, Jr.
25. William Zaayer

Librarian Emeritus

1. Violet M. Baird

Clinical Assistant Professor -- without salary, without tenure

1. Marvin L. Ernst
2. Bessie P. Lively
3. Rosalie B. Lopopolo
4. Ella G. McDonald
5. David W. Pearson

Clinical Instructor -- without salary, without tenure

1. Rosa M. Adair
2. Delores Allen
3. Clara F. Baird
4. Olivia A. Blessing
5. Margaret L. Bogle
6. Blanche N. Carpenter
7. Raymond L. Bobney
8. Wallace L. Edge, Jr.
9. Velma L. Jackson
10. Martha J. James
11. James D. Keister
12. Duane J. Kliewer
<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
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<tbody>
<tr>
<td>13.</td>
<td>Claudine McDowell</td>
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<td>14.</td>
<td>Paulette A. Murrell</td>
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<td>15.</td>
<td>Modenna B. Prescott</td>
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<td>Sandra L. Price</td>
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<td>Billie H. Stuart</td>
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<td>18.</td>
<td>Janice M. Urman</td>
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<td>19.</td>
<td>J. D. Wendeborn</td>
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<tr>
<td>20.</td>
<td>Lennie L. Wilkins</td>
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</tbody>
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**Clinical Assistant Instructor -- without salary, without tenure**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
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<tbody>
<tr>
<td>1.</td>
<td>Jack Burross</td>
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<td>2.</td>
<td>Bernice L. Chancellor</td>
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<td>3.</td>
<td>Richard R. Clark</td>
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<td>4.</td>
<td>Ronald L. Clarke</td>
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<td>5.</td>
<td>Billie J. Day</td>
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<td>6.</td>
<td>Judith K. Fincher</td>
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<td>7.</td>
<td>Helen C. Hall</td>
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<td>8.</td>
<td>Earline Kutcher</td>
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<tr>
<td>9.</td>
<td>Sandra S. Schwedler</td>
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THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT DALLAS

AMENDMENTS TO THE 1973-74 OPERATING BUDGET

BOARD OF REGENTS MEETING - JUNE 14, 1974

DALLAS HEALTH SCIENCE CENTER

Extension-Postgraduate Program

1. Transfer funds in the amount of $13,333.28 from Unallocated Faculty Salaries to Extension-Postgraduate Program and appoint William A. Osburn (non-tenure), Assistant to Associate Dean of Continuing Education, effective January 1, 1974, at an annual salary rate of $20,000 payable from Extension-Postgraduate Program budget. (RBC No. 317)

Family Practice Training Program

2. Transfer funds in the amount of $18,416.64 from Unallocated Faculty Salaries to Family Practice Training Program Teaching Salaries and appoint Bruce K. Jacobson (non-tenure), Assistant Professor and Assistant Director of Family Medicine and Director of Emergency Services, effective February 15, 1974, at an annual salary rate of $34,000 payable from Family Practice Training Program budget. (RBC No. 307)

3. Change the status of Jack Oliver (non-tenure), effective February 15, 1974, as follows:
   From: Assistant Director, Family Practice, and Assistant Professor of Family Medicine
   To: Assistant Professor, with no change in salary.
   Dr. Oliver is budgeted at an annual salary rate of $30,000 payable from Family Practice Training Program budget. (RBC No. 308)

DALLAS MEDICAL SCHOOL

Biochemistry

1. Transfer funds in the amount of $4,083.31 from Unallocated Faculty Salaries to Biochemistry Teaching Salaries and change the source of salary of Ronald W. Estabrook (tenure), Dean, Dallas G.S.B.S.; Virginia Lazenby O'Hara Professor and Chairman of Biochemistry, effective February 1, 1974, as follows:
   From: An annual salary rate of $43,000 payable $16,000 from Biochemistry budget, $7,000 from Virginia Lazenby O'Hara Fund, $4,000 from Southwestern Medical Foundation, and $16,000 from Dallas G.S.B.S. budget
   To: An annual salary rate of $43,000 payable $23,000 from Biochemistry budget, $4,000 from Southwestern Medical Foundation, and $16,000 from Dallas G.S.B.S. budget. (RBC No. 275)

2. Transfer funds in the amount of $1,458.31 from Unallocated Faculty Salaries to Biochemistry Teaching Salaries and change the source of salary of John M. Johnston (tenure), Professor of Biochemistry and Obstetrics and Gynecology, effective February 1, 1974, as follows:
   From: An annual salary rate of $30,000 payable $19,500 from Biochemistry budget, $2,500 from USPHS 5 R01 AM-03108, $7,000 from Dallas G.S.B.S., Graduate Program in Biochemistry budget, and $1,000 from Obstetrics and Gynecology budget
   To: An annual salary rate of $30,000 payable $22,000 from Biochemistry budget, $7,000 from Dallas G.S.B.S., Graduate Program in Biochemistry budget, and $1,000 from Obstetrics and Gynecology budget. (RBC No. 276)
AMENDMENTS TO THE 1973-74 OPERATING BUDGET - Continued

DALLAS MEDICAL SCHOOL - Continued

Biochemistry - Continued

3. Transfer funds in the amount of $4,083.31 from Unallocated Faculty Salaries to Biochemistry Teaching Salaries and change the source of salary of Ronald A. Butow (tenure), Associate Professor, effective February 1, 1974, as follows:
   From: An annual salary rate of $21,000 payable $14,000 from Biochemistry budget and $7,000 from Dallas G.S.B.S., Graduate Program in Biochemistry budget
   To: An annual salary rate of $21,000 payable from Biochemistry budget. (RBC No. 274)

4. Transfer funds in the amount of $2,041.69 from Unallocated Faculty Salaries to Biochemistry Teaching Salaries and change the source of salary of Larry Cottam (tenure), Associate Professor of Biochemistry and Biophysics, effective February 1, 1974, as follows:
   From: An annual salary rate of $19,000 payable $13,000 from Biochemistry budget and $6,000 from Dallas G.S.B.S., Graduate Program in Biochemistry budget
   To: An annual salary rate of $19,000 payable $16,500 from Biochemistry budget and $2,500 from Dallas G.S.B.S., Graduate Program in Biochemistry budget. (RBC No. 277)

5. Transfer funds in the amount of $4,666.69 from Unallocated Faculty Salaries to Biochemistry Teaching Salaries and change the source of salary of Russell Prough (non-tenure), Assistant Professor, effective February 1, 1974, as follows:
   From: An annual salary rate of $16,000 payable $8,000 from Biochemistry budget and $8,000 from USPHS NO1 CP-33362
   To: An annual salary rate of $16,000 payable from Biochemistry budget. (RBC No. 278)

6. Transfer funds in the amount of $7,750.02 from Unallocated Faculty Salaries to Biochemistry Teaching Salaries and appoint William T. Garrard (non-tenure), Assistant Professor, effective March 1, 1974, at an annual salary rate of $15,500 payable from Biochemistry budget. (RBC No. 311)

7. Transfer funds in the amount of $3,645.81 from Unallocated Faculty Salaries to Biochemistry Teaching Salaries and change the source of salary of Brenda Walker Griffin (non-tenure), Instructor, effective February 1, 1974, as follows:
   From: An annual salary rate of $12,500 payable $6,250 from Biochemistry budget and $6,250 from USPHS R01 GM-16488
   To: An annual salary rate of $12,500 payable from Biochemistry budget. (RBC No. 279)

Cell Biology

8. Transfer funds in the amount of $3,000.06 from Unallocated Faculty Salaries to Cell Biology Teaching Salaries and change the source of salary of Wayne Streilein (tenure), Professor of Cell Biology and Associate Professor of Internal Medicine, effective February 1, 1974, as follows:
   From: An annual salary rate of $32,500 payable $12,000 from Cell Biology budget, $10,000 from Dallas G.S.B.S., Graduate Program in Anatomy budget, $5,000 from USPHS 5 D08 PE-00026, and $5,500 from USPHS 5 R01 AI-10678
   To: An annual salary rate of $32,500 payable $17,143 from Cell Biology budget, $10,000 from Dallas G.S.B.S., Graduate Program in Anatomy budget, $9,000 from USPHS 5 D08 PE-00026, and $357 from USPHS 5 R01 AI-10678. (RBC No. 272)
AMENDMENTS TO THE 1973-74 OPERATING BUDGET - Continued

DALLAS MEDICAL SCHOOL - Continued

Cell Biology - Continued

9. Transfer funds in the amount of $1,166.69 from Unallocated Faculty Salaries to Cell Biology Teaching Salaries and change the source of salary of Frederick Grinnell (non-tenure), Assistant Professor, effective February 1, 1974, as follows:

From: An annual salary rate of $16,000 payable $6,830 from Cell Biology budget, $4,000 from Dallas G.S.B.S., Graduate Program in Anatomy, $3,170 from USPHS 5 R01 CA-14609, and $2,000 from National Science Foundation

To: An annual salary rate of $16,000 payable $8,830 from Cell Biology budget, $4,000 from Dallas G.S.B.S., Graduate Program in Anatomy, and $3,170 from USPHS 5 R01 CA-14609. (RBC No. 273)

10. Transfer funds in the amount of $5,833.31 from Unallocated Faculty Salaries to Cell Biology Teaching Salaries and change the source of salary of Howard R. Toben (non-tenure), Assistant Professor, effective February 1, 1974, as follows:

From: An annual salary rate of $16,000 payable $6,000 from Cell Biology budget and $10,000 from USPHS 5 R01 AI-10678

To: An annual salary rate of $16,000 payable from Cell Biology budget. (RBC No. 271)

Internal Medicine

11. Transfer funds in the amount of $5,833.31 from Unallocated Faculty Salaries to Internal Medicine Teaching Salaries and change the source of salary of Robert L. Johnson, Jr. (tenure), Professor, effective February 1, 1974, as follows:

From: An annual salary rate of $33,500 payable $16,000 from Parkland Memorial Hospital, $7,500 from USPHS 5 P17 HL-14187, and $10,000 from USPHS 5 R03 PE-00174

To: An annual salary rate of $33,500 payable $16,000 from Parkland Memorial Hospital, $7,500 from USPHS 5 P17 HL-14187, and $10,000 from Internal Medicine budget. (RBC No. 262)

12. Transfer funds in the amount of $7,666.65 from Unallocated Faculty Salaries to Internal Medicine Teaching Salaries and change the source of salary of John S. Chapman (tenure), Professor of Internal Medicine, from an annual salary rate of $30,400 payable $12,000 from City of Dallas and $18,400 from USPHS 5 R03 PE-00174, as follows:

For the period February 1, 1974 thru June 30, 1974: An annual salary rate of $30,400 payable $12,000 from City of Dallas and $18,400 from Internal Medicine budget

For the period July 1, 1974 thru August 31, 1974: An annual salary rate of $30,400 payable from USPHS 5 R03 PE-00174. (RBC No. 264)

13. Transfer funds in the amount of $5,833.31 from Unallocated Faculty Salaries to Internal Medicine Teaching Salaries and change the source of salary of James Michael Atkins (non-tenure), Assistant Professor, effective February 1, 1974, as follows:

From: An annual salary rate of $25,000 payable $9,000 from Internal Medicine budget, $10,000 from USPHS 5 R03 PE-00174, $5,000 from USPHS 2 T01 HL-05812, and $1,000 from USPHS 5 P01 HL-06296

To: An annual salary rate of $25,000 payable $19,000 from Internal Medicine budget, $5,000 from USPHS 2 T01 HL-05812, and $1,000 from USPHS 5 P01 HL-06296. (RBC No. 263)
14. Transfer funds in the amount of $14,583.31 from Unallocated Faculty Salaries to Internal Medicine Teaching Salaries and change the source of salary of David W. Bilheimer (non-tenure), Assistant Professor, effective February 1, 1974, as follows:

   From: An annual salary rate of $25,000 payable from USPHS 5 E03 PE-00174
   To: An annual salary rate of $25,000 payable from Internal Medicine budget. (RBC No. 226)

15. Accept the resignation of Patrick C. Walsh (non-tenure), Visiting Assistant Professor of Internal Medicine and Surgery, effective June 30, 1974. Dr. Walsh is budgeted at an annual salary rate of $20,000 payable from USPHS 5 TO1 CA-05200. (RBC No. 301)

16. Transfer funds in the amount of $9,916.62 from Unallocated Faculty Salaries to Internal Medicine Teaching Salaries and change the source of salary of Michael Charles Grogan, Coordinator for Cardiopulmonary Center, effective February 1, 1974, as follows:

   From: An annual salary rate of $17,000 payable from USPHS 5 E03 PE-00174
   To: An annual salary rate of $17,000 payable from Internal Medicine budget. (RBC No. 251)

17. Transfer funds in the amount of $4,141.62 from Unallocated Faculty Salaries to Obstetrics and Gynecology Teaching Salaries and change the source of salary of Jack A. Pritchard (tenure), Gillette Professor, effective February 1, 1974, as follows:

   From: An annual salary rate of $37,300 payable $30,200 from Obstetrics and Gynecology budget and $7,100 from USPHS 06 H 000074
   To: An annual salary rate of $37,300 payable from Obstetrics and Gynecology budget. (RBC No. 298)

18. Transfer funds in the amount of $1,166.62 from Unallocated Faculty Salaries to Obstetrics and Gynecology Teaching Salaries and change the source of salary of Daniel E. Scott (non-tenure), Associate Professor and Vice Chairman, effective February 1, 1974, as follows:

   From: An annual salary rate of $31,000 payable $29,000 from Obstetrics and Gynecology budget and $2,000 from USPHS 06 H 000074
   To: An annual salary rate of $31,000 payable from Obstetrics and Gynecology budget. (RBC No. 304)

19. Transfer funds in the amount of $11,783.31 from Unallocated Faculty Salaries to Obstetrics and Gynecology Teaching Salaries and change the source of salary of Euel Crosby (non-tenure), Associate Professor and Director of Clinics, effective February 1, 1974, as follows:

   From: An annual salary rate of $30,200 payable $10,000 from Obstetrics and Gynecology budget and $20,200 from USPHS 06 H 000074
   To: An annual salary rate of $30,200 payable from Obstetrics and Gynecology budget. (RBC No. 305)

20. Transfer funds in the amount of $2,333.31 from Unallocated Faculty Salaries to Obstetrics and Gynecology Teaching Salaries and change the source of salary of Norman F. Gant (tenure), Associate Professor, effective February 1, 1974, as follows:

   From: An annual salary rate of $29,000 payable $25,000 from Obstetrics and Gynecology budget and $4,000 from USPHS 06 H 000074
   To: An annual salary rate of $29,000 payable from Obstetrics and Gynecology budget. (RBC No. 297)
AMENDMENTS TO THE 1973-74 OPERATING BUDGET - Continued

DALLAS MEDICAL SCHOOL - Continued

Obstetrics and Gynecology - Continued

21. Transfer funds in the amount of $750.00 from Unallocated Faculty Salaries to Obstetrics and Gynecology Teaching Salaries and increase the annual salary rate of Alan Beer (tenure), Associate Professor of Cell Biology and Obstetrics and Gynecology, effective March 1, 1974, as follows:

From: An annual salary rate of $26,500 payable $18,500 from Cell Biology budget, $5,500 from USPHS 1 R01 AI-10678, and $2,500 from Obstetrics and Gynecology budget

To: An annual salary rate of $28,000 payable $18,500 from Cell Biology budget, $5,500 from USPHS 1 R01 AI-10678, and $4,000 from Obstetrics and Gynecology budget. (RBC No. 319)

22. Transfer funds in the amount of $1,000 from Unallocated Faculty Salaries to Obstetrics and Gynecology Teaching Salaries and change the source of salary of Johann Duenhoelter (non-tenure), Assistant Professor, for the period February 1, 1974 thru May 31, 1974, as follows:

From: An annual salary rate of $24,500 payable $21,500 from Obstetrics and Gynecology budget and $3,000 from USPHS 06 H 000074

To: An annual salary rate of $24,500 payable from Obstetrics and Gynecology budget.

Dr. Duenhoelter's source of salary will revert to original budgeted sources effective June 1, 1974. (RBC No. 303)

23. Accept the resignation of Duck J. Choi (non-tenure), Assistant Professor, effective January 17, 1974. Dr. Choi is budgeted at an annual salary rate of $21,000 payable $17,000 from Obstetrics and Gynecology budget and $4,000 from USPHS 5 S03 PE-00174. (RBC No. 182 Revised)

24. Transfer funds in the amount of $1,750.00 from Unallocated Faculty Salaries to Obstetrics and Gynecology Teaching Salaries and change the source of salary of Gary Cunningham (non-tenure), Assistant Professor, effective February 1, 1974, as follows:

From: An annual salary rate of $21,000 payable $18,000 from Obstetrics and Gynecology budget and $3,000 from USPHS 06 H 000074

To: An annual salary rate of $21,000 payable from Obstetrics and Gynecology budget. (RBC No. 300)

25. Transfer funds in the amount of $1,750.00 from Unallocated Faculty Salaries to Obstetrics and Gynecology Teaching Salaries and change the source of salary of Barry E. Schwarz (non-tenure), Assistant Professor, effective February 1, 1974, as follows:

From: An annual salary rate of $20,000 payable $17,000 from Obstetrics and Gynecology budget and $3,000 from USPHS 06 H 000074

To: An annual salary rate of $20,000 payable from Obstetrics and Gynecology budget. (RBC No. 299)

26. Transfer funds in the amount of $750.00 from Unallocated Faculty Salaries to Obstetrics and Gynecology teaching Salaries and increase the annual salary rate of James R. Scott (non-tenure), Assistant Professor, effective March 1, 1974, as follows:

From: An annual salary rate of $19,000 payable from Obstetrics and Gynecology budget

To: An annual salary rate of $20,500 payable from Obstetrics and Gynecology budget. (RBC No. 320)
27. Change the status and increase the annual salary rate of Barbara Cambridge (non-tenure), effective March 1, 1974, as follows:
   From: Instructor in Sociology in Obstetrics and Gynecology at an annual salary rate of $15,800 payable from USPHS 06 H 000074
   To: Assistant Professor of Sociology in Obstetrics and Gynecology at an annual salary rate of $16,500 payable from USPHS 06 H 000074. (RBC No. 310)

28. Transfer funds in the amount of $13,416.62 from Unallocated Faculty Salaries to Ophthalmology Teaching Salaries and change the source of salary of Peter R. Bringewald (non-tenure), Assistant Professor, effective February 1, 1974, as follows:
   From: An annual salary rate of $23,000 payable from USPHS 5 E03 PE-00174
   To: An annual salary rate of $23,000 payable from Ophthalmology budget. (RBC No. 265)

29. Transfer funds in the amount of $3,791.69 from Unallocated Faculty Salaries to Pathology Teaching Salaries and change the source of salary of Frank Vellios (tenure), Professor, effective February 1, 1974, as follows:
   From: An annual salary rate of $33,500 payable $27,000 from Pathology budget and $6,500 from Parkland Memorial Hospital
   To: An annual salary rate of $33,500 payable from Pathology budget. (RBC No. 289)

30. Transfer funds in the amount of $2,916.69 from Unallocated Faculty Salaries to Pathology Teaching Salaries and change the source of salary of Rolland C. Reynolds (tenure), Professor of Pathology and Health Care Sciences, effective February 1, 1974, as follows:
   From: An annual salary rate of $33,400 payable $25,400 from Pathology budget, $5,000 from Parkland Memorial Hospital, and $3,000 from School of Allied Health Sciences, Health Care Sciences budget
   To: An annual salary rate of $33,400 payable $30,400 from Pathology budget and $3,000 from School of Allied Health Sciences, Health Care Sciences budget. (RBC No. 291)

31. Transfer funds in the amount of $3,291.61 from Unallocated Faculty Salaries to Pathology Teaching Salaries and change the source of salary of L. Ruth Guy (tenure), Professor and Chairman of Medical Technology; Associate Professor of Pathology, effective February 1, 1974, as follows:
   From: An annual salary rate of $21,500 payable $4,800 from Pathology budget, $10,925 from Parkland Memorial Hospital, and $5,775 from School of Allied Health Sciences, Medical Technology budget
   To: An annual salary rate of $21,500 payable $10,443 from Pathology budget, $5,282 from Parkland Memorial Hospital, and $5,775 from School of Allied Health Sciences, Medical Technology budget. (RBC No. 290)

32. Transfer funds in the amount of $9,041.62 from Unallocated Faculty Salaries to Pathology Teaching Salaries and change the source of salary of Joel Kirkpatrick (tenure), Associate Professor, effective February 1, 1974, as follows:
   From: An annual salary rate of $29,000 payable $15,500 from USPHS 5 E03 PE-00174 and $13,500 from Pathology budget
   To: An annual salary rate of $29,000 payable from Pathology budget. (RBC No. 266)
AMENDMENTS TO THE 1973-74 OPERATING BUDGET - Continued

DALLAS MEDICAL SCHOOL - Continued

Pediatrics

33. Transfer funds in the amount of $3,791.69 from Unallocated Faculty Salaries to Pediatrics Teaching Salaries and change the source of salary of Heinz F. Eichenwald (tenure), William Buchanan Professor of Pediatrics and Chairman, effective February 1, 1974, as follows:

From: An annual salary rate of $37,500 payable $25,000 from Pediatrics budget, $6,000 from Southwestern Medical Foundation, $5,000 from American Medical Association, and $1,500 from William Buchanan Professorship

To: An annual salary rate of $37,500 payable $31,500 from Pediatrics budget and $6,000 from Southwestern Medical Foundation. (RBC No. 286)

34. Reappoint Robert I. Kramer (non-tenure), Clinical Associate Professor, 50%, effective March 1, 1974, at an annual salary rate of $16,000 payable from National Cystic Fibrosis Foundation. (RBC No. 312)

35. Transfer funds in the amount of $3,101 from Unallocated Faculty Salaries to Pediatrics Teaching Salaries and change the source of salary of Richard Adams (non-tenure), Assistant Professor, effective February 1, 1974, as follows:

From: An annual salary rate of $18,900 payable from the Jonsson Foundation

To: An annual salary rate of $18,900 payable $5,316 from Pediatrics budget and $13,584 from the Jonsson Foundation. (RBC No. 288)

36. Transfer funds in the amount of $3,105 from Unallocated Faculty Salaries to Pediatrics teaching Salaries and change the source of salary of Frank D. Ohler (non-tenure), Assistant Professor of Pediatrics and Psychology, for the period February 1, 1974 thru April 30, 1974, as follows:

From: An annual salary rate of $17,400 payable from USPHS 06 H 000079

To: An annual salary rate of $17,400 payable $12,420 from Pediatrics budget and $4,980 from USPHS 06 H 000079.

Dr. Ohler will revert to original budgeted source effective May 1, 1974. (RBC No. 287)

Pharmacology

37. Transfer funds in the amount of $9,625.00 from Unallocated Faculty Salaries to Pharmacology Teaching Salaries and change the source of salary of Franklin R. Goodman (non-tenure), Assistant Professor, effective February 1, 1974, as follows:

From: An annual salary rate of $16,500 payable from American Medical Association

To: An annual salary rate of $16,500 payable from Pharmacology budget. (RBC No. 283)

38. Transfer funds in the amount of $7,875.00 from Unallocated Faculty Salaries to Pharmacology Teaching Salaries and change the source of salary of Roy L. Dorris (non-tenure), Assistant Professor, effective February 1, 1974, as follows:

From: An annual salary rate of $13,500 payable from USPHS 5 R01 MH-05831

To: An annual salary rate of $13,500 payable from Pharmacology budget. (RBC No. 284)
Pharmacology - Continued

39. Transfer funds in the amount of $8,499.96 from Unallocated Faculty Salaries to Pharmacology Teaching Salaries and appoint Thomas H. Gardiner (non-tenure), Instructor in Pharmacology, effective March 1, 1974, at an annual salary rate of $17,000 payable from Pharmacology budget. (RBC No. 313)

40. Transfer funds in the amount of $408.31 from Unallocated Faculty Salaries to Pharmacology Teaching Salaries and change the source of salary of Helen C. Mitchell (non-tenure), Instructor, 50%, effective February 1, 1974, as follows:
   From: An annual salary rate of $15,600 payable $14,200 from Pharmacology budget and $1,400 from Eaton Laboratories
   To: An annual salary rate of $15,600 payable from Pharmacology budget. (RBC No. 283)

Physiology

41. Accept the resignation of Carlos Libertun (non-tenure), Visiting Associate Professor, effective March 31, 1974. Dr. Libertun is budgeted at an annual salary rate of $2,000 payable from Ford Foundation. (RBC No. 326)

42. Appoint Dennis R. Morrison (non-tenure), Assistant Professor, for the period March 1, 1974 thru June 30, 1974, at an annual salary rate of $22,000 payable from NASA NGR 44 012 151. (RBC No. 306)

43. Transfer funds in the amount of $999.99 from Unallocated Faculty Salaries to Physiology Teaching Salaries and change the source of salary of Keith J. Cooper (non-tenure), Assistant Professor, for the period February 1, 1974 thru April 30, 1974, as follows:
   From: An annual salary rate of $16,000 payable $12,000 from Physiology budget and $4,000 from Ford Foundation
   To: An annual salary rate of $16,000 payable from Physiology budget.
   Dr. Cooper will revert to original budgeted sources effective May 1, 1974. (RBC No. 280)

44. Transfer funds in the amount of $7,291.62 from Unallocated Faculty Salaries to Physiology Teaching Salaries and change the source of salary of Edmond Griffin (non-tenure), Instructor, effective February 1, 1974, as follows:
   From: An annual salary rate of $12,500 payable from Moss Foundation
   To: An annual salary rate of $12,500 payable from Physiology budget. (RBC No. 282)

45. Transfer funds in the amount of $6,708.31 from Unallocated Faculty Salaries to Physiology Teaching Salaries and change the source of salary of Pavel Illner (non-tenure), Instructor, effective February 1, 1974, as follows:
   From: An annual salary rate of $11,500 payable from USPHS 5 R01 AM-10073
   To: An annual salary rate of $11,500 payable from Physiology budget. (RBC No. 281)
AMENDMENTS TO THE 1973-74 OPERATING BUDGET – Continued

DALLAS MEDICAL SCHOOL – Continued

Psychiatry

46. Transfer funds in the amount of $2,416.75 from Unallocated Faculty Salaries to Psychiatry Teaching Salaries and change the source of salary of Robert T. Long (non-tenure), Clinical Professor 37 1/2%, effective February 1, 1974, as follows:

From: An annual salary rate of $34,800 payable $5,333 from Psychiatry budget, $15,600 from USPHS 5 T01 MH-06528, and $13,867 from USPHS 5 T01 MH-10856

To: An annual salary rate of $34,800 payable $16,380 from Psychiatry budget, $15,600 from USPHS 5 T01 MH-06528, and $2,820 from USPHS 5 T01 MH-10856. (RBC No. 292)

47. Transfer funds in the amount of $7,583.31 from Unallocated Faculty Salaries to Psychiatry Teaching Salaries and change the source of salary of Judith H. Forgotson (non-tenure), Assistant Professor, effective February 1, 1974, as follows:

From: An annual salary rate of $24,400 payable $11,400 from Psychiatry budget, $4,700 from USPHS 5 E03 PE-00174, and $8,300 from USPHS 5 T01 MH-10856

To: An annual salary rate of $24,400 payable from Psychiatry budget. (RBC No. 293)

48. Transfer funds in the amount of $8,166.69 from Unallocated Faculty Salaries to Psychiatry Teaching Salaries and change the source of salary of John L. Hall (non-tenure), Assistant Professor, effective February 1, 1974, as follows:

From: An annual salary rate of $21,000 payable $14,000 from USPHS 5 E03 PE-00174 and $7,000 from Psychiatry budget

To: An annual salary rate of $21,000 payable from Psychiatry budget. (RBC No. 267)

Radiology

49. Transfer funds in the amount of $1,166.69 from Unallocated Faculty Salaries to Radiology Teaching Salaries and change the source of salary of Jack Reynolds (tenure), Professor and Vice Chairman, effective February 1, 1974, as follows:

From: An annual salary rate of $34,500 payable $15,000 from Radiology budget, $2,000 from USPHS 5 E03 PE-00174, and $17,500 from Parkland Hospital

To: An annual salary rate of $34,500 payable $17,000 from Radiology budget and $17,500 from Parkland Hospital. (RBC No. 269)

50. Transfer funds in the amount of $6,259.12 from Unallocated Faculty Salaries to Radiology Teaching Salaries and change the source of salary of Mary Esther Gaulden (non-tenure), Emma Freeman Associate Professor, effective February 1, 1974, as follows:

From: An annual salary rate of $23,000 payable $6,000 from Dallas G.S.B.S., Graduate Program in Radiation Biology, $4,000 from USPHS 5 T01 CA-05136, $6,270 from USPHS 5 R01 HD-06832, and $6,730 from American Cancer Society

To: An annual salary rate of $23,000 payable $6,000 from Dallas G.S.B.S., Graduate Program in Radiation Biology, $6,270 from USPHS 5 R01 HD-06832, and $10,730 from Radiology budget. (RBC No. 296)
51. Transfer funds in the amount of $3,500.00 from Unallocated Faculty Salaries to Radiology Teaching Salaries and change the source of salary of J. Edward Dowdey (non-tenure), Associate Professor, effective February 1, 1974, as follows:
From: An annual salary rate of $21,900 payable $13,900 from Radiology budget, $6,000 from USPHS 5 TO1 CA05136-12, and $2,000 from Parkland Memorial Hospital
To: An annual salary rate of $21,900 payable $19,900 from Radiology budget and $2,000 from Parkland Memorial Hospital. (RBC No. 295)

52. Transfer funds in the amount of $5,202.12 from Unallocated Faculty Salaries to Radiology Teaching Salaries and change the source of salary of Donald E. Carlson (non-tenure), Assistant Professor, effective February 1, 1974, as follows:
From: An annual salary rate of $20,800 payable $11,882 from Radiology budget and $8,918 from USPHS 5 R01 CA-13371
To: An annual salary rate of $20,800 payable from Radiology budget. (RBC No. 294)

53. Transfer funds in the amount of $7,291.69 from Unallocated Faculty Salaries to Radiology Teaching Salaries and change the source of salary of Kenneth W. Bull (non-tenure), Instructor, effective February 1, 1974, as follows:
From: An annual salary rate of $13,500 payable $12,500 from USPHS 5 E03 PE-00174 and $1,000 from Radiology budget
To: An annual salary rate of $13,500 payable from Radiology budget. (RBC No. 268)

54. Accept the resignation of George Thomas Shires (tenure), Professor and Chairman, effective February 28, 1974. Dr. Shires is budgeted at an annual salary rate of $40,000 payable $37,500 from Surgery budget and $2,500 from Southwestern Medical Foundation. (RBC No. 241)

55. Transfer funds in the amount of $15,166.69 from Unallocated Faculty Salaries to Surgery Teaching Salaries and change the source of salary of Jack Gunter (tenure), Associate Professor of Otolaryngology, effective February 1, 1974, as follows:
From: An annual salary rate of $28,300 payable $2,300 from Surgery budget and $26,000 from USPHS 5 E03 PE-00174
To: An annual salary rate of $28,300 payable from Surgery budget. (RBC No. 260)

56. Transfer funds in the amount of $14,583.38 from Unallocated Faculty Salaries to Surgery Teaching Salaries and change the source of salary of Claude V. DeShazo (non-tenure), Assistant Professor of Surgery, effective February 1, 1974, as follows:
From: An annual salary rate of $25,000 payable from USPHS 5 E03 PE-00174
To: An annual salary rate of $25,000 payable from Surgery budget. (RBC No. 270)

57. Accept the resignation of Claude V. DeShazo (non-tenure), Assistant Professor of Surgery, effective March 28, 1974. Dr. DeShazo is budgeted at an annual salary rate of $25,000 payable from Surgery budget. (RBC No. 309)
AMENDMENTS TO THE 1973-74 OPERATING BUDGET - Continued

DALLAS ALLIED HEALTH SCIENCES SCHOOL

Health Care Sciences
1. Reappoint Mabel Claire Jenkins (non-tenure), Instructor in Continuing Education, for the period January 1, 1974 thru January 31, 1974, at an annual salary rate of $12,000 payable from the General Continuing Education Fund. (RBC No. 316)

Rehabilitation Science
2. Transfer funds in the amount of $800.00 from Unallocated Faculty Salaries to Rehabilitation Science Teaching Salaries and reappoint Michael K. Muegge (non-tenure), Adjunct Assistant Professor, 15%, for the period January 1, 1974 thru April 30, 1974, at an annual salary rate of $16,000 payable from Rehabilitation Science budget. (RBC No. 315)

DALLAS HEALTH SCIENCE CENTER

1. Please approve the attached Parking and Traffic Regulations of The University of Texas Health Science Center at Dallas which have been presented in their entirety due to major revisions.
PARKING AND TRAFFIC REGULATIONS
AND INFORMATION
THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER
AT DALLAS

Be it resolved by the Board of Regents of The University of Texas System, that pursuant to Section 51.202 of Vernon's Texas Education Code the following security, parking and traffic regulations of The University of Texas Health Science Center at Dallas be and they are hereby adopted as the parking, traffic and security regulations governing traffic and security at The University of Texas Health Science Center at Dallas.
Approved by Board of Regents, ____________________________.

GENERAL INFORMATION
The general and criminal laws of the United States, the State of Texas, and City Ordinances of Dallas, Texas, dealing with traffic and security, as well as the traffic, parking and security regulations of The University of Texas Health Science Center at Dallas are hereby declared to be in full force and effect on the campus of The University of Texas Health Science Center at Dallas.

The commissioned campus Police Officers are vested with all the powers, privileges, and immunities of peace officers while on the campus and are empowered to enforce all of these laws, rules and regulations.

"Campus" as used herein shall include all the property under the control of The University of Texas Health Science Center at Dallas.

The University of Texas Health Science Center at Dallas, and its employees, will not assume any responsibility for the care and protection of any vehicle or its contents at any time that such vehicle is operated or parked on the campus.

The University of Texas Health Science Center at Dallas, and its employees, will not assume any responsibility for the care and protection of any personal property at any time while on campus.

Any person who willfully or through negligence causes damage to The University of Texas Health Science Center at Dallas property shall be liable for any damage done to said property.

ARTICLE I. GENERAL PROVISIONS
1. The purpose of these regulations is to provide for the safety and welfare of students and employees, control of traffic and parking, and protection of institutional property.

2. If any part of these traffic, parking and security regulations is held to be invalid, such invalidity shall not affect other provisions which can be given effect without the invalid provisions, and to this end the provisions of these regulations are declared to be severable.

3. The provisions of these regulations shall be cumulative of all other laws.

4. On special occasions and in emergencies, Police Officers may impose temporary parking and traffic control restrictions. These temporary restrictions shall have all of the force of other written and approved regulations and shall be subject to the same penalties. On special occasions and in emergencies they may also waive parking restrictions.
ARTICLE I. GENERAL PROVISIONS - Continued

5. It shall be a violation to commit any act prohibited by these regulations, or to fail to do any act required by these regulations.

6. The words "motor vehicle" or "vehicle" as used in these regulations shall include automobiles, buses, trucks, trailers, motorcycles, motor scooters, and motorbikes.

7. The operations of a motor vehicle shall be restricted to the campus drives, streets, and parking lots.

8. Employees, faculty, and students are prohibited from parking in the reserved visitor parking spaces at any time.

9. Motor vehicles operated or parked on the campus must comply with all State Laws, City Ordinances of Dallas, Texas, dealing with traffic and security and the Parking, Traffic and Security Regulations of The University of Texas Health Science Center at Dallas.

10. "Parking Permit" includes gate cards and decals issued by The University of Texas Health Science Center at Dallas.

ARTICLE II. REGISTRATION OF VEHICLES

1. All employees, faculty, and students must register any motor vehicle which they possess or maintain and properly display a valid parking permit decal if the motor vehicle is parked on the campus of The University of Texas Health Science Center at Dallas. It is a violation of these rules and regulations to park a vehicle on the campus that does not properly display a current valid parking permit.

2. Only one vehicle per permit holder shall be parked on the campus at one time.

3. The motor vehicles must be registered during the period designated for all students, and on the first day of work for new employees and faculty.

4. Falsification of information on registration of a motor vehicle will result in cancellation of parking privileges.

5. Faculty and employees must register motor vehicles at the place and period designated.

6. Registration of a motor vehicle does not entitle a person to park that vehicle on the campus unless a valid parking decal is properly displayed on the vehicle.

7. Any change affecting the registration or ownership of a vehicle shall be reported promptly to the University Police Office so the change may be recorded. Failure to do so may result in the cancellation of parking privileges.

8. If a replacement decal is required, it will be necessary to destroy the old decal and give written notice to that effect to the University Police Office.
ARTICLE III. PARKING PERMITS

1. Only after a motor vehicle has been properly registered and the parking fee paid may a parking permit decal be issued.

2. The parking fees are paid through the Cashier's Office. The fees are payable in full for the unexpired fiscal period. The fiscal period is from September 1 through the following August 31.

3. Parking fees for students, employees, and faculty must be paid during the designated period at the beginning of the school term. New employees and faculty must obtain parking permits on their first day of employment.

4. Parking permit decals must be permanently affixed to the inside of the windshield in the area designated so the decal is easily visible and the number of the decal easily read.

5. Parking permit decals for motorcycles, motorbikes, and motorscooters without windshields shall be permanently affixed to the vehicle's gas tank or in a location in which the decal may be easily seen and the number on the decal easily read.

6. Parking permit decals and gate cards are not transferable. Gate cards must be turned in to the University Police Department upon termination of employment or requesting refund.

7. The person in whose name the parking permit is issued is responsible for all the traffic violations of that motor vehicle for which the permit was issued. If the operator of a motor vehicle involved in a violation is not the person in whose name that parking permit decal was issued, then both the operator and the person in whose name the permit was issued are responsible for the violation.

8. Refund will be made for the unexpired portion of the parking period upon surrender of parking gate card to the University Police Office. If refund is requested after the 15th of the month, no money will be refunded for that month.

9. Approval on Terminal Clearance form is required on all employees before final paycheck is received. Gate Cards must be turned in to the University Police Office.

10. Parking Permits may be restricted to designated parking areas.

11. Parking permit replacement decal or decals for additional vehicles may be obtained for an additional fee of $1.00.

12. Upon restoration of cancelled parking privileges, re-registration and payment of a $1.00 registration fee will be required.

13. Parking, traffic and security regulations shall be in effect 24 hours per day, 7 days per week.

14. Specific parking space may be assigned on a temporary basis under special and unusual circumstances.
ARTICLE IV. PARKING PERMIT FEES

1. The fee includes the issuance of one gate card and one decal.
   a. Department Chairmen and Administration Reserve Spaces $60.00 per year
   b. Faculty $48.00 per year
   c. Staff and Fellows $24.00 per year
   d. Students $18.00 per year
   e. Non-paid Clinical Faculty and Volunteers $2.00 per year
   f. Visitors .75 per day
   g. Replacement for Lost or Stolen Gate Card $2.00
   h. Replacement Decals $1.00
   i. Decals for Additional Vehicles $1.00

ARTICLE V. DRIVING & PARKING OFFENSES

NOTE:
If a vehicle is found parked in violation of any State Law or City Ordinance of Dallas, Texas, dealing with traffic and security or in violation of these regulations, or is parked in such a manner as to create a traffic hazard, such vehicle may be impounded, relocated, or immobilized at the expense of the violator. The University shall not, nor shall any of its authorized personnel, be liable or assume any responsibility for any loss of damage suffered because of such impoundment, immobilization, or relocation.

It shall be a violation of these regulations for any person to:

1. Drive and operate a motor vehicle or bicycle on any street, drive, alley, or sidewalk in excess of 15 miles per hour, which is the speed limit on all parts of the campus.

2. Park a motor vehicle so that it is not wholly within the lines or boundaries of a line parking space.

3. Park a motor vehicle in a space marked for visitor parking when the operator of the vehicle, or parking permit holder, is either a student, employee, or faculty member of the University.

4. Drive or park a motor vehicle in an area prohibited by a "No Parking" sign or signs, or by a barricade or barricades.

5. Park a motor vehicle, or any part thereof, next to a red which shall designate a "No Parking" zone.

6. Park a motor vehicle, or any part thereof, on a lawn, curb, sidewalk, or any area not designated as a parking space, or in any restricted or unauthorized area.
ARTICLE V. DRIVING & PARKING OFFENSES - Continued

7. Park a motor vehicle in a loading zone or service drive. Parking in a loading zone or service drive by a truck or trailer is allowed only during the time the truck or trailer is being loaded or unloaded. Parking in a loading zone or service drive by a passenger vehicle is allowed only if in the actual process of loading or unloading, and then only if a written parking permit to do so is displayed on the windshield.

8. Park a motor vehicle on the campus for more than 24 hours, without being moved, or at any time for the purpose of storing, washing, greasing, or repairing such vehicle (except emergency repairs). Vehicles which are the property of The University of Texas, parked in their proper spaces, are excepted.

9. Park a motor vehicle at an angle or perpendicular to a curb in such a manner that the front wheel or wheels are more than 12 inches from the curb or park a motor vehicle parallel to a curb in a manner whereby either of the curbside wheels is more than 18 inches from the curb.

10. Drive and operate a motor vehicle or bicycle and fail to stop said motor vehicle or bicycle at a stop sign facing the vehicle or bicycle when said stop sign is officially placed in its location by the University Police Chief or his delegate. Authority is herein granted to the University Police Chief or his delegate to erect and place stop signs as well as other traffic control signs and markings at any location on campus he shall deem appropriate.

11. Park a motor vehicle in a reserved parking area when the vehicle does not display a proper parking permit for the area. Temporary exception may be granted by the University Police Chief.

12. Park a motor vehicle in a space reserved for disabled or handicapped, unless the vehicle properly displays a current parking permit decal permitting such parking.

13. Park a passenger vehicle or truck in the space or spaces reserved for motorcycles, motorscooters, and motorbikes.

14. Park a motorcycle, motorscooter, or motorbike in a space designated for passenger vehicles.

15. Park a motor vehicle so as to obstruct the entrance to any building.

16. Drive, operate or park a motor vehicle to which is affixed a forged or altered parking permit or decal.

17. Drive, operate or park a motor vehicle to which is affixed a parking permit or decal that was not officially issued for the vehicle.

18. Drive a motor vehicle into a parking lot other than through the designated entrance.

19. Park a motor vehicle which fails to display a valid parking permit.

20. Transfer a parking permit without permission of the University Police Chief.

21. Permit another person to use a parking gate card to gain entrance to a parking area.
ARTICLE V. DRIVING & PARKING OFFENSES - Continued

22. Drive, operate, or park a motor vehicle which displays a parking permit in an unauthorized area of the vehicle.

23. Park a motor vehicle in a time-limited zone for longer than the prescribed time limit without moving the vehicle.

24. Drive and operate a motor vehicle the wrong way on a one-way street.

25. Park a motor vehicle within ten feet of a fire plug.

26. Park a bicycle in an area or space not officially designated for bicycle parking.

27. Park a motor vehicle in any place where it may create a traffic hazard or where it blocks or impedes pedestrian or vehicular traffic.

28. Drive and operate a motor vehicle and fail to yield the right-of-way to a pedestrian. Pedestrians have the right-of-way over motor vehicles and bicycles at all times.

29. Operate a motor vehicle that is involved in a collision and fail to immediately report said collision to the nearest University Police Officer or to the police telephone operator.

30. Drive and operate a motor vehicle and fail to have a valid operator's, commercial operator's, or chauffeur's license in his immediate possession. It shall be a defense to any charge filed under this section that the person so charged produced in court an operator's, commercial operator's, or chauffeur's license theretofore issued to such person and valid at the time of his arrest.

31. Drive and operate a motor vehicle and fail or refuse to display a valid operator's, commercial operator's, or chauffeur's license to a University Police Officer when requested to do so. It shall be a defense to any charge filed under this section that the person so charged produced in court an operator's, commercial operator's, or chauffeur's license theretofore issued to such person and valid at the time of his arrest.

32. Move or remove a traffic sign or barricade without permission of a University Police Officer.

33. Fail to follow the orders, directions, or signals of a University Police officer in the direction of traffic.

ARTICLE V. ENFORCEMENT

1. Two types of traffic tickets may be issued by the University Police Officers.

A. Campus Tickets:

   (1) Campus traffic tickets may be issued by the University Police Officers for a violation of State Law, City Ordinances of Dallas, Texas, dealing with traffic and security, or these rules and regulations.
ARTICLE V. ENFORCEMENT - Continued

(2) The service charge for such violation shall be as follows:

(a) First violation . . . . . . . . . . . . . . . . . $3.00
(b) Second violation within one year . . . . . . . . . . . $5.00
(c) Third violation or more within one year . . . . . $10.00 each
(d) More than three violations per year may result in loss of parking privileges for up to one year.
(e) Habitual violation (five or more violations per year) may result in suspension, withdrawal, or termination of parking privileges.

(3) Appeals of campus tickets:

(a) A person desiring to appeal a campus ticket must make such an appeal within ten days from the date of violation to the University Police Office.
(b) The appeal application and explanation of why the ticket was issued will be forwarded to the Administrative Officer who has been designated by the President to hear the appeal.
(c) The designated Administrative Officer will rule on the appeal and the violator will be notified whether the citation is to be voided or must be paid. Action of the Administrative Officer will be final.
(d) If the Administrative Officer rules in favor of the appellant, he shall be entitled to a reimbursement of any fee he has paid to the University Accounting Office as a result of such alleged violation.

B. Court Appearance Tickets:

(1) Court appearance tickets may be issued by commissioned University Police Officers; such tickets shall constitute a summons to appear in justice court or municipal court in the same manner as traffic tickets issued by the Texas Highway Patrol.
(2) Penalties, as provided by law, may be imposed by the justice or municipal court for violation of these regulations as well as for violations of State Law, and where appropriate, City Ordinances of Dallas, Texas.

ARTICLE VI. AMENDMENTS TO REGULATIONS

1. As conditions and necessity dictate, the parking, traffic and security regulations may be revised or amended by the President of The University of Texas Health Science Center at Dallas, subject to the approval of The University of Texas System Board of Regents.
OTHER FISCAL ITEMS

DALLAS HEALTH SCIENCE CENTER - FUNDING FOR PROJECT 303-172

The total project budget is $1,831,020 for renovation of Phases II, III, IV, and V of the Hoblitzelle Building Air Conditioning System. Required funding for this project is as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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<tr>
<td>Hoblitzelle Project 303-172 - Unallocated</td>
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<td>Transfers from Unallocated Balances:</td>
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<td>Hoblitzelle Building Project 303-228</td>
<td>$41,264.81</td>
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<tr>
<td>Unappropriated Plant Funds</td>
<td>357,392.27</td>
</tr>
<tr>
<td>State General Revenue Appropriation - Major Repairs</td>
<td>898,000.00</td>
</tr>
<tr>
<td>USPHS Grant 1 P06-RR008-31-01</td>
<td>75,000.00</td>
</tr>
</tbody>
</table>

**TOTAL FUNDS AVAILABLE**

$1,831,020.00

It is recommended that approval be given to make the necessary budget adjustments, as indicated above, to fund this project.
Chancellor Charles A. LeMaistre
The University of Texas System
601 Colorado Street
Austin, Texas 78701

Dear Chancellor LeMaistre:

The docket for the June 14, 1974, meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.

Sincerely,

T. G. Blocker, Jr., M.D.
President
APPOINTMENTS, RESIGNATIONS, AND/OR CHANGES OF STAFF
STATUS OF MEMBER-SHIPS ON THE MEDICAL STAFF OF THE UNIVERSITY OF TEXAS MEDICAL BRANCH
HOUSPITALS AT GALVESTON: On the recommendation of the Executive Committee of the Medical Staff, approval of the following recommendations is respectfully requested:

1. Resign Joseph M. White, M.D., Professor of Anesthesiology, from Full Time Attending Membership on the Medical Staff. Dr. White resigned on December 31, 1973, to accept the position of Provost at The University of Missouri Medical Center.

TRAVEL IN EXCESS OF 29 DAYS: In compliance with Section 33:33 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 requests:

1. Mr. Steven Lieber, Technician, Marine Biomedical Institute, for the period March 11, 1974 through May 1, 1974, to San Jose, Costa Rica, to set up a network of seismic stations. His expenses are to be paid from the Marine Biomedical Institute, Division of Earth & Planetary Sciences - Travel Account.

2. Dr. Tosimatu Matumoto, Senior Research Investigator, Marine Biomedical Institute, for the period March 11, 1974 through June 1, 1974, to San Jose, Costa Rica, to set up a network of seismic stations. His expenses are to be paid from the Marine Biomedical Institute, Division of Earth & Planetary Sciences - Travel Account.

3. Dr. Harvey M. Fishman, Associate Professor, Department of Physiology, for the period May 1, 1974 through August 15, 1974, to Woods Hole, Massachusetts, Marine Biological Laboratory, to use the Woods Hole facilities to do part of the research project funded by the National Institutes of Health. The change of the location is necessary because the squid are not presently available from any other source. His expenses are to be paid from the Graduate School - Dean's Office - Travel.

THE TERMS AND CONDITIONS OF THE JAMES W. McLAUGHLIN FELLOWSHIP FUND (REVISED): On approval of the McLaughlin Committee, the Assistant to the Chancellor for Health Affairs, and the Chancellor, approval is respectfully requested for the following changes, additions and/or deletions in the Terms and Conditions of The James W. McLaughlin Fellowship Fund (Pages G-3 through G-15).
1. Name of Fund: The James W. McLaughlin Fellowship Fund

2. Established by: Will of A. C. McLaughlin, deceased, the pertinent provisions of which read as follows:

"I bequeath all other property of which I die possessed to the School of Medicine, University of Texas to establish and maintain fellowships to be known as The James W. McLaughlin Fellowships for the Investigation of Infection and Immunity."

(In all matters concerning The James W. McLaughlin Fellowship Fund, "The School of Medicine, University of Texas" refers to The University of Texas Medical Branch at Galveston.)

Mr. A. C. McLaughlin, a resident of the State of California at the time of his death, was a graduate of the University of Texas, receiving a Bachelor of Science Degree with a major in Geology, Class of 1896. He was an early pioneer geologist, moving to California in 1906, where he became a leader in the petroleum industry. Among his achievements was his contribution to the development of the Rangely Field in the State of Colorado.

3. In honor of: The fellowships are named in honor of his father, Dr. James W. McLaughlin, who was for many years a professor in The University of Texas School of Medicine in Galveston, Texas, and who served also as a Regent of The University of Texas from 1907 to 1909.

4. Date of Will: December 7, 1951.

5. Date of Death: January 6, 1952.


7. Eligibility: Fellowships shall be awarded to graduate students and/or other qualified persons, including members of the faculty of The University of Texas Medical Branch at Galveston, to aid and assist their studies and research.

8. Purposes

A. The Fellowships shall be known as "The James W. McLaughlin Fellowships for the Investigation of Infection and Immunity" and the Fellows under this Fund shall be known as "James W. McLaughlin Fellows."

B. The available income from the Fund shall be used for investigations in the field of infection and immunity.

C. The fellowships shall be for research and shall not require any other services to the University such as routine teaching or clinical duties. The responsibilities of the Fellows shall be fulfilled through one or more departments of The University of Texas Medical Branch.
9. Investment of Fund: The principal of the Fund shall be held in perpetuity and while a separate account shall be main-
tained, the Fund may be grouped with others for the pur-
pose of investment. The Board of Regents shall have full power to retain investments received, to invest and re-
invest the Fund or any part thereof in such securities or property of the kind or character it may deem to be most suitable for such investment, including (but not by way of limitation) bonds, preferred and common stocks, mortgages, and real or personal property. Only the income of the Fund, after reasonable allowance for the depletion of the mineral interests as approved by the Board of Regents, shall be used for Fellowship awards. [The estimated amount of un-
expended income to be available each year on September 1st shall be reported to the McLaughlin Committee by the Endow-
ment Officer during the preceding month of April so that time will be allowed for the selection of the Fellow; funds available to the McLaughlin Committee, but not required for immediate use, may be invested temporarily and for this purpose may be grouped with other funds. Income from such temporary investments shall be available to the Committee. By the 1st of October and the 1st of March of each year, the McLaughlin Committee shall give to the Business-Manager of the Medical Branch an estimate of its anticipated expen-
ditures for the next six months]. Any money that is not encumbered or spent during the fiscal year shall not be returned to the McLaughlin Endowment Fund, but shall be carried over to become available to the McLaughlin Committee in subsequent fiscal years, unless the committee recommends, and the Board of Regents approves, some other procedure.

10. Patents. It shall be the policy of the James W. McLaughlin Fellowship Fund that any patents or negotiable rights derived from research supported by the Fund shall be assigned to the Board of Regents, The University of Texas System, for the use and benefit of the Endowment Fund. Any royalties or other compensations from these patents or rights shall be divided between the Endowment Fund and the Fellow on the basis of three-fourths to the Endowment Fund and one-fourth to the Fellow. Co-inventorship may be a reason for further division of the share of the Fellow but will not alter the share accruing to the Endowment Fund.

11. The McLaughlin Committee. This committee shall be estab-
lished to review applications, recommend fellowship awards, recommend other proper uses of the McLaughlin Fund income and to do whatever else is necessary to ensure proper use of the Fund income for the advancement of science in the field of infection and immunity. All actions of the commit-
tee involving the awarding of fellowships or the appropriation of money from the unallocated income shall be [submitted to the Executive-Director] recommended by the Dean of the Graduate School of Biomedical Sciences or the Dean of the School of Medicine and approved by the President of the Medical Branch [to be forwarded to the President of the University for presenta-
tion to the Board of Regents]. For purposes of information, the [Executive-Director and the Chairman of the Research Commit-
tee of the Medical Branch] Means of the Graduate School of Bio-
medical Sciences and the School of Medicine and the Office of Sponsored Research shall receive copies of all minutes of regular and special McLaughlin Committee meetings. The McLaughlin Committee shall be composed of seven members from the faculty of the Medical Branch with rank of
[Associate] Assistant Professor or higher and shall be appointed by the [Executive-Director] President of the Medical Branch who will designate a member of the committee to serve as chairman. Appointments will be made for a period of two years, four members to be appointed in the even years and three to be appointed in odd years. Vacancies shall be filled by appointment for the unexpired terms. The term of the committee member as chairman shall be at the pleasure of the [Executive-Director] President of the Medical Branch. No McLaughlin Committee member shall serve more than two terms consecutively.

12. Supplementary Funds. Fellowship funds shall not be used as a supplement to or substitute for staff salaries. The financial support for each approved fellowship project shall be recommended by the McLaughlin Committee. The total expenditure for other than fellowships [stipends] normally shall not exceed one-third of the annual available income of the Fund as a whole; however, with the approval of two-thirds of the committee, non-renewable grants may be recommended for special projects provided that the committee specifically finds that the granting of the money is desirable for the future welfare of the McLaughlin Fund program and that the expenditure does not assume the responsibilities of the University for the provision of services or instructional facilities.

13. Permanent Equipment. All items of permanent equipment purchased by McLaughlin Fund money for the support of any specific Fellow shall remain under the control of the McLaughlin program during the tenure of the Fellow. At the conclusion of this period, the equipment shall be under the control of the Medical Branch department in which the Fellow's sponsor has his appointment. In cases where there has been joint sponsorship, the McLaughlin Committee will designate the control of any equipment. All items purchased in relation to special projects shall be under the control of various departments of the Medical Branch as designated by the McLaughlin Committee. However, the McLaughlin Committee may retain control of any items purchased with McLaughlin Fund money that it may decide are essential for its own operations. Any property under the control of the McLaughlin Committee at the time of the adoption of these Terms and Conditions shall be retained by the Committee or transferred to the various departments of the Medical Branch at the discretion of the Committee.

14. Selection of Fellows.

A. Application for a fellowship shall be completed at least three months prior to the anticipated appointment.

B. Applications for these fellowships may be invited through announcements in leading medical and scientific journal or by other means.

15. Stipend. The term "stipend" as used in these Terms and Conditions refers to a sum of money paid to a Fellow for the defrayment of his personal expenses and does not refer to money used to payment of any expenses incurred as a result of the study and investigation that the Fellow is
pursuing. These stipends are granted subject to the income tax regulations that are applicable.

16. Description of Fellowships. The major responsibility of the McLaughlin Fellowship Fund is to contribute to the sum total of scientific knowledge and to the scientific manpower pool in the field of infection and immunity through the training and encouragement of scientists. Other responsibilities are to promote the academic stature of the Medical Branch through its activities in supporting worthwhile Fellows who will be credits to the University and to assist in the creation of a favorable atmosphere at the Medical Branch for scientific endeavor. In accord with these stated objectives, the types of fellowships that may be granted are listed below:

A. DISTINGUISHED FELLOWSHIPS. These are to be offered to outstanding scientifically mature individuals who would be invited to come to the University of Texas Medical Branch. One of the purposes of this class of fellowship is to provide opportunities for scientific stimulation and consultation in this particular field for the Medical Branch. The tenure for a Distinguished Fellow should normally not exceed one year, although under special circumstances renewal of the Fellowship may be granted for a total period of up to three years. A Distinguished Fellow shall have a sponsor within the department or laboratory in which he would be carrying on his research. In addition, however, the Chairman of the McLaughlin Committee shall appoint a member of the committee as a co-sponsor. This co-sponsor shall have the specific responsibility for promoting scientific interchange between the Distinguished Fellow, and the faculty and students of the University.

The stipend for a Distinguished Fellow shall be set by the McLaughlin Committee and shall not exceed the maximum salary paid professors of comparable status at the Medical Branch.

There shall be a reasonable allowance at the discretion of the McLaughlin Committee to cover travel expenses, to include but not be limited to, travel to scientific meetings. It may also include allowance for travel to cover the following:

Travel to and from Galveston from point of origin either within or outside of the United States.

Travel from and return to Galveston when the contemplated research or part of it should be done away from Galveston.

The rules covering travel by McLaughlin Fellows shall be those covering travel on trust funds set forth in the travel policies in effect at the University of Texas Medical Branch.

Ordinarily, the McLaughlin Committee will endeavor to supply funds for equipment and supplies sufficient to permit the Fellow to carry out his research in a satisfactory manner. The acceptance
of the fellowship signifies the Distinguished Fellow's agreement that the funds are adequate for the program that has been proposed. Requests for major permanent equipment shall be acted upon by the McLaughlin Committee. Distinguished Fellowships normally shall include the privilege of obtaining skilled technical assistance at the salary level commensurate with the qualifications of the assistant but not exceeding the salary paid to instructors in the pre-clinical departments. In the event that the Distinguished Fellow may wish to obtain the services of one of his associates within the salary range above indicated, travel expenses within the North American continent for this person may be approved by the McLaughlin Committee.

B. FACULTY FELLOWSHIPS. Faculty Fellowships shall be available to members of the faculty of the University of Texas Medical Branch who have any professorial rank and who have been faculty members for at least three years. These fellowships should provide opportunity for faculty members to travel to other institutions within this country, or outside of it, in order to carry on research in the field of infection and immunity that could not be accomplished at the Medical Branch. Faculty Fellowships should not exceed one year and are not renewable; it is anticipated that most of them would be for shorter periods of time.

The stipend for a faculty fellow shall be equivalent to the salary being paid to said fellow by the University. The awarding of faculty fellowships depends upon the approval of the McLaughlin Committee, the recommendation of the Dean of the School of Medicine, and the approval of the [Executive-Director] President of the Medical Branch. Approval of the application for a faculty fellowship by the McLaughlin Committee shall precede any consideration by the [Executive Director] Dean of the School of Medicine and the President of the Medical Branch.

Any applicant for a Faculty Fellowship should present evidence that his proposed project could not be carried out with the facilities available locally. There shall be a reasonable allowance at the discretion of the McLaughlin Committee to cover [first class] travel to and from the area where the Fellow would be carrying out his research. In addition, there shall be an allowance for lodging and tuition or other expenses necessary to the project. The rules covering travel by McLaughlin Fellows shall be those covering travel on trust funds set forth in the travel policies in effect at The University of Texas Medical Branch. "Travel" shall be interpreted as travel from Galveston to the new headquarters of the Fellow and return to Galveston. Once having arrived at his new headquarters, pertinent expenses of a Fellow shall be chargeable against the allowance for lodging. It is the intent of these Faculty Fellowships to remove the added
burden of necessary expense resulting from the fact that the Faculty Fellow is working away from his Galveston headquarters. The committee shall be guided by this principle in establishing or modifying allowances for lodging.

C. POSTDOCTORAL FELLOWSHIPS. Applications for Postdoctoral Fellowships in the field of infection and immunity shall be considered from individuals holding doctoral degrees and having had training and experience in subjects bearing a satisfactory relationship to the fields in which they propose to do their research. These applicants should have qualities that portend investigative ability. [See Section 17]

The duration of a Postdoctoral Fellowship shall be one year, with annual renewal at the discretion of the McLaughlin Committee, for a total of not more than three years. The stipend shall be in line with salaries at the academic level for which the applicant is qualified. Yearly increases may be awarded at the discretion of the McLaughlin Committee. Ordinarily, the McLaughlin Committee will endeavor to supply funds for equipment and supplies sufficient to permit the Fellow to carry out his research in a satisfactory manner. Requests for major items of permanent equipment shall be considered separately by the McLaughlin Committee. There shall be a reasonable allowance, at the discretion of the McLaughlin Committee to cover travel expenses, this to include, but not be limited to, travel to scientific meetings and in special cases may include travel allowances to cover the following:

Travel to and from Galveston from point of origin either within or outside the United States.

Travel from and return to Galveston when the contemplated research, or part of it, should be done away from Galveston.

The rules covering travel by McLaughlin Fellows shall be those covering travel on trust funds set forth in the travel policies in effect at the University of Texas Medical Branch.

D. PREDOCTORAL FELLOWSHIPS. Applications for Predoctoral Fellowships shall be considered from exceptionally well qualified students who meet the requirements for admission to the Graduate School of the University of Texas Medical Branch at Galveston.

The duration of a Predoctoral Fellowship shall be one year. Application for renewal will be considered annually for no more than two additional years. The Committee may extend support for a further additional year in special cases. The stipend for Predoctoral Fellowships shall be
recommended by the McLaughlin Committee annually prior to the announcing of available Fellowships for the succeeding academic year. Allowance for additional support for dependents will likewise be recommended at that time. Ordinarily, the McLaughlin Committee will endeavor to supply funds for equipment and supplies sufficient to permit the Fellow to carry out his research in a satisfactory manner. Requests for major items of permanent equipment shall be acted upon separately. There [shall] may be a reasonable allowance at the discretion of the McLaughlin Committee to cover travel expenses, this to include, but not be limited to, travel to scientific meetings and in special cases may include travel allowances to cover travel from and return to Galveston when the contemplated research or part of it should be done away from Galveston. The rules covering travel by McLaughlin Fellows shall be those covering travel on trust funds set forth in the travel policies in effect at The University of Texas Medical Branch.

E. MEDICAL STUDENT FELLOWSHIPS. [These Fellowships are to be awarded by the McLaughlin Committee after A) personal interview with the candidate; B) investigation of the candidate's qualifications; and C) evaluation of the proposed program; At the time of the personal interview the written comments of the applicant's sponsor should be available; giving his opinion of the applicant and the proposed program; as well as certifying the availability of space, equipment, material and consultative advice; The attendance of the sponsor at the McLaughlin Committee meeting during the consideration of an applicant should be invited.]

[Medical Student Fellowships will be awarded for a period of three months in residence full time. This program may be extended during the following school year if the student is judged to be performing satisfactorily; or may be renewed for a succeeding three months in residence full time; during the succeeding summer.---The stipend for a Medical Student Fellowship shall be recommended by the McLaughlin Committee annually prior to the announcement of available Fellowships for the succeeding summer.---In addition, supplementary funds to purchase equipment and supplies shall be appropriated in an amount not exceeding $199.99; When Medical Student Fellowships are extended during the succeeding school year the stipend will be placed on an hourly basis at a rate to be recommended annually by the McLaughlin Committee; investigation and research during this period shall not exceed fifty hours per month.] Applications for Medical Student Fellowships shall be considered from medical students in the School of Medicine at Galveston. The conditions of these fellowships, including time schedule, stipend and allowances for supplies, shall be set by the McLaughlin Committee in accordance with current medical branch policies on medical student fellowships.
As an alternative to the above procedure for the selection of McLaughlin Student Fellows and the administration of the McLaughlin Student Fellowships, the McLaughlin Committee may delegate certain of its authority and duties in this area to the Faculty Committee on Student Fellowships. If this is done, [the McLaughlin Committee may appropriate an amount of money each year from the McLaughlin Fund income to be transferred to the Faculty Committee on Student Fellowships. This money shall be used for Medical Student Fellowships and supplementary funds for these fellowships. The amounts allocated for stipends and supplementary funds shall be at the discretion of the Faculty Committee on Student Fellowships, which may receive applications, recommend the Fellowship awards and administer the Fellowships. These fellowships, however, shall be awarded for research in the field of infection and immunity. The Faculty Committee on Student Fellowships shall report to the McLaughlin Committee yearly concerning its disposition of the McLaughlin Fund income made available to it. The responsibilities of the medical student fellow and his sponsor shall be the same whether the fellowship is awarded recommended by the McLaughlin Committee or the Faculty Committee on Student Fellowships. Recommendations of the Faculty Committee on student fellowships in regard to these fellowships shall be submitted through the McLaughlin Committee to the Executive Director, President and the Board of Regents for recommendation by the Dean of the School of Medicine and approval of the President of the Medical Branch.

[In addition to the amount granted for stipend and supplies, the Chairman of the McLaughlin Committee shall have available a fund of $1,000 per year which he may draw against in single amounts not to exceed $100 for additional equipment and supplies to meet specific requests by the Medical Student Fellows, with the approval of their sponsors.] The student must submit an acceptable report of work accomplished at the completion of the program prior to receiving his final stipend, and this report should be accompanied by a critical evaluation of the work by the sponsor. If a fellowship is approved for renewal during the following summer, the McLaughlin Committee shall specify any additional funds for the purchase of further equipment and supplies. [This amount shall normally not exceed $1,000.]

[As a means of fostering the concept of quality in research and as a means of recognizing the accomplishment of research of high quality, the McLaughlin Committee may provide an award to be given to no more than one McLaughlin Student Fellow each year in recognition of outstanding research activity.]

G-10
When such an award is given, it will be associated with a formal public presentation of the results of this research by the awardwinner; in the event that outstanding research programs have been carried out by other students, the committee may invite the public presentation of this research as well. This award is to be known as the James W. McLaughlin Student Research Award (The James W. McLaughlin Summer Fellowship Award). Publication costs which may result from this program shall be assumed by the McLaughlin Fund."

F. AWARDS FOR STUDENT RESEARCH. An awards program for student research in infection and immunity has been established as a means of fostering and recognizing the accomplishment of research of high quality.

The title of these awards will be "James W. McLaughlin Award for Research in Infection and Immunity."

Students presenting research papers at the annual Student Research Forum at The University of Texas Medical Branch at Galveston shall be the recipients of these awards. The McLaughlin Committee may delegate the responsibility of selecting recipients of these awards to the directors of this forum. The sum of $300 shall be established as an awards fund to be used upon authorization of the McLaughlin Committee with the approval of the President of the Medical Branch. This fund shall be replenished to its original level of $300 at the beginning of each fiscal year.

17. Classification of Applicants for McLaughlin Fellowships. Postdoctoral McLaughlin Fellowships shall be awarded only to individuals who, in the opinion of the McLaughlin Committee, have competence in their proposed field of research equivalent to that derived from a doctorate degree in this field of science. Individuals with doctoral degrees not meeting this qualification may be considered for Predoctoral Fellowships.

18. Method of Application for McLaughlin Fellowships. Applications for McLaughlin Fellowships shall be made on forms designed for this purpose and shall be sent to the Chairman of the McLaughlin Committee. After preliminary review to determine that the application is filled out satisfactorily, it shall be transmitted to the Chairman of the Department in which the applicant proposes to carry out his research, together with a form to be filled out by the Chairman [approving the sponsorship arrangements indicated in the application and certifying that space and facilities are available within the department] certifying that space, facilities, and sponsorship are available within the department. If the applicant is proposing a research program in an organized research laboratory not an integral part of one of the teaching departments at the medical branch, this certification should come from the director of the laboratory. When the application and certification are returned to the McLaughlin
Committee, the application shall be placed on the agenda for the next regular meeting of the Committee. [The sponsor shall be notified of this fact and invited to attend this portion of the McLaughlin Committee meeting.] Motions relating to the award of a fellowship shall be voted on in executive session. All applications should be received at least three months prior to the date on which the fellowship would commence.

Fellowships shall be recommended on the basis of duly passed motions at either regular or special meetings of the McLaughlin Committee. The McLaughlin Committee shall meet once each calendar month or more often at the call of the chairman. A majority of the total membership shall constitute a quorum and actions of the Committee shall be on the basis of the majority of members attending a meeting. The chairman of the McLaughlin Committee shall notify each applicant of the final action taken in regard to his application. If this final action is the granting of a fellowship, the chairman of the McLaughlin Committee shall request the applicant to state his acceptance of the fellowship. Copies of all such correspondence will be sent to the applicant's sponsor or the department chairman or laboratory director of the department or laboratory in which the fellow will be working.

19. Requests for Additional Supplementary Funds. The original allocation represents the sole monetary commitment of the McLaughlin Committee. Any additional requests for supplementary funds shall be considered only if the committee agrees that unusual circumstances beyond the control of the fellow have made supplementary support necessary.

20. Method of Application for Renewal of McLaughlin Fellowships. The initial granting of a fellowship does not represent a commitment concerning its renewal by the McLaughlin Committee. However, when the progress of a McLaughlin Fellow appears to be satisfactory, renewal of fellowship may be made up to the limits described under each class of fellowship. Any holder of a McLaughlin Fellowship desiring to renew this fellowship should make application for renewal, by letter, to the McLaughlin Committee at least four months prior to the expiration of his fellowship. Letter of application should be accompanied by a precise report of progress [and] a description of the fellow's proposal for research to be carried out during the period of the requested renewal [and a letter from the fellow's sponsor recommending fellowship renewal. [In addition, the applicant should provide the committee with a letter from the chairman of the department; or laboratory; director; with which he is associated; certifying that space and facilities would be available within the department or laboratory and approving the sponsorship arrangements indicated in the application.]] Upon receipt of letter of application for renewal of a fellowship, [and the recertifying letter from the department chairman or laboratory director,] the chairman of the McLaughlin Committee [shall] may appoint an ad hoc sub-committee from the McLaughlin Committee membership to review the
applicant's report and any other pertinent information and to make recommendations to the full Committee concerning the renewal of the fellowship.

21. Reports by McLaughlin Fellows.
   
   A. Each Predoctoral and Postdoctoral Fellow should present a precise written report of progress to the McLaughlin Committee at six-month intervals. However, if an application for a renewal of the fellowship is anticipated, the six-month progress report may be omitted in favor of a report submitted at the time of application for renewal. Under no circumstances shall reports be made less frequently than once every twelve months and a final report should be in the hands of the McLaughlin Committee within one month after the termination of a fellowship tenure. All interim reports shall be considered as status reports and may be correspondingly brief. However, final reports should be considered as the summation of all the significant research carried out by the Fellow and should, therefore, be complete in themselves.

   Distinguished Fellows shall not be required to make written reports to the McLaughlin Committee on the general activities of the Distinguished Fellow and give an appraisal of his contribution to the academic and scientific welfare of the Medical Branch.

   Faculty Fellows shall present a precise written report of their activities during the period of their McLaughlin Faculty Fellowship within three months of the completion of their Fellowship.

   B. Publications resulting from these Fellowships should carry an acknowledgment as follows: "Supported by James W. McLaughlin Fellowship Fund" and two reprints of each publication should be submitted to the McLaughlin Committee.

   C. At its discretion the McLaughlin Committee may recommend a contribution toward the publication expenses of a McLaughlin Fellow. This money will be appropriated from the McLaughlin unallocated income and will be given only for publication of manuscripts which have been accepted by standard journals or approved publishers. The McLaughlin Committee will exercise no jurisdiction or authority over reports of McLaughlin Fellows, since these are to be considered as independent efforts of each Fellow. It will not be the function of the McLaughlin Committee to suggest any policies concerning publication of the results of research by the McLaughlin Fellow, since the Committee assumes no responsibility for the content of such publication. The Committee will act only when funds are requested by the McLaughlin Fellow.

22. Reports by the McLaughlin Committee.
A. The McLaughlin Committee shall prepare an annual summary of its activities to-the-Executive-Director-of-the-Medical-Branch; the-President; and the following members of Central-Administration:--Vice-President-for Fiscal-Affairs;--Vice-President-for-Medical Affairs;--Comptroller;--and-Endowment-Officer]. After approval by the President of the Medical Branch, this summary shall be presented to the faculty at a regular meeting.

B. The McLaughlin Committee shall prepare an annual summary of its activities. After approval by the Executive-Director-of-the-Medical-Branch, this summary shall be presented to the faculty at a regular meeting. An annual financial report on the McLaughlin Fund shall be prepared at the Medical Branch for appropriate distribution within The University of Texas Medical Branch as directed by the President of the Medical Branch.

23. Consultation and Contingency Fund. The sum of $4,000 shall be established as a Consultation and Contingency Fund to be used upon the authorization of the McLaughlin Committee with the approval of the Executive Director; President of the Medical Branch or a representative designated by him. This fund shall be replenished to its original level of $4,000 at the beginning of each fiscal year. It will be used to secure consultation with workers in the field of infection and immunity, to hold symposia, to promote the welfare of the McLaughlin Fund Program in any approved way and to be available for emergency use by the McLaughlin Committee for contingencies. In addition, the sum of $1,000 annually will be assigned to the McLaughlin Committee Chairman's Fund to be allocated by the chairman at his discretion to meet urgent needs of the McLaughlin Fund program or McLaughlin Fellows. Any expenditures from this fund shall be reported to the McLaughlin Committee at its next meeting.

24. Faculty Fund for Preliminary Research. A fund of $5,000 shall be withdrawn from the unallocated income of the McLaughlin fund and established as a Faculty Fund for Preliminary Research in the field of infection and immunity. The purpose of this fund shall be to grant to faculty members of any rank at the Medical Branch limited funds with which to carry on exploratory research that would be anticipated to lead to application for more extensive support from other sources. This fund shall be replenished to its original level of $5,000 at the beginning of each fiscal year. Applications from faculty members for support from this fund shall be made by letter in which the need for support is stated and the proposed program is described. Such letters should be transmitted to the McLaughlin Committee by and with the approval of the department chairman or laboratory director in whose area the research will be done. The McLaughlin Committee may recommend grants from this fund with the approval of the Executive-Director; President of the Medical Branch, in amounts not to exceed $1,000 to any individual applicant. These grants shall not be renewable.
25. McLaughlin Fund Administration. The McLaughlin Committee shall have the right to employ secretarial or other clerical assistance and to purchase any supplies, equipment or services necessary for the conduct of McLaughlin Committee business. At the beginning of each fiscal year the McLaughlin Committee shall recommend the appropriation of the necessary funds from the McLaughlin Fund unallocated income to a Salary Account and Maintenance & Equipment Account for these purposes.

26. Committee-Fellow Relations. The McLaughlin Committee shall concern itself with the adequacy of space, facilities, services and opportunity for guidance and consultation provided for the McLaughlin Fellows by the various departments and laboratories. The committee may request the presence of any Department Chairman, Laboratory Director or sponsor at its meetings for the purpose of discussing problems in these areas. McLaughlin Fellows of Postdoctoral or Distinguished rank should have, insofar as possible, the same privileges and prerogatives that are enjoyed by University employees of comparable academic stature.

All Fellows and/or sponsors are urged to request a conference with the McLaughlin Committee at any time when special problems arise. Such conferences shall be sought when a Fellow proposes a major alteration from the program that was outlined in his original proposal.

27. Distribution of McLaughlin Funds over Various Types of Fellowships.
At least once each year the McLaughlin Committee shall formally consider and enter into its minutes its decision in regard to the distribution of funds over the various classes of fellowships mentioned in these Terms and Conditions. The McLaughlin Committee has the responsibility for interpreting the objectives of the McLaughlin Fellowship Fund as stated herein in the light of conditions as they exist at the time of consideration. [The approximate allocation of funds to various classes of fellowships expressed in terms of percentage of available money and actual amounts determined for each year will be forwarded to the Executive Director for his comment and counsel. This approximate allocation for the coming year will be included in the annual report of the committee in its summary to the faculty.]

28. Approval and Alteration of Terms and Conditions. The Terms and Conditions herein described shall become effective upon approval by the Board of Regents. Changes in these Terms and Conditions may be made by approval of two-thirds of the entire membership of the McLaughlin Committee, subject to the approval of the [Executive Director of the Medical Branch; the] President of the Medical Branch, the Chancellor, and the Board of Regents of The University of Texas System.

All Terms and Conditions previously approved by the Board of Regents in regard to the administration of the James W. McLaughlin Fellowship Fund program shall be repealed and rescinded when these recommendations are approved by the Board of Regents.
GIFTS: In compliance with Section 1, Subsection 1.3 of Chapter I of Part Two of the Rules and Regulations of The Board of Regents for the Government of The University of Texas System, I recommend approval for the acceptance of the following gifts:

<table>
<thead>
<tr>
<th>Donor and Address</th>
<th>Purpose and Conditions</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Raymond F. and Isabel H. Blount 3111 Avenue R Galveston, Texas 77550</td>
<td>Gift of a collection of periodical volumes and issues, valued at $14,985.00, to be placed in the Moody Medical Library.</td>
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</tr>
<tr>
<td>George W. Brackenridge Foundation c/o Mr. Leroy G. Denham Suite 535 Travis Park West 711 Navarro Street San Antonio, Texas 78205</td>
<td>Funds to be used as a permanent scholarship endowment in memory of Isabella H. Brackenridge. The funds have been forwarded to the Office of Investments, Trusts and Lands for investment with the income derived therefrom to be returned to the Galveston Medical Branch for support of the Isabella H. Brackenridge Scholarship Fund.</td>
<td>$10,000.00</td>
</tr>
<tr>
<td>Mrs. Edward Randall, Jr. 3502 Avenue P Galveston, Texas 77550</td>
<td>For the establishment of the Dr. Edward Randall, Jr., Award for Academic Excellence and Patient Care. The awards, consisting of medallions to eight students and cash prizes to five of the eight students selected by the faculty, are to be given annually to the students in the Junior and Senior Classes. $5,000.00 of the $30,000.00 commitment is to be retained at the Galveston Medical Branch and $25,000.00 forwarded to the Office of Investments, Trusts and Lands for investment with the income derived therefrom to be returned to the Galveston Medical Branch and used for the purpose stated above.</td>
<td>$30,000.00</td>
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GRANTS, CONTRACTS AND AGREEMENTS (NON-GOVERNMENTAL)

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

Research Grant - Study of Industrial Heat Stress in Gulf Coast Area May 1, 1973 through August 31, 1974 Dr. Don W. Micks and Dr. Norman Trieff Letter dated February 1, 1974 from Dow Chemical extends the grant period for four additional months without additional funds.
2. Dow Chemical U.S.A.
Texas Division
Freeport, Texas 77541

Research Grant - Study of the Effect of Organic Compounds Used in the Manufacture of Plastics on Immunological Responses In Vitro
$73,125
April 15, 1974 through April 14, 1975
Dr. Allan L. Goldstein
This is a new grant award.

3. Schering Corporation
Bloomfield, New Jersey 07003

Research Grant - Studies of IV Diazoxide in Childhood Hypertension
$19,568
March 1, 1974 until completion of project
Dr. Luther B. Travis

4. Warner-Lambert Research Institute
Medical Research Division
Morris Plains, New Jersey 07950

Research Project - Research with Petrin in Myocardial Infarction
$2,500
Dr. Ralph J. Gorten
This award is to support the continuation of an on-going project.

5. The Robert A. Welch Foundation
2010 Bank of the Southwest Building
Houston, Texas 77002

Grant No. H-168 (Renewal)
$20,000
May 1, 1974 through April 30, 1975
Research Project - Oxidations of Steroids
Dr. Leland L. Smith

6. The Robert A. Welch Foundation
2010 Bank of the Southwest Building
Houston, Texas 77002

Grant No. H-520 (Renewal)
$20,000
May 1, 1974 through April 30, 1975
Research Project - Study of the Marine Geochemistry of 90Sr, 137Cs and 226Ra
Dr. A. D. Suttle, Jr.

7. The Robert A. Welch Foundation
2010 Bank of the Southwest Building
Houston, Texas 77002

Grant No. H-504 (Renewal)
$24,000
May 1, 1974 through April 30, 1976
Research Project - Characterization of a New L-Glutamic Acid Decarboxylase - A Novel System of Enzymatic Catalysis
Dr. Bernard Haber
1. Department of Health, Education, and Welfare  
National Institutes of Health  
Bureau of Health Resources Development  
Grant No. 061450043 74 BHL10 (Formerly 1 7 53 9013 09 1)  
$28,381  
July 1, 1973 through June 30, 1975  
Health Professions Student Assistant Programs  
Mr. Gene Powell, Coordinator  
This award covers additional funds for the Student Scholarship program.  
Galveston County

2. Department of Health, Education, and Welfare  
Health Resources Administration  
Bureau of Health Resources Development  
Modification No. 2 to Contract No. MO1-MB-24391  
September 30, 1972 through September 30, 1977  
Area Health Education Center. This contract establishes cooperative educational programs in the health sciences with several colleges and health facilities in Central and South Texas.  
Dr. Edward N. Brandt, Jr.  
The purpose of this modification is to allot additional funds to the contract under the "Limitation of Funds" Article, to make certain adjustments to the Scope of Work and to modify Advance Understandings. There is no change in the amount of contract award or performance period.  

3. Department of Health, Education, and Welfare  
National Institutes of Health  
National Heart and Lung Institute  
Research Grant No. 1 RO1 HL 16443 01  
$26,895 plus indirect costs  
April 1, 1974 through March 31, 1975  
Plasma Inhibitor of Profibrinolysin Activation. This project will attempt to determine the active sites on the Antifibrinolytic Molecule that are blocked by effective compounds.  
Dr. Luddo B. Nanninga  
This is the first year of a new three year grant award.  
Galveston County
   National Institutes of Health
   National Heart and Lung Institute
   Research Grant No. 2 RO1 HL 13639 04
   $77,659 plus indirect costs
   April 1, 1974 through March 31, 1976
   Factors Altering the Course of Myocardial Dysfunction. This project is designed to study the effect of corrective intervention, exercise and the use of drugs on myocardial function and recovery.
   Dr. John F. Williams, Jr.
   This is a renewal for an on-going project for an additional three years. The first budget period is for two years.
   Galveston County

5. Department of Health, Education, and Welfare
   National Institutes of Health
   National Heart and Lung Institute
   Research Grant No. 1 RO1 HL 16449 01
   $40,371 plus appropriate indirect costs
   May 1, 1974 through April 30, 1975
   Microcirculation, Hemofluidity and Hemostasis. The objectives of this study are improvement in techniques for the direct study of dynamic aspects of the microcirculation and the development of cineholography.
   Dr. M. M. Guest
   This is the first year of a new three year grant.
   Galveston County

   National Institutes of Health
   National Heart and Lung Institute
   Training Grant No. 3 T01 HL 05940-03S1
   $4,653
   April 1, 1974 through June 30, 1975
   Training Grant in Clinical Cardiology
   Dr. John F. Williams
   This award provides supplemental funds for the period April 1, 1974 through June 30, 1975.
   Galveston County

   National Institutes of Health
   National Institute of Allergy and Infectious Diseases
   Research Grant No. 5 R22 AI 08518 06
   $32,511 plus appropriate indirect costs
   April 1, 1974 through March 31, 1975
   Antibacterial Immunity Against Vibrio Cholerae. The objectives of this study are to improve antibacterial immunity within the intestinal tract.
   Dr. W. F. Verwey
   This is the sixth year of a continuing grant.
   Galveston County
National Institutes of Health  
National Institutes of Neurological Diseases and Stroke  
Training Grant No. 3 T01 NS 05743-02S1  
$12,036  
July 1, 1973 through June 30, 1974  
Comparative Neurobiology  
Dr. William D. Willis, Jr.  
This award provides supplemental funds for the period  
July 1, 1973 through June 30, 1974.  
Galveston County

National Institutes of Health  
National Institute of Neurological Diseases and Stroke  
Training Grant No. 3 T01 NS 05755-07S1  
$37,433  
July 1, 1973 through June 30, 1974  
Neurology Training Grant  
Dr. John R. Calverley  
This award provides supplemental funds for the period  
July 1, 1973 through June 30, 1974.  
Galveston County

National Institutes of Health  
National Institute of Neurological Diseases and Stroke  
Research Grant No. 3 PO1 NS 07377-05S1  
January 1, 1974 through June 30, 1974  
Clinical Head Injury Research  
Dr. Robert G. Grossman (Formerly Dr. James C. Thompson)  
This award extends the grant period for six additional months  
with no additional funds.  
Galveston County

11. National Aeronautics and Space Administration  
Research Grant No. NGR 44-088-008  
$9,160  
February 1, 1974 through January 31, 1975  
Stratigraphy and Sedimentation of Lunar Core Samples. This project will attempt to interpret the stratigraphic records preserved in the lunar soil at each of the Apollo sites in terms of both local and more distant events.  
Dr. John F. Lindsay  
This is a new grant award.  
Galveston County

12. National Endowment for the Humanities  
Grant No. FP-20820-74-338  
$30,902  
March 1, 1974 through October 31, 1974  
This grant will support a summer seminar entitled The Patient as Person - Ethical and Philosophical Issues.  
Dr. H. Tristram Engelhardt, Jr.  
This is a new grant award.  
Galveston County
13. National Science Foundation

Amendment No. 1 to Grant No. GD-40764
$46,100
October 15, 1973 through March 31, 1975
Ship Support for Seismic Investigations of the Western Gulf of Mexico
Dr. J. Lamar Worzel (Formerly Dr. W. M. Ewing)
This amendment provides $46,100 supplemental funds, making the total award $57,200.
Galveston County

14. National Science Foundation

Research Project No. GX-42351
$339,900
March 15, 1974 through August 31, 1975
Multichannel Seismic Reflection Investigation of the Sea Floor
Mineral Resources of the Western Gulf of Mexico
Dr. W. M. Ewing
This is a new grant award.
Galveston County

15. National Science Foundation

Amendment No. 1 to Research Grant No. GB-31240
October 1, 1971 through September 30, 1974
A Mechanism of Chemotaxis. The primary objective in this study is to expand the histologic observations already made of the tissue reaction to polyurethane in the mouse and rat and to determine whether or not the reaction in rabbits, guinea pigs, hamsters, dogs, and even the monkey is the same as that which has been observed in the mouse or the rat.
Dr. R. H. Rigdon
The amendment extends the grant period for six months without additional funds.
Galveston County

National Institutes of Health
National Institute of Arthritis, Metabolism and Digestive Diseases

Research Grant No. 5 RO1 AM 15811-03 (Revised)
$18,122 plus indirect costs
January 1, 1974 through December 31, 1974
Thyroglobulin Proteolysis and Thyroid Hormone Release. The purpose of the project is to study the enzymic activity of certain hormone components.
Dr. Robert L. Peake
This is a revised award issued to reflect partial restoration of previous reduction to the committed level for this budget period.
Galveston County
17. National Aeronautics and Space Administration

Modification No. 8 to Research Contract No. NAS 9-13143
August 7, 1972 through October 31, 1974
Passive Lunar Seismic Experiment. This contract provides technical support to NASA in evaluating seismic data on moonquakes.
Dr. Gary V. Latham
This modification amends Article XVIII to increase funds allotted and amends other technical portions of the contract. There is no change in the contract award or performance period.
Galveston County

18. The United States Government

Research Contract No. XG-3880 (62-8026) 74R
$318,828
March 1, 1974 through February 28, 1975
Interview Sensitization Techniques: Assessing Behavioral Predispositions from Video-taped Interviews. This study is 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 a continuing project.
Galveston County
CLINICAL FACULTY APPOINTMENTS -- SEPTEMBER 1, 1974 THROUGH AUGUST 31, 1975

ANATOMY

None

ANESTHESIOLOGY

Clinical Associate Professor--without salary, without tenure
1. Beck, George P.

Clinical Assistant Professor--without salary, without tenure
1. Waldron, Richard L.

Clinical Instructor--without salary, without tenure
1. Allen, Richard F.
2. Ashy, Thomas M.
3. Danner, Charles A.
4. Flewellen III, Eugene H.

DERMATOLOGY

Clinical Assistant Professor--without salary, without tenure
1. Watts, Fenwick L.

FAMILY MEDICINE

Clinical Associate Professor--without salary, without tenure
1. Davis, Harry K.
   (Psychiatry)

Adjunct Associate Professor--without salary, without tenure
1. Kemmerer Jr., Walter W.
   (Preventive Medicine & Community Health)

Clinical Assistant Professor--without salary, without tenure
1. Robinson, Sally S.
   (Pediatrics)

Adjunct Assistant Professor--without salary, without tenure
1. Jernigan, Clarence A.
   (Preventive Medicine & Community Health)
2. Sullivan, Robert E.

Adjunct Instructor--without salary, without tenure
1. Meier, Mark J.

HUMAN BIOLOGICAL CHEMISTRY AND GENETICS

Adjunct Professor--without salary, without tenure
1. Shetlar, Marvin R.

Adjunct Associate Professor--without salary, without tenure
1. Harrison, Gunyon M.
Human Biological Chemistry and Genetics--Cont.'

Adjunct Assistant Professor—without salary, without tenure

1. Doggett, Robert G.

INTERNAL MEDICINE

Clinical Associate Professor—without salary, without tenure

1. Levine, Harry
2. Perry, John E.
   (Preventive Medicine & Community Health)
3. Schwab, Edward H.

Clinical Assistant Professor—without salary, without tenure

1. Bromberg, Leon
2. Castiglioni, Leo J.
3. Decherd, Jonathan F.
4. Fradkin, Aaron
5. Moncrief, Jack W.

Clinical Instructor—without salary, without tenure

1. Allen, Thomas S.
   (Radiology)
2. Canales, Carlos O.
3. Emmite, Joseph P.
4. Essex, Francis X.
5. George, William K.
6. Kelso Jr., Harry B.
7. Leder, Archie A.
8. Leon-Sotomayor, Luis
9. Louis, Edward E.
10. Marr III, William L.
11. Pollock, Morris A.
12. Rappaport, Martin P.
13. Stiles, Charles M.
14. Vogelpohl Jr., Elmer B.

NEUROLOGY

None

OBSTETRICS AND GYNECOLOGY

Clinical Professor—without salary, without tenure

1. Rutledge, Felix N.

Clinical Associate Professor—without salary, without tenure

1. Bridgforth, Edwin B.
2. Jinkins Sr., Julius L.
3. Lucci, Joseph A.

Clinical Assistant Professor—without salary, without tenure

1. Brumley, Harold W.
2. Falk, Stephen
OBSTETRICS AND GYNECOLOGY—Cont.'

3. Giglio, Frank A.
4. Lancaster, Joseph S.
5. Magliolo, Amedeo A.
6. McLean, William F.
7. Rabinowitz, George E.
8. Smith, Julian P.
9. Voulgaris, Dennis M.
10. Wharton, James T.

Clinical Instructor—without salary, without tenure

1. Abbott, Lillian M.
2. Baxter, Virgil C.
3. Lehman Jr., Robert F.
4. Wernecke, Robert H.

OPHTHALMOLOGY

Clinical Associate Professor—without salary, without tenure

1. Payton, Calvin W.
2. Potter, William B.
3. Ruiz, Richard S.

Clinical Assistant Professor—without salary, without tenure

1. Broman, Charles R.
2. Christensen, Gerald R.
3. Greenspan, David A.
4. Hawkins, Walter R.
5. Stewart Jr., Robert H.
6. Stiernberg, Douglas D.

Clinical Instructor—without salary, without tenure

1. Brenner, Ralph L.
2. Duncan, Thomas E.
3. Fradkin, Allan E.
4. Keatts, James G.
5. Lanier, Jeffrey D.
6. Milstein, Bernard A.

OTOGLARYNGOLOGY

Clinical Assistant Professor—without salary, without tenure

1. McLarey, Don C.
2. Stiernberg, Royal C.

Clinical Instructor—without salary, without tenure

1. Blackburn, Edward A.
2. Livingston, Donna G.
3. Waldron, Jimmie F.

Adjunct Instructor—without salary, without tenure

1. Battin, R. R.
PATHOLOGY

Clinical Professor--without salary, without tenure
1. Earle, Kenneth M.

Clinical Associate Professor--without salary, without tenure
1. Austin, Flavius L.

Clinical Assistant Professor--without salary, without tenure
1. Baillie, Earle E.
2. Chen, Julian M.

PEDIATRICS

Clinical Professor--without salary, without tenure
1. Meyer, Sr., Paul R.
2. Kopra, Lennart L.

Clinical Associate Professor--without salary, without tenure
1. Ford, George D.
2. Gibbs, Reagan H.

Clinical Assistant Professor--without salary, without tenure
1. Lewis, Kay L.
2. Robinson, Sally S.
   (Family Medicine)

PHARMACOLOGY

Adjunct Professor--without salary, without tenure
1. Goth, Andres
2. Jaffe, Jerome H.

Adjunct Associate Professor--without salary, without tenure
1. Geller, Irving
2. Smith, Frank E.

Adjunct Assistant Professor--without salary, without tenure
1. Johnson, Gordon L.

PHYSIOLOGY

None

PREVENTIVE MEDICINE AND COMMUNITY HEALTH

Adjunct Professor--without salary, without tenure
1. Duff, Fratis L.

Clinical Associate Professor--without salary, without tenure
1. Perry, John E.
   (Internal Medicine)
Adjunct Associate Professor--without salary, without tenure

1. Kemmerer, Jr., Walter W.  
   (Family Medicine)

Clinical Assistant Professor--without salary, without tenure

1. Jernigan, Clarence A.  
   (Family Medicine)

PSYCHIATRY

Clinical Professor--without salary, without tenure

1. Cohen, Irvin  
2. Constant, George A.  
3. McGaughran, Lawrence S.

Adjunct Professor--without salary, without tenure

1. Holtzman, Wayne W.  
2. Sutherland, Robert L.

Clinical Associate Professor--without salary, without tenure

1. Cambor, Charles G.  
2. Davis, Harry K.  
   (Family Medicine)

Clinical Assistant Professor--without salary, without tenure

1. Bondurant III, William W.  
2. Goodman, John W.  
3. Johnson, Jr., James E.  
4. Martin, Winston L.  
5. Zein-Elden, Elsayed A.

Clinical Instructor--without salary, without tenure

1. Eanes III, Harvey R.  
2. Ruscelli, Vincent

RADIOLOGY

Clinical Professor--without salary, without tenure

1. Collins, Vincent P.  
2. Fletcher, Gilbert  
3. Miller, Jarrell E.

Clinical Assistant Professor--without salary, without tenure

1. Allen, Thomas S.  
   (Internal Medicine)  
2. Heimbigner, Elmer  
3. Johnson, Jesse B.  
4. Leavenworth, William M.  
5. van der Smissen, Eugene T.
Clinical Instructor--without salary, without tenure
1. Danks, Clyde R.
2. Hendrick, Charles K.
3. Walker, William A.
4. Wooley, Robert F.

Surgery
Clinical Professor--without salary, without tenure
1. Clark, Randolph L.
2. Greenwood Jr., James

Clinical Associate Professor--without salary, without tenure
1. Dailey, James E.
2. McGivney, John Q.

Clinical Assistant Professor--without salary, without tenure
1. Allums, James A.
2. Angel, Jorge
3. Cunningham, Paul J.
4. Doyle, James E.
5. Epstein, Isadore V.
6. Field, James L.
7. Fountain, Edmund M.
8. Gordon, Fallon T.
9. Hanna, Ed A.
10. Kirksey, Thomas D.
11. Kubala, Mark J.
12. Lockhart, Leroy D.
13. Martin Jr., Frank S.
14. McKenna, John R.

Clinical Instructor--without salary, without tenure
1. Beekler, Daniel M.
2. Braeuer, Harry L.
3. Cedars, Nathan
4. Chotiprasidhi, Phaibul
5. Cleveland, Benny R.
6. Cox, George W.
7. Cress, Ronald D.
8. Edwards, Robert L.
9. Hink Jr., Burton W.
10. Julian, Jerry D.
11. Klein, Elihu I.
12. Lionti, Joseph N.
13. Minyard, A. E.
14. Mount, Jerry E.
15. Nelson, Page W.
16. Pearson, Lynn L.
17. Roosch, Hyman P.
18. Smith, James R.
19. Yates Jr., Sam M.
20. Zanetti, Paul H.
1. Increase the salary rate of Mr. David C. Tabaracci, Jr., Fiscal Manager, Sponsored Research, from $15,400 to $16,000 for twelve months, effective March 1, 1974. Additional funds needed are to come from Unallocated Appropriations - General. (REC 434)

MEDICAL SCHOOL
Office of the Dean of Medicine
2. Change the status of Dr. James C. Guckian, Acting Associate Dean for Clinical Affairs, from full-time at a salary rate of $28,000 for twelve months to part-time, without salary, effective April 1, 1974. Dr. Guckian also serves as Associate Professor at a salary rate of $28,000 in the Department of Internal Medicine. (REC 437)

3. Dr. Spencer G. Thompson, Associate Dean of Medicine (part-time) at a salary of $31,000 for twelve months from DHES Grant 5E03-PE-00170-08, has returned from Faculty Reassignment Leave. Change source of funds to General Budget, effective April 1, 1974. Funds needed are to come from the departmental non-teaching salaries budget. Dr. Thompson also serves as Assistant Professor (part-time) at a salary of $5,200 in the Department of Pediatrics. Total salary for twelve months, $36,200. (REC 464)

Dermatology
4. Change the source of funds for Dr. Prapand Apisaranthanarax (Non-Tenure), Assistant Professor at a salary rate of $23,782 for twelve months, from General Budget to DHET Grant 5E08-PE-00131-04, effective March 1, 1974. (REC 427)

Human Biological Chemistry and Genetics
5. Change the source of funds for Dr. Paul S. Baur, Jr. (Non-Tenure), Assistant Professor at a salary rate of $19,000 for twelve months, from $1,000 from NIH-NICHD-69-2139 and $18,000 from DHES Grant 5E03-PE-00170-08 to $1,000 from NIH-NICHD-69-2139 and $18,000 from DHES Grant 5D08-PE-00131-04, effective March 1, 1974. (REC 428)

6. Appoint Dr. Armond S. Goldman (Tenure) as Professor (part-time), without salary, effective March 1, 1973. Dr. Goldman also serves as Professor at a salary rate of $34,100 in the Department of Pediatrics. (REC 441)

7. Change the status of Dr. Gerald M. Fuller (Tenure) from Assistant Professor (part-time) at a salary of $10,500 to Associate Professor (part-time) at a salary of $11,614. Dr. Fuller also serves as Associate Professor (part-time) at a salary of $11,133 in the Office of Dean of Graduate School and as Adjunct Member (part-time), without salary, in The Marine Biomedical Institute. Total salary for twelve months, $22,727. (REC 471)

Internal Medicine
8. Change the source of funds for Dr. James D. Lindley (Non-Tenure), Assistant Professor at a salary rate of $24,000 for twelve months, from DHES Grant 5D03-PE-00170-08 to DHES Grant 5D08-PE-00131-04, effective March 1, 1974. (REC 429)
AMENDMENTS TO THE 1973-74 OPERATING BUDGET - continued

MEDICAL SCHOOL - continued
Internal Medicine - continued

9. Change the status of Dr. James C. Guckian (Tenure), Associate Professor, from part-time, without salary, to full-time at a salary rate of $28,000 for twelve months, effective April 1, 1974. Funds needed are to come from DHEW Grant 5D08-PE-00131-04. Dr. Guckian also serves as Associate Professor (part-time), without salary, in the Department of Microbiology and as Acting Associate Dean for Clinical Affairs (part-time), without salary, in the Office of the Dean of Medicine. (RBC 438)

10. Appoint Mr. Fred C. Delaney as Assistant to the Program Director of the Cancer Center at a salary rate of $18,000 for twelve months, effective March 18, 1974. Funds needed are to come from DHEW Grant 1FO1-CA-14621-01. (RBC 456)

Microbiology

11. Increase the salary of Dr. Arzrooom A. Pakchanian (Tenure), Professor (one-half time) from $9,000 for twelve months ($8,340 from General Budget and $660 from Professional Fees - Microbiology) to $9,996 for twelve months ($9,336 from General Budget and $660 from Professional Fees - Microbiology), effective February 1, 1974. Additional General Budget funds needed are to come from Unallocated Appropriations - Instructional. (RBC 411)

Psychiatry

12. Accept the resignation of Dr. Manuel C. Ramirez (Non-Tenure), Clinical Assistant Professor (part-time) at a salary of $6,000 for twelve months, effective March 15, 1974. (RBC 450)

13. Change the title of Dr. Harold A. Goolishian (Tenure), from Professor and Chief to Professor at the same salary rate of $32,000 for twelve months, effective March 1, 1974. (RBC 457)

14. Accept the resignation of Dr. Philip D. Seat (Non-Tenure), Assistant Professor at a salary rate of $17,578 for twelve months, effective March 15, 1974. (RBC 459)

15. Appoint Dr. Phillip R. Nader (Non-Tenure) as Associate Professor (part-time), without salary, effective April 1, 1974. Dr. Nader also serves as Associate Professor at a salary rate of $31,537 in the Department of Pediatrics. (RBC 463)

Neurology

16. Change the source of funds for Dr. John R. Calverley (Tempre, Professor and Chairman at a salary rate of $34,000 for twelve months, from $29,000 from General Budget and $5,000 from Charlotte Warmoth Professorship to $29,000 from DHEW Grant 5D01-NS-05755-07 and $5,000 from Charlotte Warmoth Professorship, effective March 18, 1974. (RBC 425)

Obstetrics and Gynecology

17. Change the source of funds for Dr. Leslie C. Powell, Jr. (Tenure), Professor at a salary rate of $33,000 for twelve months, from $31,500 from General Budget and $1,250 from Interagency Contract to $26,500 from General Budget, $5,000 from DHEW Grant 5D08-PE-00131-04 and $1,500 from Interagency Contract, effective March 1, 1974. (RBC 432)

18. Accept the resignation of Dr. Sidney A. Smith (Non-Tenure), Assistant Professor at a salary rate of $29,000 for twelve months ($23,000 from General Budget and $6,000 from DHEW Project 04-H-000-084-04-0), effective March 31, 1974. (RBC 461)
AMENDMENTS TO THE 1973-74 OPERATING BUDGET - continued

MEDICAL SCHOOL - continued

Pathology
19. Change the source of funds for Dr. Sydney S. Schochet, Jr. (Tenure), Associate Professor at a salary rate of $28,000 for twelve months, from General Budget to DHEW Grant 5D08-PE-00131-04, effective March 1, 1974. (RBC 431)

20. Increase the salary rate of Dr. Otto F. Peters, Jr., Assistant to the Chairman, from $16,751 ($7,497 from General Budget and $9,254 from MSRDP - Pathology) to $17,500 for twelve months ($7,497 from General Budget and $10,003 from MSRDP - Pathology), effective April 1, 1974. (RBC 466)

Pediatrics
21. Change the source of funds for Dr. Hugo F. Carvajal (Non-Tenure), Assistant Professor at a salary rate of $24,350 for twelve months, from $16,801 from General Budget, $11,430 from Shrine Affiliation Agreement, and $2,119 from NIH 72-4391 to $10,801 from General Budget, $9,716 from Shrine Affiliation Agreement, $1,714 from Texas Lions League for Crippled Children, and $2,119 from NIH 72-4391, effective February 1, 1974. (RBC 420)

22. Accept the resignation of Dr. Jimmy L. Simon (Tenure), Professor at a salary rate of $38,259 for twelve months ($18,671 from General Budget and $19,388 from C and Y Project 06-H-000-080-06), effective March 31, 1974. (RBC 422)

23. Change the source of funds for Dr. Leonard C. Harris (Tenure), Professor at a salary rate of $32,554 for twelve months, from $32,054 from General Budget and $500 from Pediatric Nurse Practitioner Program to General Budget only, effective March 1, 1974. (RBC 426)

24. Dr. Spencer G. Thompson (Tenure), Assistant Professor (part-time) at a salary of $5,200 for twelve months from DHEW Grant 5D03-PE-00170-08, has returned from a Faculty Reassignment Leave. Change the source of funds to General Budget, effective April 1, 1974. Funds needed are to come from Unallocated Appropriations - Instructional. Dr. Thompson also serves as Associate Dean of Medicine (part-time) at a salary of $31,000 in the Office of the Dean of Medicine. Total salary for twelve months, $36,200. (RBC 465)

Pharmacology
25. Appoint Dr. Odd S. Steinsland (Non-Tenure) as Assistant Professor at a salary rate of $14,000 for twelve months, effective February 20, 1974. Additional funds needed are to come from Unallocated Appropriations - Instructional. (RBC 417)

26. Appoint Dr. Alexander D. Kenny (Tenure) as Professor at a salary rate of $30,000 for twelve months, effective April 1, 1974. Funds needed are to come from Unallocated Appropriations - Instructional. (RBC 458)

Physiology
27. Change the status of Dr. Ruth Ashkenazi, Lecturer, from part-time, without salary, to full-time at a salary rate of $12,000 for twelve months, effective April 1, 1974. Funds needed are to come from the Lanier Foundation. This is an increase from a stipend of $8,500 as Post-doctoral Fellow in the Department of Human Biological Chemistry and Genetics. (RBC 467)

Radiology
28. Change the source of funds for Dr. Pranab Ray (Non-Tenure), Assistant Professor at a salary rate of $24,000 for twelve months, from General Budget to DHEW Grant 5D08-PE-00131-04, effective March 1, 1974. (RBC 430)
MEDICAL SCHOOL - continued

Surgery
29. Change the source of funds for Dr. Benjamin L. Allen, Jr. (Non-Tenure), Assistant Professor at a salary rate of $28,952 for twelve months, from General Budget to DHHS Grant 5D08-PE-00131-04, effective March 1, 1974. Dr. Allen also serves as Adjunct Assistant Professor (part-time), without salary, in School of Allied Health Sciences - Health Care Sciences. (RBC 424)

30. Appoint Dr. John A. McCrary, III (Tenure) as Associate Professor (part-time), without salary, effective March 15, 1974. Dr. McCrary also serves as Associate Professor at a salary rate of $28,000 for twelve months in the Department of Ophthalmology and as Associate Professor (part-time), without salary, in the Department of Neurology. (RBC 453)

ALLIED HEALTH SCIENCES SCHOOL

School of Allied Health Sciences - Health Care Sciences
31. Appoint Dr. David C. Eiland, Jr. (Non-Tenure) as Adjunct Assistant Professor (part-time), without salary, effective March 1, 1974. Dr. Eiland also serves as Assistant Professor (part-time), without salary, in the Department of Family Medicine and Full-time at a salary rate of $25,000 in the Department of Neurology. (RBC 439)

32. Appoint Dr. Douglas M. Daniels as Adjunct Assistant Professor (part-time), without salary, effective March 1, 1974. Dr. Daniels also serves as Assistant Professor (one-half time) at a salary of $13,184 in the Department of Pediatrics and as Medical Director (one-half time) at a salary of $13,184 in Moody State School. Total salary for twelve months, $26,368. (RBC 440)

33. Appoint Dr. Dale L. Messer (Non-Tenure) as Adjunct Assistant Professor (part-time), without salary, effective February 15, 1974. (RBC 446)

34. Appoint Dr. Sam R. Barns (Non-Tenure) as Adjunct Professor (part-time), without salary, effective February 15, 1974. (RBC 447)

35. Appoint Mr. William L. Price (Non-Tenure) as Instructor at a salary rate of $14,500 for twelve months, effective March 20, 1974. Funds needed are to come from Contract N01-MH-24113. (RBC 448)

36. Accept the resignation of Mr. Larry D. Wilson, Adjunct Instructor (part-time), without salary, effective December 31, 1973. (RBC 461)

37. Appoint Dr. Carroll C. Jones (Non-Tenure) as Adjunct Assistant Professor (part-time), without salary, effective March 15, 1974. (RBC 462)

School of Allied Health Sciences - Medical Records Administration
38. Accept the resignation of Miss Linda A. McDonald (Non-Tenure), Instructor at a salary rate of $10,545 for twelve months, effective April 12, 1974. (RBC 455)

School of Allied Health Sciences - Occupational Therapy
39. Accept the resignation of Mrs. Jill M. Gray, Adjunct Instructor (part-time), without salary, effective February 18, 1974. (RBC 444)

40. Accept the resignation of Miss Ruby C. Stephans, Adjunct Instructor (part-time), without salary, effective February 18, 1974. (RBC 445)
AMENDMENTS TO THE 1973-74 OPERATING BUDGET - continued

ALLIED HEALTH SCIENCES SCHOOL - continued

School of Allied Health Sciences - Physical Therapy
41. Appoint Mrs. Kathleen J. Johnson as Adjunct Instructor (part-time), without salary, effective January 1, 1974. (RBC 436)

GRADUATE SCHOOL
Office of Dean of Graduate School
42. Change the status of Dr. Gerald M. Fuller (Tenure) from Assistant Professor (part-time) at a salary of $10,000 to Associate Professor (part-time) at a salary of $11,114 for twelve months, effective April 1, 1974. Additional funds needed are to come from Unallocated Appropriations - Graduate School. Dr. Fuller also serves as Associate Professor (part-time) at a salary of $11,614 in the Department of Human Biological Chemistry and Genetics and as Adjunct Member (part-time), without salary, in The Marine Biomedical Institute. Total salary for twelve months, $22,727. (RBC 470)

UNIVERSITY HOSPITALS

Patient Charge System
43. Increase the salary rate of Mr. Alan N. Ladd, Manager, Patient Charge System, from $12,168 to $13,200 for twelve months, effective March 1, 1974. Additional funds needed are to come from Unallocated Appropriations - Hospitals. (RBC 435)

Central Supply
44. Appoint Mr. George W. Elliott as Director, Central Supply (three-fourths time) at a salary of $9,750 for twelve months, effective March 1, 1974. Funds needed are to come from the departmental non-teaching salaries budget. Mr. Elliott also serves as Director, Central Supply (one-fourth time) at a salary of $3,250 in Central Supply - Sealy and Smith. Total salary for twelve months, $13,000. (RBC 409)

Hospital Distribution
45. Accept the resignation of Mr. George W. Elliott, Director, Hospital Distribution (three-fourths time) at a salary of $8,411 for twelve months, effective February 28, 1974. Mr. Elliott is transferring to Central Supply. (RBC 410)

THE MARINE BIOMEDICAL INSTITUTE

The Marine Biomedical Institute
46. Appoint Mr. Steven H. Lieber as Geoscience Instrumentation Specialist at a salary rate of $14,004 for twelve months, effective February 1, 1974. Funds needed are to come from NAS-9-13143. (RBC 421)

47. Appoint Dr. Kenneth N. Gray as Adjunct Member (part-time), without salary, effective February 1, 1974. (RBC 423)

Environmental Science
48. Appoint Dr. John F. Lindsay as Senior Research Investigator at a salary rate of $17,500 for twelve months, effective February 1, 1974. Funds needed are to come from the departmental non-teaching salaries budget. (RBC 442)

SEALY & SMITH FOUNDATION HOSPITALS

Central Supply - Sealy & Smith
49. Appoint Mr. George W. Elliott as Director, Central Supply (one-fourth time) at a salary of $3,250 for twelve months, effective March 1, 1974. Funds needed are to come from the departmental non-teaching salaries budget. Mr. Elliott also serves as Director, Central Supply (three-fourths time) at a salary of $9,750 in Central Supply. Total salary for twelve months, $13,000. (RBC 442)
AMENDMENTS TO THE 1973-74 OPERATING BUDGET - continued

SEALY & SMITH FOUNDATION HOSPITALS - continued

Hospital Distribution - Sealy & Smith
50. Accept the resignation of Mr. George W. Elliott, Director, Hospital Distribution (one-fourth time) at a salary of $2,804 for twelve months, effective February 28, 1974. Mr. Elliott is transferring to Central Supply - Sealy & Smith. (RBC SS 9)

TRANSFER OF FUNDS

51. From: Unallocated Appropriations - General $2,259.61
   To: Purchasing:
       Classified Salaries $2,259.61
   For: This transfer will provide funds for the creation of a new position of Buyer I at a salary rate of $4,776 for twelve months, effective March 11, 1974. (RBC 443)

52. From: Pathology:
       Classified Salaries $4,621.53
       Unallocated Appropriations - Instructional $3,048.47
   To: Internal Medicine:
       Classified Salaries $7,670.00
   For: Transfer one (1) position of Secretary III (part-time) at a salary of $7,670 for twelve months, effective September 1, 1973. Funds being used from Unallocated Appropriations - Instructional were lapsed from the Department of Pathology from this unfilled position. (RBC 449)

53. From: Unallocated Appropriations - Allied Health Sciences $4,200.00
   To: School of Allied Health Sciences - Medical Technology:
       Maintenance and Operation $4,200.00
   For: This transfer will provide funds for the purchase of supplies. (RBC 452)

54. From: Unallocated Appropriations - Hospitals $3,500.00
   To: Credit and Collections:
       Maintenance and Operation $3,500.00
   For: This transfer is requested due to increased cost of postage and additional collection efforts via mailouts. (RBC 433)
AMENDMENTS TO THE 1973-74 OPERATING BUDGET - continued

TRANSFER OF FUNDS - continued

55. From: Unallocated Appropriations - Hospitals $2,378.57
To: Out-Patient Clinics: Classified Salaries $2,378.57
For: This transfer will provide funds for the creation of a new position of Clerk I at a salary rate of $4,320 for twelve months, effective February 12, 1974.
(RBC 418)

56. From: Unallocated Appropriations - Hospitals $2,500.00
To: Gastroenterology Endoscopy Room: Maintenance and Operation $2,500.00
For: This transfer will provide funds for continued operations for the remainder of this fiscal year.
(RBC 460)

57. From: The Marine Biomedical Institute - Environmental Sciences:
- Non-Teaching Salaries $10,000.00
- Classified Salaries 5,000.00
- Equipment 6,000.00
- $21,000.00
To: The Marine Biomedical Institute - Environmental Sciences:
- Maintenance and Operation $15,000.00
- Travel 6,000.00
- $21,000.00
For: These transfers are necessary to provide the necessary operational support for this division for the remainder of this fiscal year.
(RBC 468)

58. From: The Marine Biomedical Institute: Classified Salaries $20,000.00
To: The Marine Biomedical Institute: Rental $20,000.00
For: This transfer is necessary to cover rental expenses of being located in the Sealy & Smith Professional Building. The additional space that has become necessary to meet the requirement of The Marine Biomedical Institute has made this request necessary.
(RBC 469)
AMENDMENTS TO THE 1973-74 OPERATING BUDGET - continued

TRANSFER OF FUNDS - continued

59. From: Clinical Laboratory - Classified Salaries $4,440.00
    Renal Transplant Center - Classified Salaries 7,585.00
    Renal Transplant Center - Maintenance and Operation 3,125.00
    Unallocated Appropriations - Hospitals 3,750.00
    **Total** $18,900.00

To: Special Immunology Laboratory:
    Classified Salaries $12,025.00
    Maintenance and Operation 6,875.00
    **Total** $18,900.00

For: This transfer will provide funds for the creation of a new "Special Immunology Laboratory," effective April 1, 1974.

(RSC 454)

OTHER FISCAL ITEMS

SCHEDULE OF ADDITIONAL (OR CHANGES IN) FUNDING OF CONSTRUCTION PROJECTS

<table>
<thead>
<tr>
<th>Project No.</th>
<th>Project Title</th>
<th>Source of Funds</th>
<th>To (New or Additional Appropriations)</th>
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<td>IOP PUF</td>
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Legend
IOP - Interest on Bond Proceeds
PUF - Permanent University Fund Bonds
Chancellor Charles A. LeMaistre
The University of Texas System
601 Colorado St.
Austin, Texas  78701

Dear Chancellor LeMaistre:

The docket for the June 14, 1974 meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.

Sincerely,

Charles A. Berry, M.D., M.P.H.
President
REVISION TO THE 1973-74 PERSONNEL PAY PLAN: Approval is respectfully requested for the addition of the following job title to the Houston Health Science Center Pay Plan for Fiscal Year 1973-74.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Monthly</th>
<th>Annually</th>
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</thead>
<tbody>
<tr>
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<td>Communications Specialist III</td>
<td>$1,014-1,370</td>
<td>$12,168-16,440</td>
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</tbody>
</table>

GRANTS, CONTRACTS AND AGREEMENTS (NON-GOVERNMENTAL): Approval is respectfully requested for the following grants and agreements.

HOUSTON MEDICAL SCHOOL

1. Agreement between The University of Texas Health Science Center at Houston, Medical Service Research and Development Plan of the Houston Medical School, and Houston Creditors' Association, Inc., 2421 Driscoll, Houston, Texas, 77019, whereby Houston Creditors' Association, Inc., provides collection services for the MSRP Office. Houston Creditors' Association, Inc., will be paid commissions contingent upon collections made on a monthly basis. The agreement, approved by Mr. E. D. Walker, was signed on behalf of the Houston Health Science Center by Mr. G. C. Franklin, Vice President for Business Affairs, and became effective April 17, 1974.

2. Grant Agreement 720-0075A between The University of Texas Health Science Center at Houston, Medical School, and The Ford Foundation, 320 East 43rd Street, New York, New York, 10017, wherein The Ford Foundation provides $232,040, for the period February 26, 1974 through February 25, 1978, for support of studies on fertility control in the male under the direction of Dr. Emil Steinberger, Professor and Director of the Program in Reproductive Biology and Reproductive Endocrinology. (This award supplements a grant of $103,113.41 made in December, 1971.) The grant agreement was signed on behalf of the Houston Health Science Center by Dr. J. V. Olson, Acting President.

3. Service Agreement between The University of Texas Health Science Center at Houston, Medical School, and The Ford Foundation, 320 East 43rd Street, New York, New York, 10017, wherein The Ford Foundation provides up to $3,850, for a period of thirty days between January 1, 1974 through July 1, 1974, for the services of Dr. Emil Steinberger to write a report on the Pituitary-Testis Interrelationships with two other colleagues for the Greep Review Committee. Dr. Steinberger is Professor and Director of the Program in Reproductive Biology and Reproductive Endocrinology. The agreement was signed on behalf of the Houston Health Science Center by Dr. J. V. Olson, Acting President.

4. Grant by which the American Heart Association, 44 East 23rd Street, New York, New York, 10010, provides $48,743, for the period March 1, 1974 through October 31, 1974, for the development of an instructional program for cardiopulmonary resuscitation. The project will be carried out by Arthur D. Katser, Ph.D., Assistant Professor, and Gail Norman of the Program in Biomedical Communications, under the direction of Dr. Arnold Sladen, Professor and Acting Director of the Program in Anesthesiology. The grant was made on behalf of the American Heart Association by Mr. Paul Archambault, Director, Division of Materials Development.
1. Grant by which the General Foods Corporation, Pet Foods Division, Route 3, St. Anne, Illinois, 60964, provides $35,000, for the period April 1, 1974, through March 31, 1975, to support research entitled, "Neurophysiological Analysis of Canine Gustation," under the direction of James C. Boudreau, Ph.D., Associate Professor in the Sensory Sciences Center. The objective of this project is to discover the functional organization of canine gustatory neural systems and to determine the nature of the chemical signals the systems were designed to measure. The grant was made on behalf of the General Foods Corporation by Mr. W. L. Vollink, Gaines Nutrition Center.

2. Interagency Cooperation Contract IAC (74-75)-0831, between The University of Texas Health Science Center at Houston (Performing Agency) and the Texas State Department of Health (Receiving Agency), whereby the Houston Health Science Center will provide special supplemental foods to qualified women, infants, and children in a specified geographic area in accordance with regulations for participation in the United States Department of Agriculture's WIC Program. Susan Skrovan, M.D., Assistant Professor in the Medical School Program in Pediatrics, is Program Director. The Houston Health Science Center will be reimbursed for food and administrative costs not to exceed a total of $125,030 for the period March 13, 1974 through June 30, 1974. The contract was signed on behalf of the Houston Health Science Center by Dr. J. V. Olson, Acting President, and was approved by the State Board of Control on March 13, 1974.

3. Interagency Cooperation Contract IAC (74-75)-0830, between The University of Texas Health Science Center at Houston, Public Health School (Performing Agency) and the Texas Water Development Board (Receiving Agency), whereby the Public Health School will perform "Selective Studies for Definition of Primary Biological Productivity in Lavaca, San Antonio, Aransas-Copano, and Corpus Christi Bay Systems, Texas." Ernst M. Davis, Ph.D., Associate Professor in the Department of Environmental Health, is Project Director. The Houston Health Science Center will be reimbursed $5,138 for salaries, wages and other costs for the period February 27, 1974 through August 31, 1974. The contract was signed on behalf of the Houston Health Science Center by Dr. J. V. Olson, Acting President, and was approved by the State Board of Control on February 27, 1974.
The following grants and contracts have been approved by the chief administrative officer and are hereby submitted for ratification by the Board of Regents.

HOUSTON MEDICAL SCHOOL

1. Grant 1 R01 HL16552-01, by which the Department of Health, Education and Welfare, National Heart and Lung Institute, provides $84,536, plus applicable indirect costs, for the period April 1, 1974 through March 31, 1976, to support research entitled, "Regulation of Cardiac Adenylyl Cyclase Activity." The main objective of this project is to understand how cardiac adenylyl cyclase activity is regulated by hormones and other factors. The total project period is April 1, 1974 through March 31, 1977, and George A. Robison, Ph.D., Professor and Director of the Program in Pharmacology, is Principal Investigator. The majority of expenditures from this award will be made in Harris County.

2. Supplemental Award to Training Grant 3 T01 NS10080-02S1, by which the Department of Health, Education and Welfare, National Institute of Neurological Diseases and Stroke, provides an additional $3,323, for the period July 1, 1973 through June 30, 1974, to support a "Graduate Training Program in Neurological Sciences," under the direction of Dr. William S. Fields, Professor and Director of the Program in Neurology. The majority of expenditures from this award will be made in Harris County.

HOUSTON GRADUATE SCHOOL OF BIOMEDICAL SCIENCES

1. Grant 1 R01 EY00907-01A1, by which the Department of Health, Education and Welfare, National Eye Institute, provides $12,149, plus applicable indirect costs, for the period April 1, 1974 through March 31, 1975, to support research entitled, "Correlates of Binocular Visual Stimulation." This project is designed to investigate the ways by which single cells within the striate cortex of cat process visual information provided by simultaneous stimulation of binocular receptive fields. The total project period is April 1, 1974 through March 31, 1976, and Steven J. Cool, Ph.D., Assistant Professor in the Sensory Sciences Center, is Principal Investigator. The majority of expenditures from this award will be made in Harris County.

PUBLIC HEALTH SCHOOL

1. Grant 1 A03 AH00521-01, by which the Department of Health, Education and Welfare, Public Health Service, Division of Associated Health Professions, provides $98,000, for the period July 1, 1974 through June 30, 1976, the total project period, to support a General Purpose Traineeship Program. Robert Oseasohn, M.D., Associate Dean for Student Affairs, is Program Director. The majority of expenditures from this award will be made in Harris County.
HOUSTON MEDICAL SCHOOL

CLINICAL SCIENCES

Anesthesiology

Clinical Associate -- without salary, without tenure
1. Ramon Diaz, M.D.

Neurology

Clinical Assistant Professor -- without salary, without tenure
1. George Isaacs, M.D.

Clinical Instructor -- without salary, without tenure
1. Rita Dale Turkel Lee, M.D.

Obstetrics and Gynecology

Clinical Associate -- without salary, without tenure
1. Homer Brown Woodward, M.D.

Ophthalmology

Clinical Assistant Professor -- without salary, without tenure
1. Frank J. Grady, M.D.

Psychiatry

Clinical Associate Professor -- without salary, without tenure
1. Louis F. Fabre, Jr., M.D.

Clinical Instructor -- without salary, without tenure
1. Jonathan O. Lee, M.D.

Radiology

Clinical Professor -- without salary, without tenure
1. Charles W. Yates, Sr., M.D.
2. Sidney Wallace, M.D.
3. Bao-Shan Jing, M.D.

Clinical Associate Professor -- without salary, without tenure
1. Leslie L. Lemak, M.D.
2. John E. Martin, M.D.
3. James M. Keegan, M.D.

Clinical Assistant Professor -- without salary, without tenure
1. Kenneth Jensen, M.D.
2. Victor Carlson, M.D.
3. Arnold M. Goldman, M.D.
4. J. Barnett Finkelstein, M.D.
5. David D. Paulus, M.D.
6. Harvey Goldstein, M.D.
7. Alfonso Zermeno, M.D.

Clinical Instructor -- without salary, without tenure
1. Lee M. Marsh, M.D.
CLINICAL FACULTY APPOINTMENTS -- SEPTEMBER 1, 1974 THROUGH AUGUST 31, 1975

HOUSTON MEDICAL SCHOOL (Continued)

Surgery - Otolaryngology

Clinical Associate -- without salary, without tenure
1. Francis Irving Catlin, M.D.

COMMUNITY HEALTH SCIENCES

Family Practice

Clinical Associate -- without salary, without tenure
1. Stanley A. Boyd, M.D.
2. B. C. Dayton, M.D.

NOTE: These appointments are in addition to those included in the Fiscal Year 1974-75 Operating Budget for the Houston Health Science Center.
THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON

Amendments to the 1973-74 Operating Budget
Board of Regents' Meeting June 14, 1974

Approval is respectfully requested for the following amendments to the 1973-74 operating budget.

Office of the President

1. Appoint Charles A. Berry, M.D. as President of The University of Texas Health Science Center at Houston, at an annual salary rate of $60,000, effective April 1, 1974. Funds needed are to come from the Houston Health Science Center Office of the President-Administrative and Professional Salaries and Office of the President-Trust Funds. (RBC-408)

2. Transfer $10,000 from the Houston Health Science Center Administrative Charges to Trust Funds to Administrative Expenses-President's Office. This transfer is requested to provide funds for the expenses related to the recruitment of a president, including moving costs, for the Houston Health Science Center. (RBC-394)

Data Processing

3. Create the position of Supervisor-Computer Operations, at an annual salary rate of $13,008, in the Houston Health Science Center Department of Data Processing, effective March 20, 1974. Funds needed are to come from the Office of the Vice President for Business Affairs-Administrative and Professional Salaries. (RBC-391)

HOUSTON MEDICAL SCHOOL

GENERAL ADMINISTRATION

Office of the Dean

1. Appoint Dwight E. Hood as Manager-Medical Service, Research and Development Plan in the Medical School Office of the Dean at an annual salary rate of $24,000, effective January 21, 1974. Funds needed are to come from the Medical School MSRDP Development Fund-Administrative and Professional Salaries. (RBC-237)

2. Transfer $17,851.53 from the Medical School Health Professions Capitation Grant No. EO3 PE00171-03 Maintenance and Operation to Capitation Grant-Departmental Operating Expense, Communication Costs. This transfer is requested to provide funds for institutional communication costs. (RBC-357)

3. Transfer $2,000 from the Medical School account Various Donors for Various Purposes-Restricted Funds to the Houston Medical School Development Fund-Maintenance and Operation. (RBC-400)

ANALYTIC SCIENCES

Biochemistry and Molecular Biology

4. Transfer $13,000 from the Medical School account Various Donors for Various Purposes-Restricted Funds to the Pat Rutherford Research Fund-Biochemistry Maintenance and Operation. (RBC-399)

Physiology

5. Appoint Roy H. Jacob (non-tenure) as Assistant Instructor in the Medical School Program in Physiology, at an annual salary rate of $16,200, for the period March 1, 1974 through May 31, 1974. Funds needed are to come from departmental NIH Grant No. 5 RO1 AM15977-02. (RBC-407)
CLINICAL SCIENCES

Anesthesiology

6. Appoint Ramon Diaz, M.D. (non-tenure) as Clinical Associate in the Medical School Program in Anesthesiology, without salary, effective January 1, 1974. (RBC-315)

7. Appoint Jake E. Davis, M.D., as Assistant in Anesthesiology in the Medical School Program in Anesthesiology, one-third time, at an annual salary rate of $10,080, effective March 1, 1974. Dr. Davis' current appointment with The University of Texas System Medical Foundation will be reduced to two-thirds time, effective March 1, 1974. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-333)

8. Appoint Lalithamma K. Shekhar, M.D. (non-tenure) as Instructor in the Medical School Program in Anesthesiology, at an annual salary rate of $20,000, effective February 15, 1974. Funds needed are to come from departmental Faculty Salaries. (RBC-371)

9. Appoint John P. Gorman, M.D. as Fellow in the Medical School Program in Anesthesiology, at an annual salary rate of $22,000, effective April 1, 1974. Funds needed are to come from Anesthesiology-MSRDP Clinical Program Fund. (RBC-378)

Internal Medicine - General

10. Appoint Lawrence W. Worth, M.D. as Assistant in Medicine in the Medical School Program in Internal Medicine-General, one-third time, at an annual salary rate of $10,680, effective March 1, 1974. Dr. Worth's current appointment with The University of Texas System Medical Foundation will be reduced to two-thirds time, effective March 1, 1974. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-334)

11. Appoint Richard W. Blakely, M.D. as Assistant in Medicine in the Medical School Program in Internal Medicine-General, one-third time, at an annual salary rate of $10,680, effective March 1, 1974. Dr. Blakely's current appointment with The University of Texas System Medical Foundation will be reduced to two-thirds time, effective March 1, 1974. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-335)

Internal Medicine - Cardiology

12. Change the status of Evan Fletcher (non-tenure), Medical School Program in Internal Medicine-Cardiology, from Visiting Professor to Professor, at the same annual salary rate of $34,000, effective April 1, 1974. (RBC-393)

Internal Medicine - Hematology

13. Appoint Philip L. Cimo, M.D. (non-tenure) as Assistant Professor in the Medical School Program in Internal Medicine-Hematology, at an annual salary rate of $28,000, effective August 1, 1974. Funds needed are to come from departmental Faculty Salaries. (RBC-372)

Internal Medicine - Infectious Diseases

14. Appoint Terry K. Satterwhite, M.D. (non-tenure) as Assistant Professor in the Medical School Program in Internal Medicine-Infectious Diseases, at an annual salary rate of $26,500, effective June 1, 1974. Funds needed are to come from departmental Faculty Salaries. (RBC-375)
HOUSTON MEDICAL SCHOOL (Continued)

Internal Medicine - Infectious Diseases (Continued)

15. Appoint Larry K. Pickering, M.D. (non-tenure) as Assistant Professor in the Medical School Program in Internal Medicine-Infectious Diseases, at an annual salary rate of $26,500, effective July 15, 1974. Funds needed are to come from departmental Faculty Salaries. (RBC-377)

16. Create the position of Secretary III in the Medical School Program in Internal Medicine-Infectious Diseases, at an annual salary rate of $7,140, effective March 1, 1974. Funds needed are to come from Medical School Program in Community Medicine Classified Salaries. (RBC-365)

Neurology

17. Appoint George Isacs, M.D. (non-tenure) as Clinical Assistant Professor in the Medical School Program in Neurology, without salary, effective January 1, 1974. (RBC-313)

18. Appoint Rita Dale Turkel Lee, M.D. (non-tenure) as Clinical Instructor in the Medical School Program in Neurology, without salary, effective February 1, 1974. (RBC-403)

Obstetrics and Gynecology

19. Appoint Garland Anderson, M.D. as Assistant in Obstetrics and Gynecology in the Medical School Program in Obstetrics and Gynecology, one-third time, at an annual salary rate of $10,680, effective March 1, 1974. Dr. Anderson's current appointment with The University of Texas System Medical Foundation will be reduced to two-thirds time, effective March 1, 1974. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-336)

20. Appoint Carlos Wigoda, M.D. as Assistant in Obstetrics and Gynecology in the Medical School Program in Obstetrics and Gynecology, one-third time, at an annual salary rate of $18,580, effective March 1, 1974. Dr. Wigoda's current appointment with The University of Texas System Medical Foundation will be reduced to two-thirds time, effective March 1, 1974. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-337)

21. Appoint Ingrid M. Hernandez as Research Associate in the Medical School Program in Obstetrics and Gynecology, at an annual salary rate of $13,000, effective January 1, 1974. Funds needed are to come from departmental Development Associates, Inc. Grant. (RBC-365)

22. Appoint Arthemides C. Alvarez as Research Associate in the Medical School Program in Obstetrics and Gynecology, at an annual salary rate of $10,000, effective January 1, 1974. Funds needed are to come from departmental Development Associates, Inc. Grant. (RBC-367)

23. Appoint O. Scott Hume, M.D. (non-tenure) as Assistant Professor in the Medical School Program in Obstetrics and Gynecology, at an annual salary rate of $28,000, effective June 1, 1974. Funds needed are to come from departmental Faculty Salaries. (RBC-373)

Ophthalmology

24. Appoint Frank J. Grady (non-tenure) as Clinical Assistant Professor in the Medical School Program in Ophthalmology, without salary, effective January 1, 1974. (RBC-314)
25. Appoint Maple L. Avery, M.D., as Assistant in Ophthalmology in the Medical School Program in Ophthalmology, one-third time, at an annual salary rate of $10,680, effective March 1, 1974. Dr. Avery's current appointment with The University of Texas System Medical Foundation will be reduced to two-thirds time, effective March 1, 1974. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-338)

26. Appoint Paul C. Grant, M.D., as Assistant in Ophthalmology in the Medical School Program in Ophthalmology, one-third time, at an annual salary rate of $10,680, effective March 1, 1974. Dr. Grant's current appointment with The University of Texas System Medical Foundation will be reduced to two-thirds time, effective March 1, 1974. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-339)

27. Appoint Edwin W. Hawkins, III, M.D., as Assistant in Ophthalmology in the Medical School Program in Ophthalmology, one-third time, at an annual salary rate of $10,680, effective March 1, 1974. Dr. Hawkins' current appointment with The University of Texas System Medical Foundation will be reduced to two-thirds time, effective March 1, 1974. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-340)

28. Appoint Paul C. Salmonsen, M.D., as Assistant in Ophthalmology in the Medical School Program in Ophthalmology, one-third time, at an annual salary rate of $10,680, effective March 1, 1974. Dr. Salmonsen's current appointment with The University of Texas System Medical Foundation will be reduced to two-thirds time, effective March 1, 1974. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-341)

Pathology

29. Appoint Walfred S. Haller, Ph.D., as Research Associate in the Medical School Program in Pathology, at an annual salary rate of $12,000, effective July 1, 1974. Funds needed are to come from the Pathology MSRD P Clinical Program Fund. (RBC-368)

30. Appoint Enrique VanSanten, M.D. (non-tenure) as Assistant Professor in the Medical School Program in Pathology, at an annual salary rate of $32,000, effective June 1, 1974. Funds needed are to come from departmental Faculty Salaries (50%) and Pathology MSRD P Clinical Program Faculty Salaries. (RBC-401)

Pediatrics

31. Appoint Jerry W. Mowe, M.D., as Assistant in Pediatrics in the Medical School Program in Pediatrics, one-third time, at an annual salary rate of $10,080, effective March 1, 1974. Dr. Mowe's current appointment with The University of Texas System Medical Foundation will be reduced to two-thirds time, effective March 1, 1974. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-345)

32. Change the status of John P. Board, Jr. (non-tenure), Adjunct Assistant Professor in the Medical School Program in Pediatrics, from part-time (25%) to part-time (50%), at the same annual salary rate of $28,000, effective March 15, 1974. Additional funds needed are to come from departmental Faculty Salaries. (RBC-411)
Psychiatry

33. Appoint the following physicians as indicated in the Medical School Program in Psychiatry, without tenure and without salary, effective January 1, 1974. (RBC-316)

Clinical Associate Professor
Louis F. Fabre, Jr., M.D.
Clinical Instructor
Jonathan O. Lee, M.D.

34. Appoint Richard A. DeVaul, M.D.(non-tenure) as Assistant Professor in the Medical School Program in Psychiatry, at an annual salary rate of $27,000, effective May 15, 1974. Funds needed are to come from departmental Faculty Salaries. (RBC-376)

Radiology

35. Appoint the physicians as indicated in the Medical School Program in Radiology, without tenure and without salary, effective January 1, 1974. (RBC-318)

Clinical Professor
Charles W. Yates, Sr., M.D.
Sidney Wallace, M.D.
Bao-Shan Jing, M.D.
Clinical Associate Professor
Leslie L. Lemak, M.D.
John E. Martin, M.D.
James M. Keegan, M.D.

36. Appoint Patricia A. Athey, M.D. as Assistant in Radiology in the Medical School Program in Radiology, one-third time, at an annual salary rate of $11,880, effective March 1, 1974. Dr. Athey's current appointment with The University of Texas System Medical Foundation will be reduced to two-thirds time, effective March 1, 1974. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-347)

37. Appoint Allen H. Donnelly, M.D. as Assistant in Radiology in the Medical School Program in Radiology, one-third time, at an annual salary rate of $10,680, effective March 1, 1974. Dr. Donnelly's current appointment with The University of Texas System Medical Foundation will be reduced to two-thirds time, effective March 1, 1974. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-348)

38. Appoint Frederick P. Gregg, M.D. as Assistant in Radiology in the Medical School Program in Radiology, one-third time, at an annual salary rate of $10,680, effective March 1, 1974. Dr. Gregg's current appointment with The University of Texas System Medical Foundation will be reduced to two-thirds time, effective March 1, 1974. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-349)

39. Appoint John D. Gay, M.D. as Assistant in Radiology in the Medical School Program in Radiology, one-third time, at an annual salary rate of $11,880, effective March 1, 1974. Dr. Gay's current appointment with The University of Texas System Medical Foundation will be reduced to two-thirds time, effective March 1, 1974. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-350)
HOUSTON MEDICAL SCHOOL (Continued)

Radiology (Continued)

40. Appointment of John P. Ricks, M.D. as Assistant in Radiology in the Medical School Program in Radiology, one-third time, at an annual salary rate of $10,600, effective March 1, 1974. Dr. Ricks' current appointment with The University of Texas System Medical Foundation will be reduced to two-thirds time, effective March 1, 1974. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-351)

41. Appointment of Huey D. Rutherford, M.D. as Assistant in Radiology in the Medical School Program in Radiology, one-third time, at an annual salary rate of $10,600, effective March 1, 1974. Dr. Rutherford's current appointment with The University of Texas System Medical Foundation will be reduced to two-thirds time, effective March 1, 1974. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-352)

42. Appointment of John David Coan, M.D. (non-tenure) as Assistant Professor in the Medical School Program in Radiology, at an annual salary rate of $25,000, effective July 15, 1974. Funds needed are to come from Radiology MSRD Clinical Program-Faculty Salaries. (RBC-374)

Reproductive Biology and Reproductive Endocrinology

43. Accept the resignation of Robert D. Jones as Research Associate in the Medical School Program in Reproductive Biology and Reproductive Endocrinology, at an annual salary rate of $8,800, effective February 28, 1974. (RBC-362)

44. Change the status of Kantilal H. Thakri, Medical School Program in Reproductive Biology and Reproductive Endocrinology, from Teaching and Research Assistant, at an annual salary rate of $3,000, to Teaching Associate, at an annual salary rate of $4,200, effective January 1, 1974. Funds needed are to come from NIH Contract No. NIH-NICHD-72-2776 and NIH Grant No. 1 R01 HD07664. (RBC-363)

45. Appointment of Robert W. Hall, Ph.D. as Research Associate in the Medical School Program in Reproductive Biology and Reproductive Endocrinology, at an annual salary rate of $8,800, effective April 1, 1974. Funds needed are to come from departmental NIH Grant No. 2 RO1 HD06316-03. (RBC-398)

Surgery - General

46. Appointment of the following physicians (non-tenure) as Clinical Associates in the Medical School Program in Surgery-General, without salary, effective January 1, 1974. (RBC-317)

Harold Randolph Bailey, M.D.
David Paul Sufian, D.O.

47. Appointment of Philip R. Somers, Jr., M.D. as Assistant in Surgery in the Medical School Program in Surgery-General, one-third time, at an annual salary rate of $11,280, effective March 1, 1974. Dr. Somers' current appointment with The University of Texas System Medical Foundation will be reduced to two-thirds time, effective March 1, 1974. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-353)

48. Appointment of Graham L. Hill, M.D. (non-tenure) as Visiting Lecturer in the Medical School Program in Surgery-General, at an annual salary rate of $20,000, effective December 1, 1973. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-399)
Surgery - Orthopedics

49. Appoint Donald E. Baxter, M.D. as Assistant in Orthopedics in the Medical School Program in Surgery-Orthopedics, one-third time, at an annual salary rate of $11,280, effective March 1, 1974. Dr. Baxter's current appointment with The University of Texas System Medical Foundation will be reduced to two-thirds time, effective March 1, 1974. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-342)

50. Appoint Stanley C. Jones, M.D. as Assistant in Orthopedics in the Medical School Program in Surgery-Orthopedics, one-third time, at an annual salary rate of $11,280, effective March 1, 1974. Dr. Jones' current appointment with The University of Texas System Medical Foundation will be reduced to two-thirds time, effective March 1, 1974. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-343)

51. Appoint Thomas S. Padgett, M.D. as Assistant in Orthopedics in the Medical School Program in Surgery-Orthopedics, one-third time, at an annual salary rate of $11,280, effective March 1, 1974. Dr. Padgett's current appointment with The University of Texas System Medical Foundation will be reduced to two-thirds time, effective March 1, 1974. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-344)

Surgery - Otolaryngology

52. Appoint Francis Irving Catlin, M.D. (non-tenure) as Clinical Associate in the Medical School Program in Surgery-Otolaryngology, without salary, effective February 1, 1974. (RBC-372)

Surgery - Plastic

53. Appoint Gerald W. Johnson, M.D. as Assistant in Plastic Surgery in the Medical School Program in Surgery-Plastic, one-third time, at an annual salary rate of $11,880, effective March 1, 1974. Dr. Johnson's current appointment with The University of Texas System Medical Foundation will be reduced to two-thirds time, effective March 1, 1974. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-346)

Surgery - Urology

54. Appoint Rufino Salinas, M.D. as Assistant in Urology in the Medical School Program in Surgery-Urology, one-third time, at an annual salary rate of $11,280, effective March 1, 1974. Dr. Salinas' current appointment with The University of Texas System Medical Foundation will be reduced to two-thirds time, effective March 1, 1974. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-354)

55. Appoint Michael C. DeBernardinis, M.D. as Assistant in Urology in the Medical School Program in Surgery-Urology, one-third time, at an annual salary rate of $11,280, effective March 1, 1974. Dr. DeBernardinis' current appointment with The University of Texas System Medical Foundation will be reduced to two-thirds time, effective March 1, 1974. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-355)

56. Appoint Jose L. Villalobos, M.D. as Assistant in Urology in the Medical School Program in Surgery-Urology, one-third time, at an annual salary rate of $11,280, effective March 1, 1974. Dr. Villalobos' current appointment with The University of Texas System Medical Foundation will be reduced to two-thirds, effective March 1, 1974. Funds needed are to come from Medical School Unallocated Appropriations-Faculty Salaries. (RBC-356)
HOUSTON MEDICAL SCHOOL (Continued)

Surgery - Urology (Continued)

57. Appoint Joseph N. Corriere, Jr. (with tenure) as Professor in the Medical School Program in Surgery-Urology, at an annual salary rate of $37,000, effective June 1, 1974. Funds needed are to come from departmental Faculty Salaries. (RBC-370)

COMMUNITY HEALTH SCIENCES

Family Practice

58. Appoint the following physicians (non-tenure) as Clinical Associates in the Medical School Program in Family Practice, without salary, effective March 1, 1974. (RBC-392)

Stanley A. Boyd, M.D.
B. C. Dayton, M.D.

Education and Research Computer Services

59. Transfer $20,000 from the Medical School Health Professions Capitation Grant No. E03 PE00171-03 Maintenance and Operation to Medical School Capitation Grant-Education and Research Computer Services-Computer Rental. This transfer is requested to provide operating funds needed for the balance of the 1973-74 fiscal year. (RBC-329)

HOUSTON DENTAL BRANCH

Various

1. Transfer $6,292 from the Dental Branch General Research Support Grant to fund the following projects. (RBC-387)

<table>
<thead>
<tr>
<th>Investigator</th>
<th>Grant Number</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. R. L. Warner</td>
<td>ANA-01-72-03</td>
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<tr>
<td>Dr. Eugene P. Lazzari</td>
<td>BIO-06-70-04</td>
<td>500</td>
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<td>Dr. Gerald J. Pinero</td>
<td>HIS-02-74-01</td>
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<td>Dr. Ted D. Pate &amp;</td>
<td>PHY-01-74-01</td>
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<td>Dr. J. C. McMahon</td>
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<tr>
<td>Total</td>
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<td>$6,292</td>
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INSTRUCTIONAL ADMINISTRATION

Office of the Dean

2. Change the status of John Victor Olson from Acting President of The University of Texas Health Science Center at Houston, part-time (50%) and Dean of the Houston Dental Branch, part-time (50%) to Dean of the Houston Dental Branch, full-time, at the same annual salary rate of $44,000, to be paid from the Dental Branch Dean's Office Administrative and Professional Salaries, effective April 1, 1974. Dr. Olson also serves as Professor (with tenure), without salary, in the Dental Branch Department of Restorative Dentistry-Complete Restorations. (RBC-418)

3. Change the status of Lynn G. Tucker from Executive Assistant in the Office of the President of The University of Texas Health Science Center at Houston to Executive Assistant in the Houston Dental Branch Dean's Office, at the same annual salary rate of $13,000, effective April 1, 1974. Funds needed are to come from the Dental Branch Dean's Office Administrative and Professional Salaries. (RBC-419)
HOUSTON DENTAL BRANCH (Continued)

SCHOOL OF DENTISTRY

General Practice

4. Appoint Robert A. Brollinger (non-tenure) as Clinical Associate Professor in the Dental Branch Department of General Practice, without salary, effective February 1, 1974. (RBC-384)

5. Transfer $2,500 from the Dental Branch Department of Anatomy-General and Microscopic Classified Salaries to General Practice Wages. (RBC-413)

Medicine - Endodontics

6. Transfer $675 from the Dental Branch General Research Support Grant to support the following projects. (RBC-380)

<table>
<thead>
<tr>
<th>Investigator</th>
<th>Grant Number</th>
<th>Amount</th>
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<tr>
<td>Dr. Daniel V. Regan</td>
<td>MED-50-73-01</td>
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<tr>
<td>Dr. Ronald W. Anderson</td>
<td>MED-49-73-01</td>
<td>325</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>$675</strong></td>
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Medicine - Internal Medicine

7. Transfer $5,500 from the Dental Branch General Research Support Grant to the Department of Medicine-Internal Medicine Grant No. MED-03-74-01 Consumable Supplies. This transfer is requested to support research entitled, "Tissue Culture and Electron Microscopy of the Gingiva," to be directed by Dr. George G. Rose. (RBC-420)

Physiology - Pharmacology

8. Accept the resignation of Shau-Ping Chu as Teaching Assistant in the Dental Branch Department of Physiology-Pharmacology, effective January 15, 1974. (RBC-395)

Physiology - Physiology

9. Accept the resignation of William G. Frick as Teaching Assistant in the Dental Branch Department of Physiology-Physiology, at an annual salary rate of $2,000, effective March 29, 1974. (RBC-409)

Preventive Dentistry - Community Dentistry

10. Appoint Albert J. Fasti (non-tenure) as Clinical Assistant Professor in the Dental Branch Department of Preventive Dentistry-Community Dentistry, part-time (10%), at an annual salary rate of $21,000, effective April 1, 1974. Funds needed are to come from departmental Faculty Salaries. (RBC-388)

Preventive Dentistry - Pedodontics

11. Appoint Benny J. Eppes (non-tenure) as Clinical Assistant Professor in the Dental Branch Department of Preventive Dentistry-Pedodontics, part-time (10%), at an annual salary rate of $18,000, effective January 1, 1974. Funds needed are to come from Dental Branch Interagency Cooperation Contract No. IAC (74-75)-0382. (RBC-389)

12. Accept the resignations of Kenneth C. Killian and J. Langbery, Clinical Assistant Professors, without salary and without tenure, in the Dental Branch Department of Preventive Dentistry-Pedodontics, effective February 28, 1974. (RBC-390)
HOUSTON DENTAL BRANCH (Continued)

Restorative Dentistry - Fixed Multiple Restorations

13. Cancel the appointment of Robert A. Brollling (non-tenure) as Clinical Associate Professor in the Dental Branch Department of Restorative Dentistry-Fixed Multiple Restorations, without salary, effective January 31, 1974. (RBC-383)

Surgery

14. Change the status of Paul H. McFarland, Jr. (non-tenure), Dental Branch Department of Surgery, from Associate Professor, at an annual salary rate of $23,000, to Professor, at an annual salary rate of $29,000, effective April 1, 1974. Funds needed are to come from departmental Faculty Salaries. (RBC-386)

Education and Research Computer Services

15. Appoint John P. Kopecki as Data Processing Manager in the Dental Branch Department of Education and Research Computer Services, at an annual salary rate of $17,400, effective March 18, 1974. Funds needed are to come from departmental Administrative and Professional Salaries. (RBC-414)

HOUSTON GRADUATE SCHOOL OF BIOMEDICAL SCIENCES

INSTRUCTION

General Instruction

1. Appoint the following physicians as Adjunct Assistant Professors in the Graduate School Department of General Instruction, without tenure and without salary, effective March 1, 1974. (RBC-382)

   Roger Downey Rossen, M.D.
   Robert R. Rich, M.D.

Demographic and Population Genetics Center

2. Transfer $5,000 from the Graduate School Medical Genetics Center Maintenance and Operation to Demographic and Population Genetics Center Computer Rental and Purchased Services. This transfer is requested to provide funds for the purchase of computer services. (RBC-381)

Sensory Sciences Center

3. Appoint Robert R. Blake as Research Associate in the Graduate School Sensory Sciences Center, part-time (45%), at an annual salary rate of $16,000, effective April 1, 1974. Funds needed are to come from departmental Administrative and Professional Salaries. (RBC-398)

4. Reappoint Roy H. Jacobs as Research Associate in the Graduate School Sensory Sciences Center, at an annual salary rate of $12,000, for the period January 1, 1974 through February 28, 1974. Funds needed are to come from departmental Administrative and Professional Salaries. (RBC-397)

5. Appoint Steven J. Cool, Ph.D. (non-tenure) as Adjunct Associate Professor in the Graduate School Sensory Sciences Center, without salary, effective April 1, 1974. (RBC-402)
HOUSTON ALLIED HEALTH SCIENCES SCHOOL

Office of the Dean

1. Transfer $6,506 from the Allied Health Sciences School Department of General Instruction-Faculty Salaries to the Dean's Office, as indicated. This transfer is requested to provide necessary operating funds for the balance of the 1973-74 fiscal year. (RBC-416)

   | Classified Salaries       | $1,006 |
   | Maintenance and Operation | $1,000 |
   | Equipment                 | $2,500 |
   | Travel                    | $2,000 |

   General Instruction

2. Transfer $6,500 from the Allied Health Sciences School Department of General Instruction-Faculty Salaries to Equipment ($6,000) and Travel ($500). This transfer is requested to provide necessary operating funds for the balance of the 1973-74 fiscal year. (RBC-417)

   PUBLIC HEALTH SCHOOL

   INSTRUCTION

   Disease Control

1. Accept the resignation of Darwin R. Labarthe (tenure) as Associate Professor in the Public Health School Department of Disease Control, effective December 31, 1973. (RBC-358)

2. Change the status of J. David Curb, Public Health School Department of Disease Control, from Research Associate, at an annual salary rate of $16,000, to Assistant Research Biomedical Scientist, at an annual salary rate of $19,000, effective April 1, 1974. Funds needed are to come from Public Health School HEW Contract No. NO1 HL-1-2442. (RBC-404)

3. Appoint Clair Gothard, M.Sc. as Teaching Associate in the Public Health School Department of Disease Control, without salary, effective April 1, 1974. (RBC-406)

4. Appoint Gary R. Cutter, M.S. (non-tenure) as Assistant Professor of Biometry in the Public Health School Department of Disease Control, at an annual salary rate of $17,000, for the period April 1, 1974 through June 27, 1974. Funds needed are to come from departmental HEW Contract No. NO1 HL-1-2442. (RBC-412)

   Health Services Administration

5. Accept the resignation of Harold R. Hair, II, as Research Associate in the Public Health School Department of Health Services Administration, part-time (50%), at an annual salary rate of $9,000, effective December 31, 1973. (RBC-359)

6. Accept the resignation of Milo L. Heideman, Jr., as Associate Research Comprehensive Health Planner in the Public Health School Department of Health Services Administration, at an annual salary rate of $27,400, effective February 21, 1974. (RBC-360)

7. Accept the resignation of Ingrid M. Hernandez as Research Associate in the Public Health School Department of Health Services Administration, at an annual salary rate of $9,000, effective December 31, 1973. Ms. Hernandez is transferring to the Medical School Program in Obstetrics and Gynecology. (RBC-366)
PUBLIC HEALTH SCHOOL (Continued)

Health Services Administration (Continued)

8. Increase the salary of Loretta T. Gottschalk, M.S., Assistant Research Community Health Planner in the Public Health School Department of Health Services Administration, from an annual rate of $12,600, to an annual rate of $14,500, effective April 1, 1974. Funds needed are to come from departmental HEW Contract No. NO1 NU-14073. (RBC-415)

International Health

9. Appoint Charles P. Loomis, Ph.D. (non-tenure) as Adjunct Professor of Sociology and International Health in the Public Health School Department of International Health, without salary, effective April 1, 1974. (RBC-405)

SPEECH AND HEARING INSTITUTE

General Instruction

1. Accept the resignation of Frank C. Caccamise as Audiologist in the Speech and Hearing Institute Department of General Instruction, at an annual salary rate of $14,000, effective December 28, 1973. (RBC-361)

DIVISION OF CONTINUING EDUCATION

General Instruction

1. Appoint Sally McKee, M.A. as Educational Media Specialist in the Division of Continuing Education Department of General Instruction, at an annual salary rate of $12,000, effective January 1, 1974. Funds needed are to come from Region XIV of the Texas Education Agency. (RBC-364)

Communications

2. Create the position of Administrative Clerk in the Division of Continuing Education Department of Communications, at an annual salary rate of $7,380, effective March 1, 1974. Funds needed are to come from departmental Administrative and Professional Salaries. (RBC-379)

OTHER FISCAL ITEMS

SCHEDULE OF ADDITIONAL (OR CHANGES IN) FUNDING OF CONSTRUCTION PROJECTS

<table>
<thead>
<tr>
<th>Source of Funds</th>
<th>To (New or Additional Appropriation)</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Houston Medical School</td>
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<tr>
<td>701-302 President's Residence</td>
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<tr>
<td>Houston Dental Branch</td>
<td>PUF</td>
<td>490,000</td>
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<tr>
<td>702-287 Animal Facility</td>
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</table>

Legend:
- TRB - Tuition Revenue Bonds
- PUF - Permanent University Fund Bonds
May 6, 1974

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

Dear Chancellor LeMaistre:

The docket for the June 14, 1974 meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.

Sincerely,

Frank Harrison
President
GIFTS: Acceptance is recommended for the following gifts which have been received:

San Antonio Health Science Center

<table>
<thead>
<tr>
<th>Donor</th>
<th>Purpose and Conditions</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>American Medical Association Education and Research Foundation</em></td>
<td>General Unrestricted</td>
<td>$21,029.42</td>
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<tr>
<td>535 North Dearborn</td>
<td></td>
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<tr>
<td>Chicago, Illinois 60610</td>
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</tr>
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*. No letter of transmittal received from donor
**Including distribution of $16,341.84 from the estate of Jimmie K. Cooper

San Antonio Medical School

2. Mrs. Diana G. Williamson and Mr. Byron Williamson
   Frito-Lay Tower
   Dallas, Texas 75235
   Additional contribution towards The Sudden Infant Death Research Fund 2,236 shares of Zoecon common stock (Value--$51,730.16)

3. Mr. Semp Russ
   Milam Building
   San Antonio, Texas 78205
   Additional contribution towards the endowment fund established for The Witten B. Russ Chair in Surgery 4,727 shares of Lone Star Brewery Company stock (Value--$43,133.87)

GRANTS, CONTRACTS AND AGREEMENTS (NON-GOVERNMENTAL): Approval is requested for the following:

San Antonio Health Science Center

Lincoln Laboratories
Laboratory Park
Box 1139
Decatur, Illinois 62525

Change in Grant Previously Approved:
1. Research Grant
   Research for the Development of Mycobacterial Antigens
   Dr. William T. Kniker, Department of Pediatrics
   Extension of time to May 31, 1974
   Additional funds of $7,651.91

   The Upjohn Company
   Kalamazoo, Michigan 49001

2. Clinical Grant
   Comparison of Dinoprost (PGF$_{2a}$-Tham) and Oxytocin in Induction of Labor
   Dr. Robert H. Hayashi, Department of Obstetrics & Gynecology
   $9,995.00
   April 1, 1974 – August 15, 1974

   HS-2
The Hogg Foundation for Mental Health
The University of Texas
Austin, Texas 78712

3. Consultation
   Continued Support of Consultation Activities to Mental Health Projects in Crystal City
   Dr. Alvin G. Burstein and Dr. Harry W. Martin, Department of Psychiatry
   $4,480.00
   February 1, 1974 - August 31, 1974

San Antonio Area Foundation
201 North St. Mary's Street
San Antonio, Texas 78205

4. Research Grant
   Pineal Function in Blind Humans
   Dr. Russel J. Reiter, Department of Anatomy and Dr. George G. Meyer, Department of Psychiatry
   $9,828.00
   February 1, 1974 - January 31, 1975

GRANTS, CONTRACTS AND AGREEMENTS (OTHER): Approval is requested for the following:

San Antonio Health Science Center
Bexar County Hospital District
4502 Medical Drive
San Antonio, Texas 78284

   Change in Contract Previously Approved:
   1. Change in the amount of BCHD Contract #8 ending December 31, 1974 from $346,500.00 to $542,375.48

Contra Costa County Health Department
P.O. Box 871
Martinez, California 94553

   2. Contract
      Evaluation of the Early Periodic Screening, Diagnosis and Treatment Program for Children
      Dr. Harold D. Dickson, Department of Psychiatry
      $14,000.00
      January 1, 1974 - June 30, 1974

Santa Rosa Medical Center Children's Hospital
P.O. Box 7330, Station A
San Antonio, Texas 78285

   Change in Agreement Previously Approved:
   3. Reimbursement for Professional Services for Supervision of the Newborn Nursery
      Dr. Michael J. Sweeney, Department of Pediatrics
      Additional funds of $328.00
      No extension of time
4. Contract
Design and Implementation of an Evaluative Data System for
EPSDT Medical and Developmental Screening
Dr. Harold D. Dickson, Department of Psychiatry
$2,500.00
February 1, 1974 - May 31, 1974

5. Change in Contract Previously Approved:
Approval is requested of a change in the current vending machine
contract as negotiated by Mr. Robert B. Price, Vice-President for
Business Affairs, and approved by Officers of System Administration.
The original sales price for coffee and iced drinks was $0.10 with
a 31% commission paid to The University. The new prices,
effective April 13, 1974, are $0.15 with a 41% commission paid
to The University. The current contract is effective through
August 31, 1975.

GRANTS, CONTRACTS AND AGREEMENTS (STATE): Approval is requested for
the following:

San Antonio Health Science Center
The University of Texas at Austin

1. Interagency Contract (74-75)-0829
Reimbursement for Reproduction and Assembly Services
Not to exceed $20,000.00
March 1, 1974 - August 31, 1975

2. Interagency Contract (74-75)-0839
Reimbursement for Computation Center Services
Not to exceed $5,000.00
March 1, 1974 - August 31, 1975
GRANTS, CONTRACTS AND AGREEMENTS (FEDERAL): Approval is requested for
the following:

San Antonio Health Science Center

Department of Health, Education, and Welfare

National Cancer Institute

1. Research Fellowship Award F22 CA04004-01
   **Prolactin Interaction with Mammary Carcinoma Membrane**
   Dr. Mark Costlow, Department of Medicine
   Total Award: $12,200.00
   New Money: $12,200.00
   Latest effective date May 1, 1975
   **Activities, goals, and purposes of grant:**
   The purpose of the award is to provide fellowship support for Dr. Mark Costlow for the next two years. His project will be "Prolactin Interaction with Mammary Carcinoma Membrane".
   **Other information:**
   None
   **Expenditure estimates by county:**
   All Bexar County, Texas

Change in Grant Previously Approved:

2. Training Grant 3T12 CA08069-07S1
   **Clinical Cancer Training**
   Dr. J. Bradley Aust, Department of Surgery
   Total Award: $8,324.00
   New Money: $8,324.00
   Unsolicted Supplement
   July 1, 1973 - June 30, 1974

3. Contract No. N01-CP-43353
   **Development of In Vitro Methods for the Detection of Cell-Mediated Immunologic Reactivity to Chemical Carcinogens**
   Dr. Daniel E. Thor, Department of Microbiology
   Total Award: $76,094.00
   New Money: $76,094.00
   March 1, 1974 - February 15, 1975
   **Activities, goals, and purposes of grant:**
   The objectives of this grant are to develop methods of exposing animals to chemical carcinogens in such a way that feasible in vitro tests may be developed for detection of their cell-mediated reactions toward the chemicals.
   **Other information:**
   These studies will make it possible to determine whether individuals have been exposed to a variety of agents known to be carcinogenic in animals and suspected of being so in man. Significant differences among various populations in their immunologic reactivity to known carcinogens might make it possible to correlate the degree of reactivity with the subsequent development of cancer. Correlations of this kind might provide the impetus to remove the agents from the environment.
   **Expenditure estimates by county:**
   All Bexar County, Texas
Division of Heart and Vascular Diseases

4. Research Grant 1 R01 HL16686-01
   Properties of Cytochrome Oxidase
   Dr. David C. Wharton, Department of Biochemistry
   Total Award: $70,154.00
   New Money: $70,154.00
   April 1, 1974 - March 31, 1976
   Activities, goals, and purposes of grant:
   The chief objective of this investigation is to clarify the mechanism of action of cytochrome oxidase. The interrelationships of cytochromes a and a3 and copper in the enzyme will be studied in heart muscle and microbial systems through the use of spectrophotometric and electron paramagnetic resonance techniques. The relationship of the subunit structure of the heart muscle oxidase to its activity will be investigated especially with respect to the size and composition of the subunits and to the sites of heme and copper binding. An X-ray diffraction study of a crystalline microbial cytochrome oxidase will be investigated to determine the relationships of the 2 heme Prosthetic groups on the protein.
   Other information:
   The current award is a renewal of Research Grant HL 10633 which the Principal Investigator had at Cornell University.
   Expenditure estimates by county:
   All Bexar County, Texas

5. Research Grant 5 R01 HL12415-06
   Evaluation of Left Ventricular Function
   Dr. Vernon S. Bishop, Department of Pharmacology
   Total Award: $38,605.00
   New Money: $38,605.00
   February 1, 1974 - January 31, 1975
   Activities, goals, and purposes of grant:
   The goal of this research project is to establish the various mechanical and neural factors which contribute to the control of the circulation in normal and pathological states.
   Other information:
   This award is to supplement our continuing research efforts.
   Expenditure estimates by county:
   All Bexar County, Texas
   Change in Grant Previously Approved:
   Research Grant 5 R01 HL12387-06
   Transmembrane Fluxes in Vascular Smooth Muscle
   Dr. Arthur H. Briggs, Department of Pharmacology
   Extension of time to August 31, 1975
   No additional funds

Social and Rehabilitation Service
   Change in Grant Previously Approved:
   7. Supplemental Award
      Research Grant 09-P-56107/6-02
      Social Welfare Regional Research Institute
      Dr. Harry W. Martin, Department of Psychiatry
      Revised Award: $155,229.00
      New Money: $55,229.00
      June 1, 1973 - May 31, 1974
National Institute of Arthritis, Metabolism & Digestive Diseases

8. Research Fellowship 1 F03 AM55966-01
Isolation, Characterization and Physiology of a Pineal Anti-gonadotrophic Peptide
Dr. Mary K. Vaughan, Department of Anatomy
Total Award: $12,600.00
New Money: $12,600.00
Latest effective date April 1, 1975

Activities, goals, and purposes of grant:
As a postdoctoral fellow in the laboratory of Dr. R. J. Reiter, Dr. Mary K. Vaughan will participate in on-going research concerned with the regulation of the reproductive system by the pineal gland and by pineal substances. Her activities will be to assess reproductive function using various assay methods for hormones and to evaluate the sexual capability of experimental animals following treatment with pineal factors. The ultimate goal of this research is to develop new non-steroidal contraceptive agents for use in humans.

Other information:
Dr. Reiter has, for years, been interested in the relationship of the pineal gland to the endocrine system generally and to the reproductive system specifically. Dr. Vaughan's work is just one aspect of an extensive program which hopes to define the role of the pineal gland in the overall economy of the organism.

Expenditure estimates by county:
All Bexar County, Texas

9. Research Grant 5 R01 AM12950-06
Electron Microscopic Studies of Parietal Cells
Dr. William B. Winborn, Department of Anatomy
Total Award: $18,700.00
New Money: $18,074.00
June 1, 1974 - May 31, 1975

Activities, goals, and purposes of grant:
Electron microscopic cytochemical studies will be conducted on the cells of the gastric glands in order to determine the normal physiological and pathological processes of these cells.

Other information:
This is a continuation notification for the third year of a three year grant, June 1, 1972 - May 31, 1975.

Expenditure estimates by county:
All Bexar County, Texas

Change in Grant Previously Approved:
10. Revised Research Grant 5 R01 AM12583-06
Immunocytologic Studies on Pituitary Gonadotrophins
Dr. Edward G. Rennels, Department of Anatomy
Revised Award issued to reflect restoration of previous reduction to committed level for this budget period.
Revised Award: $28,290.00
New Money: $2,000.00
January 1, 1974 - December 31, 1974
National Institute of Neurological Diseases and Stroke

11. Research Grant 1 R01 NS10602-01A1
   Chronic Heavy Metal Toxicity and CNS Biogenic Amines
   Dr. Ronald D. Huffman, Department of Pharmacology
   Total Award: $60,192.00
   New Money: $60,192.00
   May 1, 1974 - April 30, 1976
   Activities, goals, and purposes of grant:
   This research project is concerned with the determination of the effects of heavy metals (lead, mercury and manganese) on the biochemistry (biogenic amines) and electrophysiology of the central nervous system. Biochemical and electrophysiological changes in discrete areas of the brain will be assessed for possible correlations and these will be utilized in an attempt to explain some of the underlying causes of the neurological symptoms associated with intoxication of these metals.
   Other information:
   This is a completely new project for the investigators.
   Expenditure estimates by county:
   All Bexar County, Texas

   Change in Grant Previously Approved:
   12. Research Grant 5 R01 NS 09560-03
       Mechanisms of Desensitization in Skeletal Muscle
       Dr. Terry M. Mikiten, Department of Physiology
       Extension of time to May 31, 1975
       No additional funds

   United States Air Force

   Change in Grant Previously Approved:
   13. Grant AFOSR-73-2525
       Factors Influencing the Control of Heart Rate in Aerospace Environments
       Dr. Vernon S. Bishop and Dr. D. Fred Peterson, Department of Pharmacology
       Extension of time to June 30, 1974
       No additional funds
REQUESTS FOR BUDGET CHANGE: Approval is requested for the following:

San Antonio Health Science Center

Office of the President
1. Appoint Dr. James Wagner (non-tenure) as Assistant to the President at an annual salary rate of $30,000 effective June 1, 1974. (RBC 219)

Office of the Vice-President for Business Affairs
2. Increase the annual salary rate of Mr. Earl A. Siebold (non-tenure) Associate Business Manager from $18,500 to $19,400 effective March 1, 1974. Funds needed for this increase to come from Unallocated-General Administration. (RBC 178)

3. Appoint Mr. Jack C. Park (non-tenure) as Director of Procedures and Audits at an annual salary rate of $14,000 effective March 1, 1974. Funds needed for this appointment to come from Unallocated-General Administration. (RBC 179)

4. Appoint Mr. Elmo M. Cavin (non-tenure) as Budget Officer at an annual salary rate of $18,000 effective March 1, 1974. (RBC 182)

5. Change the status and annual salary rate of Mr. Billy J. Barker (non-tenure) from Budget Officer at an annual salary rate of $19,500 to Director of Financial Services at an annual salary rate of $21,000 effective March 1, 1974. (RBC 183)

6. Accept the resignation of Mr. William S. Myers (non-tenure), Executive Assistant, at an annual salary rate of $14,400, effective at the close of business March 31, 1974. Funds in the amount of $6,000.00 will be transferred to Unallocated-General Administration. (RBC 208)

Office of the Director of Accounting
7. Change the status and annual salary rate of Mr. Ernest M. DeWinnie, Jr., from Assistant Director of Accounting at an annual salary rate of $12,300 to Director of Accounting at an annual salary rate of $13,600 effective March 1, 1974. Mr. DeWinnie will also serve as Director of Mail Service. (RBC 180)

8. Accept the resignation of Mr. Elmo M. Cavin (non-tenure) as Director of Accounting at an annual salary rate of $17,000 effective at the close of business February 28, 1974. Transfer unused Administration and Professional Salaries in the amount of $8,499.98 to Unallocated-General Administration. Mr. Cavin also served as Director of Mail Service. (RBC 181)

9. Appoint Mrs. Helen I. Crall (non-tenure) as Payroll Officer at an annual salary rate of $11,400 effective March 1, 1974. Funds needed for this appointment to come from Unallocated-General Administration. (RBC 184)

Office of the Personnel Director
10. Increase the annual salary rate of Mr. Anthony T. Ramirez (non-tenure), Assistant Personnel Director, from $14,000 to $14,500 effective March 1, 1974. Funds needed for this increase are to come from Unallocated-General Administration. (RBC 197)
General Services

11. Appoint Mr. William F. Schroeder, Jr. (non-tenure) as Assistant Director of General Services at an annual salary rate of $10,000 effective April 1, 1974. Funds needed for this appointment are to be transferred to Administrative and Professional Salaries from Unallocated-General Administration. (RBC 194)

Anesthesiology

12. Appoint Dr. Govind P. Garg (non-tenure) as Assistant Professor, at an annual salary rate of $26,000 effective March 15, 1974. Funds needed for this are to come from Unallocated-Resident Instruction. (RBC 185)

13. Change the effective appointment date of Dr. Maurice Chait (non-tenure), Visiting Assistant Professor at an annual salary rate of $25,000 from March 1, 1974 to March 18, 1974. Transfer unused Teaching Salaries in the amount of $1,142.50 to Unallocated-Resident Instruction. (RBC 196)

14. Accept the resignation of Dr. George E. Webb (non-tenure) as Assistant Professor at an annual salary rate of $27,000 effective at the close of business April 30, 1974. Transfer funds in the amount of $9,000.00 to Unallocated-Resident Instruction. (RBC 221)

Anatomy

15. Increase the annual salary rate of Dr. Damon C. Herbert (non-tenure), Instructor, from $11,000 to $12,900 effective March 1, 1974. Funds for this increase are to come from Unallocated-Resident Instruction. (RBC 190)

16. Accept the resignation of Dr. Masataka Shiino (non-tenure), Associate Professor effective at the close of business April 30, 1974. Dr. Shiino was paid (10% time) Department of Anatomy - General Budget and (80% time) HEW Grant 5 R01 AM 12582-06. He also served (10% time) Graduate School Instruction. (RBC 202)

Family Practice

17. Accept the resignation of Dr. Miriam C. Fisher (non-tenure), Assistant Professor at an annual salary rate of $20,500 (60% paid from BCHD Contract #8) and (40% paid from DHEW Grant 06-H-000290-02-1) effective at the close of business February 28, 1974. (RBC 186)

18. Appoint Dr. Edward L. Quick (non-tenure) as Instructor at an annual salary rate of $20,000 for the period of February 18, 1974 through June 30, 1974. Funds needed for this appointment will come from Unallocated-Resident Instruction. (RBC 188)

19. Increase the annual salary rate of Dr. Herschel L. Douglas, (tenure), Professor and Chairman from $32,000 to $33,000 effective April 1, 1974. Funds needed are to come from Unallocated-Resident Instruction. (RBC 205)

Pathology

20. Change the status of Dr. Everett M. Donovan, Jr. (non-tenure) Assistant Professor from (without salary) to (12.5% time) at an annual salary rate of $30,000, effective April 1, 1974. Funds needed for this change are to come from Unallocated-Resident Instruction. Dr. Donovan serves as a staff member in the Department of Pathology (87.5% time) at the Veterans Administration Hospital. (RBC 206)
21. Change the status of Dr. Louis J. Manhoff (non-tenure) Assistant Professor from (without salary) to (12.5% time) at an annual salary rate of $30,000 effective April 1, 1974. Funds needed for this change are to come from Unallocated-Resident Instruction. Dr. Manhoff serves as a staff member in the Department of Pathology (87.5% time) at the Veterans Administration Hospital. (RBC 207)

Pediatrics
22. Accept the resignation of Dr. Gloria B. Abraham (non-tenure), Instructor effective at the close of business March 31, 1974. Dr. Abraham was paid (33% time Pediatrics General Budget) and (67% time Santa Rosa Medical Center Birth Defect #2 Grant). Funds will be transferred to Unallocated-Resident Instruction. (RBC 204)

Pharmacology
23. Appoint Dr. Robert G. Tabor (non-tenure) as Special Research Coordinator effective March 1, 1974 through June 30, 1974 at an annual rate of $10,000. Funds needed for this are to come from Unallocated-Resident Instruction. (RBC 187)

24. Reappoint Dr. Arvind T. Modak (non-tenure) as Special Research Coordinator at an annual salary rate of $18,000 effective March 1, 1974 through August 4, 1974. Dr. Modak will be paid from USAF Contract F41609-74-R-0014. (RBC 198)

Psychiatry
25. Change the status and promote Dr. Harry Wilmer, Jr. from Clinical Professor (non-tenure) (25% time) at an annual salary rate of $29,000 to Professor (tenure) (12.5% time) at an annual salary rate of $36,000. Dr. Wilmer will serve as a staff member (87.5% time) in the Department of Psychiatry in the Veterans Administration Hospital. Transfer unused Teaching Salaries in the amount of $1,374.98 to Unallocated-Resident Instruction. (RBC 191)

26. Reappoint Dr. Habib Nathan (non-tenure), Clinical Assistant Professor at an annual salary rate of $25,400 effective March 1, 1974. Dr. Nathan will be paid from City of San Antonio Grant (20% time) and from BCHD Contract #8 (25% time). (RBC 199)

27. Appoint Dr. James A. Lee (non-tenure), Assistant Professor (without salary) effective December 23, 1973. Dr. Lee serves as full time staff member, department of Psychiatry, Veterans Administration Hospital. (RBC 209)

28. Reappoint Dr. De La Pena (non-tenure) as Assistant Professor at an annual salary rate of $17,500 for the period of April 1, 1974 through June 30, 1974. Funds needed for this reappointment will come from Unallocated-Resident Instruction. (RBC 212)

29. Appoint Dr. Herbert H. Janszen (non-tenure) as Associate Professor (without salary) effective September 16, 1973. Dr. Janszen serves as full time staff member, Department of Psychiatry, Veterans Administration Hospital. (RBC 214)

30. Appoint Dr. James R. Crawford (non-tenure) as Assistant Professor (without salary) effective October 14, 1973. Dr. Crawford serves as full time staff member, Department of Psychiatry, Veterans Administration Hospital. (RBC 217)
San Antonio Dental School

Office of the Dean of the Dental School
31. Appoint Dr. Philip J. Boyne (non-tenure) as Dean at an annual salary rate of $47,000 effective May 1, 1974. Dr. Boyne will also serve as Professor (with tenure) in the Department of Oral Surgery, and as Professor (non-tenure) in the Department of Surgery. Transfer funds in the amount of $15,666.68 from Unallocated-Resident Instruction. (RBC 220)

Biomaterials
32. Cancel the appointment of Dr. Charles W. Jarvis (tenure) (without salary) as Associate Professor effective at the close of business March 31, 1974. Dr. Jarvis will transfer (20% time) (with tenure) to the department of Operative Dentistry effective April 1, 1974. (RBC 213)

Operative
33. Appoint Dr. Charles W. Jarvis (tenure) as Associate Professor at an annual salary rate of $29,000 (20% time) effective April 1, 1974. Funds in the amount of $2,416.65 will come from Unallocated-Resident Instruction. Dr. Jarvis served (60% time) department of Out-Patient Clinic. (RBC 211)

Out-Patient Clinic
34. Accept the resignation of Dr. Charles W. Jarvis as Clinical Director (60% time) at an annual salary rate of $29,000 effective at the close of business March 31, 1974. Funds in the amount of $7,250.00 will go to Unallocated-Resident Instruction. Dr. Jarvis is transferring to the department of Operative Dentistry (20% time) as Associate Professor (with tenure). (RBC 210)

San Antonio Graduate School of Biomedical Sciences

Graduate School Instruction
35. Accept the resignation of Dr. Masatake Shiino (non-tenure), Associate Professor effective at the close of business April 30, 1974. Dr. Shiino served 10% time General Budget - Graduate School Instruction. He also served 10% time Anatomy - General Budget and 80% time - HEW Grant 5 RO1 AM 12582-06. (RBC 203)

TRANSFER OF FUNDS

San Antonio Health Science Center

1. Amount of Adjustment: $8,000.00
   From: Credit for Sales and Services $8,000.00
   To: Maintenance and Operation $8,000.00
   For: To adjust anticipated income and to budget same amount for needed operations. (RBC 189)
### 2. Amount of Transfer: $72,158.26

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<td>To provide funds necessary for employment of additional personnel and operating expenses needed for more effective operation of these departments.</td>
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(RBC 192)

### 3. Amount of Transfer: $10,000.00

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(RBC 193)

### 4. Amount of Transfer: $9,868.92

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<td>For:</td>
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<tr>
<td>To provide funds necessary for employment of additional personnel and operating expenses needed for more efficient operation of these departments.</td>
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</table>

(RBC 195)

**HS-13**
5. Amount of Transfer: $20,100.00
   From: Unallocated - Resident Instruction $20,100.00
   To: Maintenance and Operation $17,600.00
   Travel 2,500.00
   For: To provide additional funds needed for conducting the overall Health Science Center's Continuing Education Program. (RBC 201)

6. Amount of Transfer: $4,400.00
   From: Unallocated - Resident Instruction $4,400.00
   To: Equipment $4,400.00
   For: To provide additional funds needed for purchasing equipment necessary for the operation of the department. (RBC 218)

OTHER FISCAL ITEMS

SCHEDULE OF ADDITIONAL (OR CHANGES IN) FUNDING OF CONSTRUCTION PROJECTS

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<th>Project Title</th>
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<td>403-290</td>
<td>Teaching Equipment</td>
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<td>Cafeteria</td>
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Legend:
TRB - Tuition Revenue Bonds
ANATOMY

Adjunct Professor -- without salary, without tenure
1. Nelson, Edward M.

Adjunct Assistant Professor -- without salary, without tenure
1. Sanders, Albert E.

ANESTHESIOLOGY

Clinical Professor -- without salary, without tenure
1. Grosskruetz, Doris
2. Wulfsohn, Norman L.

Clinical Associate Professor -- without salary, without tenure
1. Dannemiller, Francis J.
2. Ritter, Richard R.

Clinical Assistant Professor -- without salary, without tenure
1. Reitman, James S.
2. Webb, George E.

Clinical Instructor -- without salary, without tenure
1. Bell, George Carter
2. Downs, John B.
3. Gray, Neal H.
4. Kaplan, Joel A.
5. Morris, Allister K.
6. Pearson, Harve D.
7. Ripper, David H.
8. Roberts, Loren L.
9. Slagle, James P.
10. Slogoff, Stephen

BIOCHEMISTRY

Adjunct Professor -- without salary, without tenure
1. Clark, Dale A.

Adjunct Associate Professor -- without salary, without tenure
1. Rowlands, John R.

BIOENGINEERING

Adjunct Associate Professor -- without salary, without tenure
1. Albanese, Richard A.
2. Burton, Charles E.
3. Gruber, George J.
4. Popovich, Robert P.

COMMUNITY DENTISTRY

Clinical Associate Professor -- without salary, without tenure
1. Lozano, Carlos
2. Mc Dermott, Thomas Allen

Clinical Assistant Professor -- without salary, without tenure
1. Alford, Robert Bruce
2. Gary, Cephas W.
3. Palmer, Hubert Bernard
CLINICAL FACULTY APPOINTMENTS: (continued)

FAMILY PRACTICE

Clinical Professor -- without salary, without tenure
1. Jackson, Carmault B.
2. Nixon, Sam A.

Clinical Associate Professor -- without salary, without tenure
1. Abbott, David J.
2. Anderson, Donald L.
3. Bacon, Dan W.
4. Berry, Lloyd E.
5. Buttery, Harold D.
6. Coates, Glenn C.
7. Fisher, Miriam
8. Frederick, J. Howard
9. Jefferson, Samuel C.
10. Kelley, John B.
11. Kurtz, Irwin
12. Pipes, William F.
13. Primomo, Marian P.
14. Tallant, Arthur N.
15. Trickett, Paul C.
16. Ward, Mildred E.
17. Winn, James R.

LABORATORY ANIMAL MEDICINE

Clinical Assistant Professor -- without salary, without tenure
1. Bonney, Charles H.
2. Burton, Russell R.
3. Erickson, Howard H.

MEDICINE

Clinical Professor -- without salary, without tenure
1. Grant, Harold
2. Lancaster, Malcolm C.
3. O'Keefe, James D.
4. Ognibene, Andre J.
5. Parker, Gerald W.
6. Pipkin, James L.
7. Schiffer, Sydney
8. Wells, Ralph F.
9. Zinn, Myron B.

Clinical Associate Professor -- without salary, without tenure
1. Beato, Virgilio I.
2. Beckmann, Charles H.
3. Block, William J.
4. Bog, Louis T.
5. Burgin, William W., Jr.
7. Cooper, Elmer E.
8. Diseker, Thomas H.
9. Dodge, Billy G.
10. Eberlin, Eugene W.
11. Engelhardt, Hugo T.
13. Higgins, Lawrence S.
15. Jacobs, Milton S.
16. Jones, Frederic G.
17. Jones, George W.
18. King, Edgar W.
CLINICAL FACULTY APPOINTMENTS: (continued)

MEDICINE (continued)

Clinical Associate Professor -- without salary, without tenure
19. Lewis, Charles W.
20. Liske, Edward A.
21. Lyons, Robert E.
23. McPhaul, John J.
24. Meadows, John C.
25. Moblad, Roger G.
26. Patterson, Jerry W.
27. Poth, Duncan O.
29. Ressmann, Arthur C.
30. Richardson, Arthur W.
31. Schwartzberg, Samuel
32. Spivey, Charles G., Jr.
33. Stevens, Robert E.
34. Strauch, James H.
35. Thompson, Alfred L., Jr.
36. Thomson, George W.
37. Wagner, Clyde
38. Young, Robert L.

Clinical Assistant Professor -- without salary, without tenure
1. Aldredge, Horatio R.
2. Avant, Wilbur S., Jr.
3. Benson, Vernon R.
4. Bilbrey, Gordon L.
5. Clouse, William J.
6. Cooper, Allen D.
7. Daly, John J.
8. DeFord, James W.
9. Dotin, Larry N.
10. Duncan, James M.
11. Eastman, Harry J.
12. Ellenbogen, Charles
13. Fladger, Charles B.
14. Furrh, John E.
15. Garcia, Raymond L.
16. Gunderson, Carl H.
17. Hempel, Karl H.
18. Hunt, Dan W.
19. Jacobson, Norman L.
20. Kerr, Robert O.
21. Lampert, Morris H.
22. Lordon, Robert E.
23. Martinez, Renato G.
24. McDougle, Ronald N.
25. Miller, Alfred
26. Moseley, John C.
27. O'Neill, James R.
28. Oines, Don
29. Oxman, Herbert A.
30. Petroff, Peter A.
31. Pezzulli, Anthony
32. Phyllyk, Robert L.
33. Rahe, Wayne A.
34. Ratkin, Gary A.
35. Robinson, Donald E.
36. Rossof, Arthur H.
37. Stool, Claudia R.
CLINICAL FACULTY APPOINTMENTS: (continued)

MEDICINE (continued)

Clinical Assistant Professor -- without salary, without tenure
38. Terrell, Freeman M.
39. Thaddeus, Aloysius P.
40. Tobin, Don W.
41. Welch, Richard W.
42. Whitecar, John P.
43. Yatteau, Ronald F.
44. Zuflacht, Michael I.

Clinical Instructor -- without salary, without tenure
1. Bearden, James DeWitt, III
2. Buell, Walter F.
3. Gaona, Raul E.
4. Garovoy, Marvin R.
5. Kaihlanen, Paul M.
6. Lerner, Charles J.
7. McGarty, Garland E.
8. Merren, Michael D.
9. Player, David M.
10. Portnoy, Barry A.
11. Termulo, Cesar S.
12. Thomas, Charles N.
13. Walter, William H., III

MICROBIOLOGY

Adjunct Professor -- without salary, without tenure
1. Jensen, Robert T.
2. Kalter, Seymour S.
3. McCracken, Alexander W.

Adjunct Associate Professor -- without salary, without tenure
1. Madorsky, David D.

Adjunct Assistant Professor -- without salary, without tenure
1. Harris, Robert E.
2. Leininger, James R.

OBSTETRICS AND GYNECOLOGY

Clinical Professor -- without salary, without tenure
1. Passmore, Glen G.
2. Posey, Frank M., Jr.
3. Schanzer, Stephan N.
4. Simpson, John W.

Clinical Associate Professor -- without salary, without tenure
1. Ansbacher, Rudi
2. Boldt, John W.
3. Brekken, Alvin L.
4. Carter, James W., Jr.
5. Gambrell, Donald, Jr.
6. Hadnott, James L.
7. Halki, John J.
8. Hilliard, Robert L.
9. Lang, Garland H.
10. Locke, William E.
11. O'Toole, Robert V.
12. Otterton, Warren N.
13. Plunkett, Guy D.
14. Stokes, John F.
15. Strozier, William E.
16. Weston, Peter V.
CLINICAL FACULTY APPOINTMENTS: (continued)

OBSTETRICS AND GYNECOLOGY (continued)

Adjunct Associate Professor -- without salary, without tenure
1. Anderson, Donald L.
2. Bain, Homer A.
3. Kraemer, Duane C.

Clinical Assistant Professor -- without salary, without tenure
1. Berler, James M.
2. Cauazos, Antonio
3. Chapman, Clyde E.
4. Chenault, C. Brandon
5. Diaz, Aurelio
6. Ehresman, Joe B.
7. Harris, Robert E.
8. Krause, Donald E.
9. Lundgren, Rupert W., Jr.
10. Marasovich, Steve A.
11. Massey, Freddy M.
12. Nash, William H.
13. Nasta, Armando
14. Parker, Maxwell V.
15. Pfeiffer, John P., Jr.
16. Photopoulos, Guy
17. Prieto, Elias M.
18. Rudolph, John D.
19. Schorlemer, Robert E.
20. Schorlemer, Wendell C.
21. Simpson, Joe L.
22. Taylor, Thomas S.
23. Walsh, John N.
24. West, Donald R.

Clinical Instructor -- without salary, without tenure
1. Marcus, Robert S.
2. Rubell, Donald
3. Saidi, Mohammad H.

PATHOLOGY

Clinical Professor -- without salary, without tenure
1. Arbiter, David
2. Bayliss, Milward W.
4. De Coursey, Elbert
5. Delmer, Merle W.
6. Galindo, D. Leo
7. Hieger, Leroy R.
8. Hooker, Southern P.
9. Jacob, Norman H.
10. Lilly, Gilbert E.
11. Queen, Daniel M.
12. Severance, Alvin O.
13. Snoga, Jimmy R.
14. Van Auken, Howard A.

Clinical Associate Professor -- without salary, without tenure
1. Bennett, Dale E.
2. de Lemos, Robert A.
3. Foley, Franklin D.
4. Jacobson, Avram A.
5. Lowry, James K.
6. Mani, George C.
7. Santos, Ruben C.
CLINICAL FACULTY APPOINTMENTS: (continued)

PATHOLOGY (continued)

Clinical Assistant Professor -- without salary, without tenure
1. Averyt, Elmore M.
2. Furrh, John E.
3. Grinstead, Carl E.
4. Laughlin, W. Robert
5. Ortiz, Maria J.
6. Snider, Thomas H.
7. Stroud, Michael B.
8. Thuss, Charles J., Jr.
9. Troxler, Raymond G.

Clinical Instructor -- without salary, without tenure
1. Henley, Loren B.
2. Marraro, Robert V.
3. Mullins, James D.
4. Roberts, Thomas H.

Clinical Assistant Instructor -- without salary, without tenure
1. Duff, James L.
2. Estes, Bates B.
3. Gadea, Carlos M.
4. Girod, Marvin G.
5. Goyette, Richert E.
6. Lauer, Dean H.
7. Makar, James, Jr.
8. Perez, Rafael A.
10. Williams, James E., III

Clinical Lecturer -- without salary, without tenure
1. Hale, John M.

PEDIATRICS

Clinical Professor -- without salary, without tenure
1. Alexander, Charles B.
2. Britton, Howard A.
3. Canales, Luis
4. Estrada, Ramiro P.
5. Fein, Bernard T.
6. Gopert, Leo J.
7. Johnson, Howard H.
8. Kaliski, Sidney R.
9. Kamin, Peter B.
10. Nau, Cornelius H.
11. Rodgers, Katherine L.
12. Thornton, Melvin L.

Adjunct Professor -- without salary, without tenure
1. Kalter, Seymour S.

Clinical Associate Professor -- without salary, without tenure
1. Brendel, William B.
2. Cordova, Albert
3. Dukes, James R.
4. Hilton, Charles B.
5. Kirks, Donald R.
6. Ledbetter, Edgar O.
7. McGovern, Bruce J.
8. Michels, Max I.
## CLINICAL FACULTY APPOINTMENTS: (continued)

### PEDIATRICS (continued)

**Clinical Associate Professor -- without salary, without tenure**
1. Myers, Robert E.
2. Newton, Jerry
3. Ratner, Irving A.
4. Shaver, Benjamin B.
5. Welsh, Virginia C.

**Clinical Assistant Professor -- without salary, without tenure**
1. Baden, Melvin
2. Brasher, George W.
3. Cocke, Joseph G., Jr.
4. Daeschner, George L.
5. Fidone, George S.
6. Fitch, J. Thomas
7. Greely, Robert L.
8. Hahn, Henry B., Jr.
9. Henderson, Bruce M.
10. Koch, Howard F.
11. Kohler, William C.
12. Lawyer, Norman G.
13. Martinez, Ernesto
15. Mewborne, Bruce
16. Morehead, Charles D.
17. Rebollo, Jose R.
18. Rutman, Joel Y.
19. Shackelford, Penelope G.
20. Smith, Forrest M.
21. Steele, Russell Wesley
22. Toledo, J. Rafael
23. Villafana, Aurora P.

**Clinical Instructor -- without salary, without tenure**
1. Beauchamp, John R.
2. Borenstein, Jose
3. Escalante, Raul
4. Faggett, Walter L.
5. Felici, Alberto P.
6. Galan, Enrique M.
7. Hilliard, Donald M.
8. Karam, Jose
9. O'Shea, John W.
10. Perez, Raul F., Jr.
11. Tabet, Adalaida S.
12. Valdes-Fuerte, Luis S.
13. Wayne, Richard S.
14. Wymer, Robert A.
15. Yoo, Sook C.

### PHARMACOLOGY

**Adjunct Associate Professor -- without salary, without tenure**
1. Decker, Walter J.
2. Healy, Mary D. (Sister)
3. Yanchick, Victor A.

**Adjunct Instructor -- without salary, without tenure**
1. Payte, James T.
PHYSICAL MEDICINE AND REHABILITATION

Clinical Associate Professor -- without salary, without tenure
1. Burnham, Stanley

Clinical Assistant Professor -- without salary, without tenure
1. Fuentes, Leonel
2. Lauder, Edmund
3. See, Donald

Clinical Instructor -- without salary, without tenure
1. De La Rosa, Mael
2. Gall, Norman G.
3. Hernandez, Gilbert V.
4. Robertson, Judith E.
5. Simonsen, Rodney J.
6. Stephens, Christine

PROSTHODONTICS

Clinical Professor -- without salary, without tenure
1. Larkin, John David
2. Olson, John V.
3. Rudd, Kenneth D.

PSYCHIATRY

Adjunct Professor -- without salary, without tenure
1. Belknap, Ivan C.
2. Bruckman, Idel
3. McLemore, Samuel D.

Clinical Associate Professor -- without salary, without tenure
1. Cameron, Richard R.
2. Childers, Cecil A.
3. Forbis, Orie L., Jr.
4. Hare, Henry P., Jr.
5. Keedy, David M.
6. Kramer, Kenneth
7. Murray, Neville
8. Nacewski, Richard M.
9. Perry, Carlos J.G.
10. Smith, Laurence C., Jr.
11. Sparks, John C.

Adjunct Associate Professor -- without salary, without tenure
1. Mote, Thomas A., Jr.

Clinical Assistant Professor -- without salary, without tenure
1. Anderson, Donald L.
2. Aniol, Lawrence
3. Brown, Frederick W.
4. Corcoran, James F. T.
5. Craig, Judith E.
6. Croft, Harry A.
7. Demski, Robert S.
8. Dinaburg, Daniel C.
9. Dyer, John T.
10. Elliott, Boyce, III
11. Fitzpatrick, Alan J.
12. Gaskin, Fred Wayne
13. Gelfond, Stephen D.
PSYCHIATRY (continued)

Clinical Assistant Professor -- without salary, without tenure
15. Hargrave, George E.
16. Hargrave, Mary
17. Kouw, Willy A.
18. Kuhn, Clifford C.
19. Larsen, Reed M.
20. Lende, Elizabeth
21. Lew, Arthur
22. McCabe, Michael S.
23. McNeill, James P.
24. Nocks, James J.
25. Pilgrim, Dennis L.
26. Plyler, Charles G.
27. Quirion, Norman F.
28. Rodriguez, Francisco J.
29. Rubinstein, Barney
30. Schroeder, Betty L.
31. Scott, Richard G.
32. Seger, Forrest M.
33. Sheehy, Leonard M.
34. Skelton, John G., Jr.
35. Stenger, Earl M.
36. Sutton, Beverly J.
37. Weiss, Victor J., Jr.

Clinical Instructor -- without salary, without tenure
1. Scoggins, James M.
2. Smolins, Maxine G.
3. Walden, Robert J.

Clinical Lecturer -- without salary, without tenure
1. Burke, Patrick D.
2. Saenz, Daniel

RADIOLOGY

Clinical Professor -- without salary, without tenure
1. Hagen, Raul O.
2. Norman, Ruskin C.
3. O’Neill, Francis E.
4. Thaggard, Alvin
5. Voltz, Phillip W., Jr.

Clinical Associate Professor -- without salary, without tenure
1. Brannan, Harold M.
2. Elmendorf, Hugo F., Jr.
3. Erickson, Clark A.
4. Harvey, William C.
5. Johnston, Lloyd W.
6. Kirks, Donald R.
7. Lawrence, Leslie J.
8. Lull, Robert J.
9. Maurer, Robert M.
10. Newborn, Bruce
11. Seitzman, Leonard H.
12. Wiesner, Jerome J.
CLINICAL FACULTY APPOINTMENTS: (continued)

RADIOLOGY (continued)

Clinical Assistant Professor -- without salary, without tenure
1. Ameduri, Ardow R.
2. Douglass, Clifton P., Jr.
3. Goff, David L.
4. Hubbard, Robert B.
5. Markette, Billy B.
6. Moore, Terence N.
7. Queralt, Ignacio
8. Riley, Fred W., Jr.
9. Thompson, Richard M.

Adjunct Assistant Professor -- without salary, without tenure
1. Kopp, David T.
2. Meltz, Martin L.

SURGERY

Clinical Professor -- without salary, without tenure
1. Campbell, Donald
2. Case, John B.
3. Clark, Fletcher A., Jr.
4. Coffman, Graham M.
5. Cox, William A.
6. Cuello, Leo
7. DeCoursey, Elbert
8. Dooley, Byron N.
9. Fischer, Albert
10. Frazell, Edgar L.
11. Gorsuch, Paul L.
12. Greenfield, Philip
14. Heaney, John P.
15. Helton, John W.
17. Hills, William J.
18. Hinchev, John J.
19. Hogan, Thomas F., Jr.
20. Hulse, Charles A.
22. Kline, Philip S.
23. Klinger, Paul
24. Lee, Jack B.
25. Lepeere, Robert H.
26. Mantell, Louis K.
27. Matthews, John L.
28. McComb, Asher R.
29. McCurdy, Marion W.
30. Mims, James L., Jr.
31. Munslow, Ralph A.
32. Myers, Paul W.
33. Nadig, Perry W.
34. Nichol, William W.
35. Nisbet, Alfred A.
36. Oxford, Marvin B.
37. Fridgen, James E.
39. Sammis, Frank C., Jr.
40. Sammis, William L.
41. Sawtelle, William W.
42. Schwarting, Bland H.
43. Sykes, Edwin M., Jr.
CLINICAL FACULTY APPOINTMENTS: (continued)

SURGERY (continued)

Clinical Professor -- without salary, without tenure
44. Thomas, Kenneth W.
45. Thompson, Milton S.
46. Weixel, Francis X.
47. Wolff, Hugh L.
48. Ziperman, H. Haskell

Clinical Associate Professor -- without salary, without tenure
1. Armstrong, Raymond G.
2. Bouzard, Walter C.
3. Branch, Charles L.
4. Burkholder, George V.
5. Butler, Milton C., Jr.
6. Canales, Gregorio M.
7. Capps, William F., Jr.
8. Dart, Leroy H., Jr.
9. Davis, Roy N.
10. Day, Phillip L.
11. Dewitt, Harvey J.
12. Doyle, John L.
13. Earle, Jack L.
15. Glass, Thomas G., Jr.
16. Hagood, Clyde O., Jr.
17. Hardy, Robert C.
19. Herff, August F., Jr.
20. Hudson, Thomas L.
21. Hutchinson, Robert H.
23. Karbach, Hylmar E., Jr.
24. Kolodny, Stanley C.
25. Livesay, George B.
26. McGovern, Bruce J.
27. McMillan, Orin P.
28. Newby, Marvin G.
29. Nixon, James W., Jr.
30. O'Brien, Eugene T.
31. Otero, Pedro J.
32. Pankowsky, Jaime
33. Price, Richard D.
34. Pruitt, Basil A., Jr.
35. Ratner, Irving A.
36. Reddix, Mason C.
37. Richards, John C.
38. Roche, William C.
39. Roof, Willie R.
40. Rowland, Spencer A.
41. Sertich, Anthony P.
42. Simmons, John R.
43. Stanford, William
44. Stool, Newsom
45. Sykes, John H. T.
46. Treasure, Robert L.
47. Urrutia, Aureliano A.
48. Waggoner, Daniel L.
49. Williams, Coyle W., Jr.
50. Williamson, John A.
51. Wimpee, James D.
Clinical Assistant Professor -- without salary, without tenure

1. Aldrich, Robert C.
2. Ball, Thomas P.
4. Bilderback, Robert D.
5. Bowers, Bruce T.
6. Boyd, E. M.
7. Bragg, Thomas G.
8. Bratcher, Everett P.
9. Braverman, Sheldon
12. Chiscano, Alfonso
13. Cohen, Lawrence A.
15. Coughlin, John P.
16. Crawford, H. Wayne
17. Crouch, David M.
18. Del Villar, Ricardo G.
19. Eichler, Allen C.
20. Escamilla, Hector A.
21. Fennegan, Francis M.
22. Fite, Fulton W.
23. Fitzgerald, Robert T.
24. Gallagher, Terrence M.
25. Galo, Michael V.
26. Gangai, Mauro F.
27. George, Richard E.
28. Haff, Roderick C.
29. Hall, C. William
30. Haynes, Richard J.
31. Henry, Jack H.
32. Isensee, Christopher H.
33. Jegathesan, Subramania
34. Johnson, Stewart M.
35. Jones, Robert L., Jr.
36. Julian, Jerry D.
37. Kiplin, Lydell C.
38. Komet, Harvey
39. Langelier, Paul R.
40. Langston, John H., Jr.
41. Lee, J. Fletcher
42. Lemay, Sonley R., Jr.
43. Leone, Charles R., Jr.
44. Madiedo, Eduardo, Jr.
45. Marlowe, Julius P.
46. Massari, Rudolph J.
47. McFarlane, Joe R., Jr.
48. Miles, William Keith
49. Minns, William R.
50. Mozersky, David J.
51. Mumma, John V.
52. Palmer, Bernard W.
53. Partain, Robert A., III
54. Peterson, Hugh D.
55. Quiroga, Pedro
56. Rupp, Richard N.
57. Sanders, Albert E.
58. Seitter, Girard, III
59. Shindle, Richard D.
60. Simmons, James W., Jr.
Clinical Assistant Professor -- without salary, without tenure

61. Soudah, Harold P.
62. Stone, Robert G.
63. Thiltgen, Robert D.
64. Trevino, Hilario
65. Walder, Arnold I.
66. Willhoite, David R.
67. Wilmore, Douglas W.
68. Wilson, Anthony
69. Wolfe, David C.
70. Zorrilla, Leopoldo

Clinical Instructor -- without salary, without tenure

1. Arredondo, Eradio
2. Caldarola, Vincent T.
3. Capello, Juan J.
4. Christiansen, Robert L.
5. Coleman, James P.
6. Duncan, James M.
7. Ellington, Alvin W., Jr.
8. Farrimond, Kenneth L.
9. Fernandez, Jose L.
10. Frey, Joseph B.
11. Hernandez, Roger
12. Huff, James F.
13. Hunter, David M.
14. Jones, Robert N.
15. Kearney, John J.
16. Kendrick, Daniel L.
17. Leibold, David G.
18. Lewis, John W.
19. Long, James M., III
20. Madden, James J., Jr.
21. Marmesh, Paul J.
22. McAlhany, Joseph C., Jr.
23. McCulloch, John H.
24. Mims, Joe M.
25. Neigut, Joseph S.
26. Pamplin, Gary R.
27. Pfaffenbach, David D.
28. Ponsdomenech, Elmo R.
29. Portales, Carlos
30. Reid, Thomas R.
31. Schuessler, William W.
32. Smith, Joshua
33. Smith, Quintin J.
34. Steckler, Robert M.
35. Stratton, Cary E.
36. Taegel, Edwin J.
37. Tecuanhuey, Leopoldo, Jr.
38. Terry, Stuart A.
39. Thornton, William E.
40. Tippett, Joe W.
41. Westwood, R. Mikel
42. Wilson, Richard D.

Clinical Lecturer -- without salary, without tenure

1. Gatewood, John B.
2. Gruber, Haskell
3. Marengo-Rowe, Alain J.
Chancellor Charles A. LeMaistre  
The University of Texas System  
601 Colorado Street  
Austin, Texas 78701  

Dear Chancellor LeMaistre:  

The docket for the June 14, 1974 meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.  

I recommend approval.  

Sincerely yours,  

R. Lee Clark, M. D.  
President  

RLC: sk
GIFTS: The following gifts have been received and are submitted for formal approval of the Board of Regents.

<table>
<thead>
<tr>
<th>Donor</th>
<th>Purpose and Explanation</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>M. D. Anderson</td>
<td>Gift for Use in Cancer Research</td>
<td>$5,000.00</td>
</tr>
<tr>
<td>2. Hoffmann-LaRoche, Inc. Attention: Mr. Jack Snyder Nutley, New Jersey 07110</td>
<td>Hoffmann LaRoche, Inc. Grant For Dr. Martin's Research Program</td>
<td>$15,000.00</td>
</tr>
<tr>
<td>3. Baker &amp; Taylor Drilling Company c/o Mr. Max Banks Box 2748 Amarillo, Texas 79101</td>
<td>Expansion of M. D. Anderson Hospital</td>
<td>$25,000.00*</td>
</tr>
<tr>
<td>4. Robert A. Welch Foundation c/o Mr. Roger J. Wolfe 2010 Bank of The Southwest Building Houston, Texas 77002</td>
<td>Second Installment Payment For The Robert A. Welch Chair in Chemistry Which Will Total $650,000</td>
<td>$125,000.00</td>
</tr>
<tr>
<td>5. Estate of Ruth H. Ainsworth c/o J. A. McNabb, Jr. P. O. Box 2809 Orlando, Florida 32802</td>
<td>Ruth Harriet Ainsworth Estate Fund for Developmental Therapeutics</td>
<td>$16,271.46*</td>
</tr>
<tr>
<td>6. Colgate-Palmolive Company 300 Park Avenue New York, New York 10022</td>
<td>Colgate-Palmolive Company Grant for Research Program of Dr. Bodey</td>
<td>$5,000.00*</td>
</tr>
<tr>
<td>7. The Honorable A. Garcia Cortina Sierra Tarahumara 620 Mexico 10, DF Mexico</td>
<td>Expansion of M. D. Anderson Hospital</td>
<td>$5,000.00*</td>
</tr>
<tr>
<td>8. Lily Reber Hills Estate c/o Mr. Royce Adkins Adkins and Chapman P. O. Box 68 Haskell, Texas 79521</td>
<td>Additional Distribution from Lily Reber Hills Estate To be Used for Cancer Research</td>
<td>$8,750.00</td>
</tr>
</tbody>
</table>

* No Letter of Transmittal Received
AMENDMENTS TO CLASSIFIED PERSONNEL PAY PLAN

M. D. Anderson

The following new classifications to the 1973-74 Classified Personnel Pay Plan have been approved by the System Personnel Director and the Deputy Chancellor for Administration and are submitted for formal approval of the Board of Regents.

<table>
<thead>
<tr>
<th>CLASS CODE</th>
<th>JOB TITLE</th>
<th>SALARY RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>6181</td>
<td>Dining Room Worker II</td>
<td>$455-615/Month</td>
</tr>
<tr>
<td>6182</td>
<td>Dining Room Worker I</td>
<td>$412-556/Month</td>
</tr>
<tr>
<td>8717</td>
<td>Assistant Print Shop Supervisor</td>
<td>$727-949/Month</td>
</tr>
<tr>
<td>8721</td>
<td>Offset Press Supervisor</td>
<td>$703-949/Month</td>
</tr>
<tr>
<td>8787</td>
<td>Typesetter Operator</td>
<td>$680-859/Month</td>
</tr>
<tr>
<td>8780</td>
<td>Bindery Equipment Operator</td>
<td>$503-680/Month</td>
</tr>
<tr>
<td>9216</td>
<td>Assistant Statistician</td>
<td>$520-703/Month</td>
</tr>
<tr>
<td>9323</td>
<td>Systems Analyst Assistant</td>
<td>$615-831/Month</td>
</tr>
</tbody>
</table>

GRANTS, CONTRACTS AND AGREEMENTS (NON-GOVERNMENTAL): The following grant was awarded and is submitted for formal approval of the Board of Regents.

M. D. Anderson

1. The Population Council Grant No. M74.63C provides new funds in the amount of $15,000 for the period April 1, 1974 through March 31, 1975, the total project period. This grant provides support for development of methods to separate different developmental stages of sperm cells and nuclei or a preparative scale for the assay of mutagenic effects of chemical substances on mouse sperm cell DNA. The majority of the expenditures from this award will be made in Harris County. This grant is under the direction of Dr. Marvin L. Meistrich.
The following Contracts, Grants and Amendments have been awarded and are submitted for formal approval of the Board of Regents.

M. D. Anderson

1. Department of Health, Education and Welfare, Public Health Service, National Cancer Institute Grant No. 3 T01 CA05232-03S1 CAN releases the remaining balance from prior year funds of $2,905 to be used during this budget period July 1, 1973 through June 30, 1974. The total project period for this grant is July 1, 1971 through June 30, 1974. This grant provides support for research training in pathology for postdoctoral trainees. The majority of the expenditures from this award will be made in Harris County. This grant is under the direction of Dr. William O. Russell.

2. Department of Health, Education and Welfare, Public Health Service, National Cancer Institute Grant No. 3 T12 CA08000-08S1 CCC provides supplemental funds in the amount of $52,067 for a revised total award of $146,814 for the period July 1, 1973 through June 30, 1974. The total project period for this grant is July 1, 1971 through June 30, 1976. This grant provides for continued support of education programs in clinical cancer and the biology of human cancer for selected trainees. The majority of the expenditures from this award will be made in Harris County. This grant is under the direction of Dr. George R. Blumenschein.

3. Department of Health, Education and Welfare, Public Health Service, National Institute of Arthritis, Metabolism & Digestive Diseases Grant No. 5 R01 AM09155-09 HEM extends the budget period to April 1, 1973 through July 31, 1974 and provides an additional $2,859 for a total grant award of $24,224 plus appropriate indirect costs. The total project period for this grant is April 1, 1971 through July 31, 1974. This grant provides funds for study of the relationship between the hormone erythropoietin and the regulation of marrow activity according to tissue requirements for oxygen. The majority of the expenditures from this award will be made in Harris County. This grant is under the direction of Dr. Raymond Alexanian.

4. Department of Health, Education and Welfare, Public Health Service, National Institute of Arthritis, Metabolism & Digestive Diseases Grant No. 5 R01 AM 9155-10 HEM provides new funds in the amount of $20,526 plus appropriate indirect costs for the period April 1, 1974 through March 31, 1975. The total project period for this grant is April 1, 1974 through March 31, 1977. This grant provides funds for study of the relationship between the hormone erythropoietin and the regulation of marrow activity according to tissue requirements for oxygen. The majority of the expenditures from this award will be made in Harris County. This grant is under the direction of Dr. Raymond Alexanian.

5. Department of Health, Education and Welfare, Public Health Service, National Institute of Child Health and Human Development Grant No. 5 R01 HD05803-04 CBH provides new funds in the amount of $30,570 plus appropriate indirect costs for the period May 1, 1974 through April 30, 1975. The total project period for this grant is May 1, 1971 through April 30, 1975. This grant provides support to study the biochemical nature of DNA restriction in chromatin during early embryogenesis and to study the changes and functions of nuclear proteins during spermatogenesis in rats or mice. The majority of the expenditures from this award will be made in Harris County. This grant is under the direction of Dr. Lubomir S. Halicka.

6. Department of Health, Education and Welfare, Public Health Service, National Cancer Institute Contract No. B01-CM-61156, Modification No. 12 provides new funds in the amount of $48,600 for a revised contract amount of $1,873,979 for the period March 21, 1974 through June 20, 1974. The total project period for this contract is June 21, 1966 through June 20, 1974. This contract provides for continuation of pharmacologic studies of antitumor agents. The majority of the expenditures from this award will be made in Harris County. This contract is under the direction of Dr. Ti Li Loo.
7. Department of Health, Education and Welfare, Public Health Service, National Cancer Institute Grant No. 3 TO1 CA05099-12S1 CAN provides supplemental funds in the amount of $1,612 for a revised total award of $274,247 for the period July 1, 1973 through June 30, 1974. The total project period for this grant is July 1, 1971 through June 30, 1976. This grant provides for the training of radiation therapists and for basic science graduates in the areas of radiological physics, biophysics, and radiation biology. The majority of the expenditures from this award will be made in Harris County. This contract is under the direction of Dr. Gilbert H. Fletcher.

8. Department of Health, Education and Welfare, Public Health Service, National Cancer Institute Grant No. 3 TO1 CA05230-04S1 CAN provides supplemental funds in the amount of $4,091 for a revised total award of $171,146 for the period July 1, 1973 through June 30, 1974. The total project period for this grant is July 1, 1970 through June 30, 1976. This grant provides support for a program in clinical pharmacology and experimental therapeutics. Clinical pharmacology training in synthesis, preclinical pharmacology, biochemical pharmacology, and human pharmacology emphasizes drug development for the control of malignancies in man. The majority of the expenditures from this award will be made in Harris County. This grant is under the direction of Dr. Emil J. Freireich.

9. Department of Health, Education and Welfare, Public Health Service, National Cancer Institute Grant No. 5 KO6 CA02501-12 NCR provides new funds in the amount of $31,778 for the period June 1, 1974 through May 31, 1975, the total project period. This grant provides support for the continued studies of chemotherapy in malignant disease in children. The majority of the expenditures from this award will be made in Harris County. This grant is awarded to Dr. Wataru W. Satow under the direction of Dr. Robert C. Hickey.
DEPARTMENT OF PEDIATRICS

Professor - Without Salary, Without Tenure

1. Alfred G. Knudson, Jr., M.D., Ph.D.
M. D. Anderson

General Administration (Business Office, Data Processing)

1. Appointment. Theodore A. Miller, Assistant Data Processing Supervisor, Business Office, Data Processing (General Funds), payable at the full time rate of $17,500.00 per annum effective March 18, 1974. The source of funds for this action is the Reserve for Professional Salaries Account. (RBC 146)

Research (Developmental Therapeutics)

2. Change in Source of Funds. Robert B. Livingston, M. D., Assistant Internist and Assistant Professor of Medicine (Without Tenure), Developmental Therapeutics from the full time rate of $23,000.00 per annum payable from Grant NIH-5-R10-CA-08859 to the full time rate of $23,000.00 per annum payable from Grant ACS-CI-22B effective January 1, 1974. The source of funds for this action is available grant funds. (RBC 149)

Research (Computer Science Laboratory, Institute of Biomathematics)

3. Resignation. Fred C. Delaney, Systems Analyst, Computer Science Laboratory, Institute of Biomathematics, payable at the full time rate of $18,000.00 per annum effective at the close of business April 15, 1974. Mr. Delaney has been paid from available grant funds NIH-2-R10-CA-12014. (RBC 143)

4. Change in Title. Elisa T. Lee, Ph.D., Computer Science Laboratory, Institute of Biomathematics from Operations Research Analyst (Other Staff) payable at the full time rate of $15,000.00 per annum from Grant NIH-5-R01-CA-11430 to Research Associate and Instructor of Biomathematics (Without Tenure) payable at the full time rate of $15,000.00 per annum from Grant NIH-5-R01-CA-11430 effective April 1, 1974. The source of funds for this action is available grant funds. (RBC 153)

Patient Care Activities (Office of Associate Director-Clinic)

5. Appointment. Sonia Cannon, Secretary II, Office of Associate Director-Clinic (General Funds) payable at the full time rate of $6,456.00 per annum effective March 18, 1974. The source of funds for this appointment is the Reserve for Classified Salaries Account. (RBC 144)

Patient Care Activities (Clinic Administration)

6. Appointment. Susan T. Frock, Secretary II, Clinic Administration (General Funds) payable at the full time rate of $6,240.00 per annum effective March 1, 1974. The source of funds for this appointment is the Reserve for Classified Salaries Account. (RBC 138)

7. Appointment. Oscar A. Salazar, Systems Analyst Assistant, Clinic Administration (General Funds) payable at the full time rate of $7,380.00 per annum effective March 1, 1974. The source of funds for this appointment is the Reserve for Classified Salaries Account. (RBC 145)

8. Appointment. James O. Pernau, Assistant Administrator, Clinic Administration (General Funds) payable at the full time rate of $14,000.00 per annum effective April 8, 1974. The source of funds for this appointment is the Reserve for Professional Salaries Account. (RBC 152)
Patient Care Activities (Appointments)

9. Appointment. Nona M. Caradine, Clerk II, Appointments (General Funds) payable at the full time rate of $5,664.00 per annum effective March 1, 1974. The source of funds for this action is the Reserve for Classified Salaries Account. (RBC 142)

10. Appointment. Cynthia D. Jackson, Clerk II, Appointments (General Funds) payable at the full time rate of $5,664.00 per annum effective March 21, 1974. The source of funds for this action is the Reserve for Classified Salaries Account. (RBC 147)

Patient Care Activities (Blood Bank)

11. Appointment. Helen M. Akins, Staff Nurse, Blood Bank (General Funds) payable at the full time rate of $10,308.00 per annum effective February 1, 1974. The source of funds for this action is the Reserve for Classified Salaries Account. (RBC 139)

Patient Care Activities (Clinical Physics)

12. Change in Source of Funds. James R. Evton, Assistant in Physics, Clinical Physics from the full time rate of $19,400.00 per annum payable from Grant NIH-2-P02-CA-10006 to the full time rate of $19,400.00 per annum payable from Grant NIH 5-P02-CA-06994 effective March 1, 1974. The source of funds for this action is available grant funds. (RBC 146)

General Services (Development Office)

13. Appointment. Frances B. Calkins, Assistant for Development, Development Office (General Funds) payable at the sixty-seven percent time rate of $8,000.00 per annum (Full time rate $12,000.00) effective February 18, 1974. The source of funds for this appointment is the Reserve for Professional Salaries Account. (RBC 141)

14. Appointment. John M. Tweed, Associate for Development, Development Office (General Funds) payable at the full time rate of $25,000.00 per annum effective April 1, 1974. The source of funds for this appointment is the Reserve for Professional Salaries Account. (RBC 151)

General Services (Central Stores and Transportation)

15. Appointment. Ulyssess Alexander, Driver, Central Stores and Transportation (General Funds) payable at the full time rate of $4,944.00 per annum effective February 1, 1974. The source of funds for this action is the Reserve for Classified Salaries Account. (RBC 140)

Transfer of Funds

16. Transfer funds as indicated below to Various Departmental Maintenance and Operation Appropriations to provide funds for expenditures for operations not previously anticipated. (RBC 150)

<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>APPROPRIATION ITEM AND TITLE</th>
<th>PAGE NO.</th>
<th>AMOUNT</th>
</tr>
</thead>
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<tr>
<td>Office of the Director</td>
<td>Maintenance &amp; Operation</td>
<td>4</td>
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<tr>
<td>Business Office, Patient</td>
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<td></td>
<td></td>
</tr>
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<td>Accounts</td>
<td></td>
<td>13</td>
<td>$4,000</td>
</tr>
<tr>
<td>Personnel</td>
<td></td>
<td>19</td>
<td>$5,000</td>
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<tr>
<td>Office of Research</td>
<td></td>
<td>52</td>
<td>$2,500</td>
</tr>
<tr>
<td>Epidemiology</td>
<td></td>
<td>91</td>
<td>$2,500</td>
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</table>

CC-8
<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>APPROPRIATION ITEM AND TITLE</th>
<th>PAGE NO.</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Animals</td>
<td>Maintenance &amp; Operation</td>
<td>93</td>
<td>$3,500</td>
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<td>Research Medical Library</td>
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<td>114</td>
<td>22,000</td>
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<td>Office of Associate Director- Clinic</td>
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<td>Clinic Administration</td>
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<td>119</td>
<td>7,500</td>
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<td>Blood Bank</td>
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<td>125</td>
<td>100,000</td>
</tr>
<tr>
<td>Dental Services</td>
<td></td>
<td>129</td>
<td>1,500</td>
</tr>
<tr>
<td>Electroencephalograph Service</td>
<td></td>
<td>130</td>
<td>750</td>
</tr>
<tr>
<td>Inhalation Therapy</td>
<td></td>
<td>133</td>
<td>5,000</td>
</tr>
<tr>
<td>Clinical Chemistry and Laboratory Medicine</td>
<td></td>
<td>141</td>
<td>90,000</td>
</tr>
<tr>
<td>Clinical Physics</td>
<td></td>
<td>145</td>
<td>20,000</td>
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<tr>
<td>Surgical Services</td>
<td></td>
<td>168</td>
<td>2,500</td>
</tr>
<tr>
<td>Hospital Inpatient Services- General</td>
<td></td>
<td>170</td>
<td>7,500</td>
</tr>
<tr>
<td>Information Office</td>
<td></td>
<td>184</td>
<td>5,000</td>
</tr>
<tr>
<td>Central Stores and Transportation</td>
<td></td>
<td>190</td>
<td>12,500</td>
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<tr>
<td>Physical Plant</td>
<td></td>
<td>205</td>
<td>125,000</td>
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<tr>
<td>Reserves</td>
<td>Reserve for Maintenance and Operation</td>
<td>208</td>
<td>250,000</td>
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<td></td>
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<td>TOTAL $669,500</td>
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**TRANSFER FROM:**

<table>
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<tr>
<th>DEPARTMENT</th>
<th>APPROPRIATION ITEM AND TITLE</th>
<th>PAGE NO.</th>
<th>AMOUNT</th>
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</thead>
<tbody>
<tr>
<td>Reserves</td>
<td>Reserve for Professional Salaries</td>
<td>208</td>
<td>$669,500</td>
</tr>
</tbody>
</table>
May 9, 1974

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

Dear Chancellor LeMaistre:

The docket for the June 14, 1974 meeting of the Board of Regents is submitted for your recommendation and presentation to the Board.

I recommend approval.

Sincerely,

Marilyn D. Willman
President
June 14, 1974

GIFTS TO THE UNIVERSITY OF TEXAS SYSTEM SCHOOL OF NURSING

The following gifts have been received. I recommend acceptance and that the thanks and appreciation of the Board be sent to the donors by the Secretary.

A single asterisk preceding the name of the donor indicates no letter of transmittal from the donor.

<table>
<thead>
<tr>
<th>Donor</th>
<th>Purpose and Conditions</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Faith Foundation</td>
<td>Houston Nursing School&lt;br&gt;Gift to be used for the purchase of equipment and furnishings.</td>
<td>$25,000.00</td>
</tr>
<tr>
<td>George W. Brackenridge Foundation</td>
<td>San Antonio Nursing School&lt;br&gt;Gift to be used for the purchase of classroom equipment.</td>
<td>$5,000.00</td>
</tr>
</tbody>
</table>
The University of Texas System School of Nursing
Austin - El Paso - Fort Worth - Galveston - Houston - San Antonio

June 14, 1974

Grants, Contracts and Agreements (Federal)

1. Grant B-7-53-9013-10-1 was increased by the Department of Health, Education and Welfare in the amount of $34,032 (Travis County) for the period July 1, 1973 through June 30, 1975 for undergraduate scholarships. This amount represents the Nursing School's share of additional funds made available from released unobligated Fiscal Year 1973 Funds and the Labor/DHEW Appropriation Act for Fiscal Year 1974 (Public Law 93-192).

2. Grant G-7-53-9013-10-1 was increased by the Department of Health, Education and Welfare in the amount of $6,304 (Travis County) for the period July 1, 1973 through June 30, 1975 for graduate scholarships. This amount represents the Nursing School's share of additional funds made available from released unobligated Fiscal Year 1973 Funds and the Labor/DHEW Appropriation Act for Fiscal Year 1974 (Public Law 93-192).

3. Grant MH06340-18 was increased by the Department of Health, Education and Welfare in the amount of $42,730 (Travis County) for the period July 1, 1973 through June 30, 1974 for Psychiatric - Mental Health Nursing (Graduate).
CLINICAL AND ADJUNCT FACULTY APPOINTMENTS
SEPTEMBER 1, 1974 THROUGH AUGUST 31, 1975

Austin Nursing School

Clinical Assistant Professor -- without salary, without tenure
1. John P. Clarkin, M.D.
2. Robert L. Hargrove, M.D.
3. J. William Hearn, M.D.
4. Sister Regis Maillian, M.S.N., R.N.

Clinical Assistant Instructor -- without salary, without tenure
1. Barbara Otting, B.S.N., R.N.

Fort Worth Nursing School

Adjunct Associate Professor -- without salary, without tenure
1. James W. Finney, Ph.D.

Clinical Assistant Professor -- without salary, without tenure
1. H. E. Eugene Bonham, M.D.

Clinical Instructor -- without salary, without tenure
1. Elaine Jutson, M.Ed., R.N.

Houston Nursing School

Clinical Assistant Professor -- without salary, without tenure
1. Sudie Cornell, M.S.N., R.N.
2. Jeanette Kernicki, M.S.N., R.N.

San Antonio Nursing School

Adjunct Associate Professor -- without salary, without tenure
1. Harold Dickson, Ph.D.
2. Jack Hartley, D.D.S.
3. Herman Wigodsky, M.D.

Clinical Associate Professor -- without salary, without tenure
1. Marguerite Burt, M.P.H., R.N.

Clinical Assistant Professor -- without salary, without tenure
1. Sister Christina Lennon, M.S.N., C.N.M., R.N.
THE UNIVERSITY OF TEXAS SYSTEM SCHOOL OF NURSING

Austin - El Paso - Fort Worth - Galveston - Houston - San Antonio

June 14, 1974

RECOMMENDED AMENDMENTS TO THE 1973-74 BUDGET

System Nursing School
1. Transfer of Funds:
   From: Unallocated Account
   $8,000.00
   To: Maintenance and Operation
   For: To provide operating funds for the remainder of the fiscal year.
       (RBC # N-236)
   $8,000.00

2. Transfer of Funds (Continuing Education):
   From: Wages
   $50.00
   Maintenance and Operation
   $114.00
   Travel
   $166.00
   To: Classified Salaries
   $390.00
   For: To provide additional funds for a Clerical Assistant (RBC # N-241)

Austin Nursing School
3. Transfer of Funds:
   From: Faculty Salaries
   $2,756.00
   To: Classified Salaries
   $2,756.00
   For: To provide funds for an Academic Assistant and a Senior Secretary
       (RBC # N-243)

El Paso Nursing School
4. Transfer of Funds:
   From: Physical Plant - Maintenance and Operation
   $1,100.00
   To: Physical Plant - Wages
   $1,100.00
   For: To provide funds for paying overtime to the Physical Plant staff
       (RBC # N-244)

San Antonio Nursing School
5. Appointment of Margaret Emilie Nicolls, Instructor, (non-tenure), one-half time, at a 9 months rate of $11,000 for the period June 1, 1974 through June 30, 1974. Source of Funds: C.E. Satellite Personnel. (RBC # N-234)

OTHER FISCAL ITEMS

SCHEDULE OF ADDITIONAL (OR CHANGES IN) FUNDING OF CONSTRUCTION PROJECTS

<table>
<thead>
<tr>
<th>Project No.</th>
<th>Project Title</th>
<th>Source of Funds</th>
<th>To (New or Additional Appropriation)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>908-294</td>
<td>Remodeling Facilities</td>
<td>IOP</td>
<td></td>
<td>$104,000</td>
</tr>
</tbody>
</table>

Legend:
IOP - Interest on Bond Proceeds

N-5
# LAND AND INVESTMENT REPORT

Meeting of June 14, 1974

## INDEX

<table>
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</tr>
</thead>
<tbody>
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<td>A. INVESTMENT MATTERS - MONTH ENDED MARCH 31, 1974</td>
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<tr>
<td>2</td>
<td>1. Report on Securities Transactions</td>
</tr>
<tr>
<td>9</td>
<td>2. Cash Statement - Permanent Fund and Available Fund</td>
</tr>
<tr>
<td></td>
<td>B. INVESTMENT MATTERS - MONTH ENDED APRIL 30, 1974</td>
</tr>
<tr>
<td>11</td>
<td>1. Report on Securities Transactions</td>
</tr>
<tr>
<td>16</td>
<td>2. Cash Statement - Permanent Fund and Available Fund</td>
</tr>
<tr>
<td></td>
<td>II. TRUST AND SPECIAL FUNDS</td>
</tr>
<tr>
<td>18</td>
<td>A. INVESTMENT MATTERS - MONTH ENDED MARCH 31, 1974</td>
</tr>
<tr>
<td>22</td>
<td>1. Report on Securities Transactions</td>
</tr>
<tr>
<td></td>
<td>2. Securities Transactions Detail</td>
</tr>
<tr>
<td>29</td>
<td>B. INVESTMENT MATTERS - MONTH ENDED APRIL 30, 1974</td>
</tr>
<tr>
<td>34</td>
<td>1. Report on Securities Transactions</td>
</tr>
<tr>
<td></td>
<td>2. Securities Transactions Detail</td>
</tr>
<tr>
<td>41</td>
<td>C. ADDITIONS TO COMMON TRUST FUND</td>
</tr>
</tbody>
</table>
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 March, 1974. The Associate Deputy Chancellor for Investments, Trusts and Lands recommends approval by the Board of Regents of these transactions.

### COMPARISON SUMMARY OF ASSETS

<table>
<thead>
<tr>
<th>SECURITY</th>
<th>BOOK VALUE 3/31/73</th>
<th>BOOK VALUE 3/31/74</th>
<th>BOOK YIELD 3/31/73</th>
<th>BOOK YIELD 3/31/74</th>
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</thead>
<tbody>
<tr>
<td><strong>DEBT SECURITIES:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U. S. Government Obligations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treasury Bonds</td>
<td>$ 88,961,700.79</td>
<td>$ 79,437,784.61</td>
<td>5.13%</td>
<td>4.94%</td>
</tr>
<tr>
<td>Various Government Guaranteed Bonds</td>
<td>28,397,822.43</td>
<td>36,753,047.25</td>
<td>6.94%</td>
<td>6.85%</td>
</tr>
<tr>
<td>FHA Mortgages</td>
<td>14,728,868.79</td>
<td>12,332,816.16</td>
<td>7.01%</td>
<td>7.01%</td>
</tr>
<tr>
<td>TOTAL - U. S. Government Obligations</td>
<td>132,088,392.01</td>
<td>131,523,648.02</td>
<td>5.73%</td>
<td>5.71%</td>
</tr>
<tr>
<td>Corporate Bonds</td>
<td>239,320,359.63</td>
<td>240,844,871.55</td>
<td>4.91%</td>
<td>4.99%</td>
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<td>TOTAL - DEBT SECURITIES</td>
<td>371,408,751.64</td>
<td>372,368,519.57</td>
<td>5.20%</td>
<td>5.24%</td>
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<td><strong>EQUITY SECURITIES:</strong></td>
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<tr>
<td>Convertible Debentures</td>
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<td>10,097,290.00</td>
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<td>5.42%</td>
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<td>Convertible Preferred Stocks</td>
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<td>6,342,900.64</td>
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<td>3.80%</td>
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<td>4.89%</td>
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<td>TOTAL - EQUITY SECURITIES</td>
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<td>271,330,111.88</td>
<td>4.45%</td>
<td>4.88%</td>
</tr>
<tr>
<td>TOTAL - LONG TERM INVESTMENTS</td>
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<td>643,698,631.45</td>
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<td>5.09%</td>
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<td><strong>CASH &amp; EQUIVALENT:</strong></td>
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<tr>
<td>Short Term U. S. Treasury</td>
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<td>24,683,990.62</td>
<td>5.73%</td>
<td>6.88%</td>
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<tr>
<td>Securities</td>
<td>18,311,100.00</td>
<td>28,397,000.00</td>
<td>6.48%</td>
<td>8.60%</td>
</tr>
<tr>
<td>Commercial Paper</td>
<td>141,069.29</td>
<td>91,016.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL - CASH &amp; EQUIVALENT</td>
<td>28,218,149.00</td>
<td>53,172,007.21</td>
<td>6.19%</td>
<td>7.79%</td>
</tr>
<tr>
<td>TOTAL - SECURITIES, CASH &amp; EQUIVALENT</td>
<td>$656,575,102.85*</td>
<td>$696,870,638.66*</td>
<td>4.94%</td>
<td>5.30%</td>
</tr>
<tr>
<td>Indicated Annual Income</td>
<td>$ 32,467,638.00</td>
<td>$ 36,934,143.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Includes Cumulative Total Realized Net Profit

<table>
<thead>
<tr>
<th></th>
<th>3/31/73 of $39,260,873.37;</th>
<th>3/31/74 of $39,251,885.75</th>
</tr>
</thead>
</table>
SUMMARY OF TRANSACTIONS
March 31, 1974

<table>
<thead>
<tr>
<th>Purchases:</th>
<th>Cost</th>
<th>Yield at Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>U. S. Government Obligations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Guaranteed)</td>
<td>$166,689.25</td>
<td>8.25%</td>
</tr>
<tr>
<td>(TOTAL PURCHASES)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sales:</th>
<th>Proceeds</th>
<th>(Loss)</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Stocks</td>
<td>$1,293,314.57</td>
<td>573,131.42</td>
<td>5.35%</td>
</tr>
<tr>
<td>(TOTAL SALES)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Bond Maturities and Prepayments:

<table>
<thead>
<tr>
<th>U. S. Government Obligations</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Guaranteed)--</td>
</tr>
<tr>
<td>Various</td>
</tr>
<tr>
<td>FHA Mortgages</td>
</tr>
<tr>
<td>Corporate Bonds</td>
</tr>
<tr>
<td>TOTAL BOND MATURITIES AND PREPAYMENTS</td>
</tr>
</tbody>
</table>

BOND EXCHANGES

<table>
<thead>
<tr>
<th>Par Exchanged</th>
<th>Increase in Annual Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>$237,000</td>
<td>$582.76</td>
</tr>
</tbody>
</table>

PERMANENT UNIVERSITY FUND BOOK VALUE

<table>
<thead>
<tr>
<th>February 28, 1974 Balance</th>
<th>$693,628,107.20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additions (March, 1974)</td>
<td></td>
</tr>
<tr>
<td>Realized Net Gain or (Loss) on Security Transactions</td>
<td>$75,120.22</td>
</tr>
<tr>
<td>From General Land Office</td>
<td>3,167,411.24</td>
</tr>
<tr>
<td>March 31, 1974 Balance</td>
<td>$696,870,638.66</td>
</tr>
</tbody>
</table>
### INVESTMENTS ACQUIRED

<table>
<thead>
<tr>
<th>Par Value</th>
<th>Description</th>
<th>Price</th>
<th>Total Net Cost</th>
<th>Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>$166,689.25</td>
<td>Various Government Guaranteed Bonds-- Marcus Daly Memorial Hospital Corp. (Hill-Burton Loan) 8-1/4% 1st Mtge. Promissory Note, due 1/24/99</td>
<td>$100.00</td>
<td>$166,689.25</td>
<td>8.25%</td>
</tr>
</tbody>
</table>

BONDS EXCHANGED IN:

<table>
<thead>
<tr>
<th>Par Value</th>
<th>Description</th>
<th>Price</th>
<th>Total Net Cost</th>
<th>Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>$237,000</td>
<td>See Bond Exchange Schedule for Detail</td>
<td>$227,971.87</td>
<td>5.43%</td>
<td></td>
</tr>
</tbody>
</table>

COMMERCIAL PAPER:

<table>
<thead>
<tr>
<th>Par Value</th>
<th>Description</th>
<th>Price</th>
<th>Total Net Cost</th>
<th>Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,285,000</td>
<td>C. I. T. Financial Corp.</td>
<td>100.00</td>
<td>$2,285,000.00</td>
<td>8.75%</td>
</tr>
<tr>
<td>1,204,000</td>
<td>Ford Motor Credit Co.</td>
<td>100.00</td>
<td>$1,204,000.00</td>
<td>8.70%</td>
</tr>
<tr>
<td>3,533,000</td>
<td>ITT-Aetna Corp.</td>
<td>100.00</td>
<td>$3,533,000.00</td>
<td>9.15%</td>
</tr>
<tr>
<td>1,409,000</td>
<td>J. C. Penney Financial Corp.</td>
<td>100.00</td>
<td>$1,409,000.00</td>
<td>8.29%</td>
</tr>
<tr>
<td>2,166,000</td>
<td>Sears Roebuck Acceptance Corp.</td>
<td>100.00</td>
<td>$2,166,000.00</td>
<td>8.29%</td>
</tr>
</tbody>
</table>

TOTAL - Commercial Paper: $10,597,000.00 8.72%

TOTAL - INVESTMENTS ACQUIRED: $10,991,661.12 8.64%
## INVESTMENTS DISPOSED OF

<table>
<thead>
<tr>
<th>No. Shares</th>
<th>Description</th>
<th>Price</th>
<th>Total Net Proceeds</th>
<th>Gain or Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>BOND MATURITIES AND PREPAYMENTS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>U. S. GOVERNMENT OBLIGATIONS:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>103,009.87</td>
<td>Various Government Guaranteed Bonds--</td>
<td>100.00</td>
<td>103,009.87</td>
<td>(190.18)</td>
</tr>
<tr>
<td>117,953.77</td>
<td>Principal Payments</td>
<td>100.00</td>
<td>117,953.77</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL - U. S. Government Obligations</strong></td>
<td></td>
<td>220,963.64</td>
<td>(190.18)</td>
</tr>
<tr>
<td>44,109.00</td>
<td>Shell Oil Co. 5% Debs., due 3/15/91</td>
<td>100.00</td>
<td>44,109.00</td>
<td>2,178.98</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL - BOND MATURITIES AND PREPAYMENTS</strong></td>
<td></td>
<td>265,072.64</td>
<td>1,988.80</td>
</tr>
<tr>
<td></td>
<td><strong>COMMON STOCKS:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5,000</td>
<td>The Coca-Cola Co.</td>
<td>114.69</td>
<td>573,464.18</td>
<td>442,486.77</td>
</tr>
<tr>
<td>17,700</td>
<td>Consumers Power Co.</td>
<td>23.45</td>
<td>415,120.41</td>
<td>(179,571.68)</td>
</tr>
<tr>
<td>17,800</td>
<td>Northern Indiana Public Service Co.</td>
<td>17.12</td>
<td>304,729.98</td>
<td>(189,783.67)</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL - Common Stocks</strong></td>
<td></td>
<td>1,293,314.57</td>
<td>73,131.42</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL - SALES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>BONDS EXCHANGED OUT:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>237,000</td>
<td>See Bond Exchange Schedule for Detail</td>
<td></td>
<td>229,446.94</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td><strong>COMMERCIAL PAPER MATURITIES:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,605,000</td>
<td>Ford Motor Credit Co.</td>
<td>100.00</td>
<td>1,605,000.00</td>
<td>0</td>
</tr>
<tr>
<td>1,300,000</td>
<td>ITT-Aetna Corp.</td>
<td>100.00</td>
<td>1,300,000.00</td>
<td>0</td>
</tr>
<tr>
<td>866,000</td>
<td>J. C. Penney Financial Corp.</td>
<td>100.00</td>
<td>866,000.00</td>
<td>0</td>
</tr>
<tr>
<td>443,000</td>
<td>Sears Roebuck Acceptance Corp.</td>
<td>100.00</td>
<td>443,000.00</td>
<td>0</td>
</tr>
<tr>
<td>2,083,000</td>
<td>Westinghouse Credit Corp.</td>
<td>100.00</td>
<td>2,083,000.00</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL - Commercial Paper</strong></td>
<td></td>
<td>6,297,000.00</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL - INVESTMENTS DISPOSED OF</strong></td>
<td></td>
<td>8,084,834.15</td>
<td>75,120.22</td>
</tr>
<tr>
<td>Exchanges</td>
<td>Par Value Exchanged</td>
<td>Book Value</td>
<td>Principal Takeout or (Payup) Required</td>
<td>Increase in Annual Income*</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------------------</td>
<td>------------</td>
<td>--------------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Corporate Bonds for Corporate Bonds</td>
<td>$237,000</td>
<td>$229,446.94</td>
<td>$227,971.87</td>
<td>$1,475.07</td>
</tr>
</tbody>
</table>

(TOTAL - All Exchanges March, 1974)

*Total income improvement includes income from investment of takeout on exchanges at current market yields.
### Permanent University Fund

#### Bond Exchanges

**(March, 1974)**

<table>
<thead>
<tr>
<th>PAR VALUE</th>
<th>ISSUE EXCHANGED</th>
<th>DESCRIPTION</th>
<th>ISSUE RECEIVED</th>
<th>BOOK VALUE</th>
<th>BOOK YIELD</th>
<th>NEW BOOK VALUE</th>
<th>INCREASE YIELD</th>
</tr>
</thead>
<tbody>
<tr>
<td>$100,000</td>
<td>General Tel. Co. of California</td>
<td>4-1/2% 1st Mtge., due 6/1/94</td>
<td>Alabama Power Co.</td>
<td>4-7/8% 1st Mtge., due 9/1/95</td>
<td>$95,037.97</td>
<td>$97,257.97</td>
<td>.20%</td>
</tr>
<tr>
<td></td>
<td>Northern States Power Co. (Wisc.)</td>
<td>4-1/2% 1st Mtge., due 8/1/94</td>
<td>$237,000</td>
<td>Total Exchange of Corporate Bonds (March, 1974)</td>
<td>$229,446.94</td>
<td>$227,971.87</td>
<td>$582.76</td>
</tr>
<tr>
<td></td>
<td>Ditto Northern States Power Co. (Wisc.)</td>
<td>4-1/2% 1st Mtge., due 8/1/94</td>
<td>$26,489.36</td>
<td></td>
<td>$23,632.49</td>
<td>$12</td>
<td>5.53</td>
</tr>
</tbody>
</table>

*Total Income Improvement, including income from investment of takeout (payup) on exchange.*
### BOND MATURITIES AND PREPAYMENTS
(March, 1974)

<table>
<thead>
<tr>
<th>PAR VALUE</th>
<th>CORPORATE BONDS</th>
<th>U.S. GOVERNMENT OBLIGATIONS (GUARANTEED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$44,109.00</td>
<td>Shell Oil Co. 5% Debs., due 3/15/91</td>
<td>$44,109.00</td>
</tr>
</tbody>
</table>

#### Corporate Bonds

<table>
<thead>
<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shell Oil Co. 5% Debs., due 3/15/91</td>
<td>$44,109.00</td>
<td>$2,178.98</td>
</tr>
</tbody>
</table>

#### U.S. Government Obligations (Guaranteed)

<table>
<thead>
<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pass-Through Pool #92, 8%, due 2/15/2001</td>
<td>8,697.73</td>
<td>(136.55)</td>
</tr>
<tr>
<td>GNMA, Pass-Through Pool #114, 8%, due 1/15/2001</td>
<td>337.29</td>
<td>(136.55)</td>
</tr>
<tr>
<td>GNMA, Pass-Through Pool #152, 8%, due 2/15/2001</td>
<td>877.67</td>
<td>(136.55)</td>
</tr>
<tr>
<td>GNMA, Pass-Through Pool #236, 8%, due 1/15/2001</td>
<td>11,816.53</td>
<td>(136.55)</td>
</tr>
<tr>
<td>GNMA, Pass-Through Pool #456, 8%, due 4/15/2001</td>
<td>1,360.84</td>
<td>(136.55)</td>
</tr>
<tr>
<td>GNMA, Pass-Through Pool #650, 8%, due 4/15/2001</td>
<td>15,597.09</td>
<td>(136.55)</td>
</tr>
<tr>
<td>GNMA, Pass-Through Pool #682, 7-1/2%, due 5/15/2001</td>
<td>7,744.37</td>
<td>(136.55)</td>
</tr>
<tr>
<td>GNMA, Pass-Through Pool #832, 6-1/2%, due 1/15/2002</td>
<td>923.19</td>
<td>(136.55)</td>
</tr>
<tr>
<td>GNMA, Pass-Through Pool #852, 6-1/2%, due 1/15/2002</td>
<td>2,429.55</td>
<td>(136.55)</td>
</tr>
<tr>
<td>GNMA, Pass-Through Pool #905, 6-1/2%, due 7/15/2001</td>
<td>5,413.74</td>
<td>(136.55)</td>
</tr>
<tr>
<td>GNMA, Pass-Through Pool #920, 8%, due 9/15/2001</td>
<td>8,942.85</td>
<td>(136.55)</td>
</tr>
<tr>
<td>GNMA, Pass-Through Pool #1029, 6-1/2%, due 12/15/2001</td>
<td>507.99</td>
<td>(136.55)</td>
</tr>
<tr>
<td>GNMA, Pass-Through Pool #1033, 6-1/2%, due 2/15/2002</td>
<td>1,729.57</td>
<td>(136.55)</td>
</tr>
<tr>
<td>GNMA, Pass-Through Pool #1105, 6-1/2%, due 1/15/2002</td>
<td>953.47</td>
<td>(136.55)</td>
</tr>
<tr>
<td>GNMA, Pass-Through Pool #1157, 6-1/2%, due 1/15/2002</td>
<td>967.30</td>
<td>(136.55)</td>
</tr>
<tr>
<td>GNMA, Pass-Through Pool #1252, 6-1/2%, due 1/15/2002</td>
<td>4,529.86</td>
<td>(136.55)</td>
</tr>
<tr>
<td>GNMA, Pass-Through Pool #1306, 6-1/2%, due 1/15/2002</td>
<td>3,562.31</td>
<td>(136.55)</td>
</tr>
<tr>
<td>GNMA, Pass-Through Pool #1997, 6-1/2%, due 8/15/2002</td>
<td>12,607.53</td>
<td>(136.55)</td>
</tr>
<tr>
<td>GNMA, Pass-Through Pool #2084, 7%, due 9/15/2002</td>
<td>6,006.39</td>
<td>(136.55)</td>
</tr>
<tr>
<td>GNMA, Pass-Through Pool #2455, 5-1/2%, due 2/13/99</td>
<td>7,944.60</td>
<td>(136.55)</td>
</tr>
</tbody>
</table>

**Total GNMAs Pass-Throughs:** $103,009.87

**Total Bond Maturities and Prepayments (excluding FHA Mortgages):**

<table>
<thead>
<tr>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$147,118.87</td>
<td>$1,988.80</td>
</tr>
</tbody>
</table>

---

**Total Bond Maturities and Prepayments:**

<table>
<thead>
<tr>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$147,118.87</td>
<td>$1,988.80</td>
</tr>
</tbody>
</table>

---

**Total Proceeds:** $147,118.87

**Total Profit or (Loss):** $1,988.80
### RECEIPTS:

<table>
<thead>
<tr>
<th>From General Land Office</th>
<th>$ 3,167,411.24</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>From Disposition of Securities:</strong></td>
<td></td>
</tr>
<tr>
<td>U. S. Government Obligations</td>
<td></td>
</tr>
<tr>
<td>GNMA Principal Payments</td>
<td>103,009.87</td>
</tr>
<tr>
<td>FHA Mortgages</td>
<td>117,953.77</td>
</tr>
<tr>
<td>Corporate Bonds</td>
<td>44,109.00</td>
</tr>
<tr>
<td>Common Stocks</td>
<td>1,293,314.57</td>
</tr>
<tr>
<td>Commercial Paper</td>
<td>6,297,000.00</td>
</tr>
<tr>
<td><strong>Interest Collected:</strong></td>
<td></td>
</tr>
<tr>
<td>U. S. Government Obligations</td>
<td></td>
</tr>
<tr>
<td>Treasury Securities</td>
<td>$ 7,693.06</td>
</tr>
<tr>
<td>GNMA Interest Payments</td>
<td>147,524.94</td>
</tr>
<tr>
<td>Various Guaranteed Bonds</td>
<td>19,638.75</td>
</tr>
<tr>
<td>FHA Mortgages</td>
<td>77,370.23</td>
</tr>
<tr>
<td>Corporate Bonds</td>
<td>936,287.56</td>
</tr>
<tr>
<td>Commercial Paper</td>
<td>158,463.73</td>
</tr>
<tr>
<td><strong>Dividends Collected:</strong></td>
<td></td>
</tr>
<tr>
<td>Common and Preferred Stocks</td>
<td>1,584,527.72</td>
</tr>
<tr>
<td>Bonds Exchanged Out - Net Receipts</td>
<td>1,475.07</td>
</tr>
<tr>
<td>Amortization of Premium</td>
<td>196.71</td>
</tr>
<tr>
<td>Cash Payments Made in February on Security Transactions Settled in March</td>
<td>1,095.00</td>
</tr>
<tr>
<td><strong>TOTAL RECEIPTS</strong></td>
<td>11,025,565.23</td>
</tr>
<tr>
<td><strong>Cash on Hand 3/1/74</strong></td>
<td>( 122,771.44)</td>
</tr>
<tr>
<td><strong>TOTAL RECEIPTS AND CASH</strong></td>
<td>$10,902,793.79</td>
</tr>
</tbody>
</table>

### CASH STATEMENT

March 31, 1974
CASH STATEMENT  
March 31, 1974  
(Continued)

<table>
<thead>
<tr>
<th>Description</th>
<th>Permanent Fund</th>
<th>Available Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISBURSEMENTS:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Securities Acquired:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U. S. Government Obligations</td>
<td>$ 166,689.25</td>
<td></td>
</tr>
<tr>
<td>Various Guaranteed Bonds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial Paper</td>
<td>10,597,000.00</td>
<td></td>
</tr>
<tr>
<td>Amortization of Discount</td>
<td>48,087.95</td>
<td></td>
</tr>
<tr>
<td>To Clear Out Available Fund</td>
<td></td>
<td>$2,931,505.99</td>
</tr>
<tr>
<td>TOTAL DISBURSEMENTS</td>
<td>10,811,777.20</td>
<td>$2,931,505.99</td>
</tr>
<tr>
<td>Cash on Hand 3/31/74</td>
<td>91,016.59</td>
<td></td>
</tr>
<tr>
<td>TOTAL DISBURSEMENTS AND CASH</td>
<td></td>
<td>$10,902,793.79</td>
</tr>
</tbody>
</table>
For Month Ended April 30, 1974

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 April, 1974. The Associate Deputy Chancellor for Investments, Trusts and Lands recommends approval by the Board of Regents of these transactions.

### COMPARISON SUMMARY OF ASSETS

<table>
<thead>
<tr>
<th>SECURITY</th>
<th>BOOK VALUE 4/30/73</th>
<th>BOOK YIELD 4/30/73</th>
<th>BOOK VALUE 4/30/74</th>
<th>BOOK YIELD 4/30/74</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DEBT SECURITIES:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U. S. Government Obligations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treasury Bonds</td>
<td>$90,942,325.79</td>
<td>5.16%</td>
<td>$79,437,784.61</td>
<td>4.94%</td>
</tr>
<tr>
<td>Various Government Guaranteed Bonds</td>
<td>28,091,215.48</td>
<td>6.93%</td>
<td>42,200,021.48</td>
<td>6.92%</td>
</tr>
<tr>
<td>FHA Mortgages</td>
<td>14,565,190.21</td>
<td>7.01%</td>
<td>13,222,709.56</td>
<td>7.01%</td>
</tr>
<tr>
<td><strong>TOTAL - U. S. Government Obligations</strong></td>
<td>133,598,731.48</td>
<td>5.73%</td>
<td>134,860,515.65</td>
<td>5.76%</td>
</tr>
<tr>
<td>Corporate Bonds</td>
<td>239,334,915.46</td>
<td>4.91%</td>
<td>241,888,598.89</td>
<td>5.01%</td>
</tr>
<tr>
<td><strong>TOTAL - DEBT SECURITIES</strong></td>
<td>372,933,646.94</td>
<td>5.20%</td>
<td>376,749,114.54</td>
<td>5.28%</td>
</tr>
<tr>
<td><strong>EQUITY SECURITIES:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convertible Debentures</td>
<td>10,097,290.00</td>
<td>5.42%</td>
<td>10,097,290.00</td>
<td>5.42%</td>
</tr>
<tr>
<td>Convertible Preferred Stocks</td>
<td>6,342,900.64</td>
<td>3.80%</td>
<td>6,342,900.64</td>
<td>3.80%</td>
</tr>
<tr>
<td>Common Stocks</td>
<td>240,508,011.57</td>
<td>4.45%</td>
<td>254,889,921.24</td>
<td>4.85%</td>
</tr>
<tr>
<td><strong>TOTAL - EQUITY SECURITIES</strong></td>
<td>256,948,202.21</td>
<td>4.47%</td>
<td>271,330,111.88</td>
<td>4.85%</td>
</tr>
<tr>
<td><strong>TOTAL - LONG TERM INVESTMENTS</strong></td>
<td>629,881,849.15</td>
<td>4.90%</td>
<td>648,079,226.42</td>
<td>5.10%</td>
</tr>
<tr>
<td><strong>CASH &amp; EQUIVALENT:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short Term U. S. Treasury Securities</td>
<td>13,613,651.59</td>
<td>5.89%</td>
<td>24,969,888.12</td>
<td>7.01%</td>
</tr>
<tr>
<td>Commercial Paper</td>
<td>18,311,100.00</td>
<td>6.93%</td>
<td>26,385,000.00</td>
<td>9.45%</td>
</tr>
<tr>
<td>Cash</td>
<td>401,511.94</td>
<td></td>
<td>150,533.31</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL - CASH &amp; EQUIVALENT</strong></td>
<td>32,326,263.53</td>
<td>6.41%</td>
<td>51,505,421.43</td>
<td>8.24%</td>
</tr>
<tr>
<td><strong>TOTAL - SECURITIES, CASH &amp; EQUIVALENT</strong></td>
<td>$662,208,112.68*</td>
<td>4.97%</td>
<td>$699,584,647.85*</td>
<td>5.33%</td>
</tr>
</tbody>
</table>

Indicated Annual Income $32,911,743.00 $37,287,862.00

*Includes Cumulative Total Realized Net Profit to 4/30/73 of $39,175,306.06; to 4/30/74 of $39,327,005.97
SUMMARY OF TRANSACTIONS
April 30, 1974

<table>
<thead>
<tr>
<th>Purchases:</th>
<th>Cost</th>
<th>Yield at Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>U. S. Government Obligations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Direct)</td>
<td>$2,261,187.50</td>
<td>8.82%</td>
</tr>
<tr>
<td>(Guaranteed)</td>
<td>3,559,332.75</td>
<td>8.37%</td>
</tr>
<tr>
<td>Corporate Bonds</td>
<td>1,030,778.06</td>
<td>8.88%</td>
</tr>
<tr>
<td>TOTAL PURCHASES</td>
<td>$6,851,298.31</td>
<td>8.59%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bond Maturities and Prepayments:</th>
<th>Proceeds</th>
<th>Gain or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>U. S. Government Obligations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Direct)</td>
<td>$1,975,290.00</td>
<td>-0-</td>
</tr>
<tr>
<td>(Guaranteed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Various</td>
<td>113,605.41</td>
<td>$3,032.10</td>
</tr>
<tr>
<td>FHA Mortgages</td>
<td>110,106.60</td>
<td>-0-</td>
</tr>
<tr>
<td>Corporate Bonds</td>
<td>19,200.00</td>
<td>1,209.73</td>
</tr>
<tr>
<td>TOTAL BOND MATURITIES AND PREPAYMENTS</td>
<td>$2,218,202.01</td>
<td>$4,241.83</td>
</tr>
</tbody>
</table>

PERMANENT UNIVERSITY FUND BOOK VALUE

March 31, 1974 Balance | $696,870,638.66 |

Additions (April, 1974) |
Realized Net Gain or (Loss) on Security Transactions | $4,241.83 |
From General Land Office | 2,709,767.36 |

April 30, 1974 Balance | $699,584,647.85 |
# INVESTMENTS ACQUIRED

<table>
<thead>
<tr>
<th>Par Value or No. Shares</th>
<th>Description</th>
<th>Price</th>
<th>Total Net Cost</th>
<th>Yield at Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>U. S. GOVERNMENT OBLIGATIONS (Direct and Guaranteed):</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$2,300,000.00</td>
<td>Short Term Treasuries (Direct)-- 5-3/4% Notes, due 11/15/74</td>
<td>$ 98.3125</td>
<td>$ 2,261,187.50</td>
<td>8.82%</td>
</tr>
<tr>
<td>1,000,000.00</td>
<td>Various Government Guaranteed Bonds-- Farmers Home Administration Certificates of Beneficial Ownership (Insured Notes) 9%, due 4/23/89</td>
<td>101.00</td>
<td>1,010,000.00</td>
<td>8.875%</td>
</tr>
<tr>
<td>1,000,000.00</td>
<td>Intercoastal Bulk Carriers, Inc. U. S. Govt. Guaranteed Ship Financing Bonds, Title XI 7.95%, due 7/1/91</td>
<td>100.00</td>
<td>1,000,000.00</td>
<td>7.95%</td>
</tr>
<tr>
<td>79,645.25</td>
<td>Marcus Daly Memorial Hospital Corp. (Hill-Burton Loan) 8-1/2% 1st Mtge. Promissory Note, due 1/24/99 (Second drawdown on total purchase of $1,716,119.00)</td>
<td>100.00</td>
<td>79,645.25</td>
<td>8.25%</td>
</tr>
<tr>
<td>1,500,000.00</td>
<td>Washington Metropolitan Area Transit Authority 8.15% Transit Bonds, Series D, due 7/1/2014</td>
<td>97.979</td>
<td>1,469,687.50</td>
<td>8.32%</td>
</tr>
<tr>
<td><strong>TOTAL - Various Government Guaranteed Bonds</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL - U. S. Government Obligations (Direct and Guaranteed)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16,000</td>
<td>Corporate Bonds: Atlantic City Electric Co. 5-1/8% 1st Mtge., due 2/1/96</td>
<td>63.237</td>
<td>10,117.92</td>
<td>9.00%</td>
</tr>
<tr>
<td>13,000</td>
<td>Baltimore Gas &amp; Electric Co. 4-7/8% SF Debs., due 6/15/86</td>
<td>69.82</td>
<td>9,076.60</td>
<td>9.00%</td>
</tr>
<tr>
<td>1,000,000</td>
<td>Hilo Electric Light Co. Ltd. (Guaranteed by Hawaiian Electric Co.) 8-7/8% 1st Mtge., due 6/15/2004</td>
<td>100.00</td>
<td>1,000,000.00</td>
<td>8.875%</td>
</tr>
<tr>
<td>19,000</td>
<td>West Penn Power Co. 4-7/8% 1st Mtge., due 12/1/95</td>
<td>60.966</td>
<td>11,583.54</td>
<td>9.00%</td>
</tr>
<tr>
<td><strong>TOTAL - Corporate Bonds</strong></td>
<td></td>
<td></td>
<td></td>
<td>8.88%</td>
</tr>
<tr>
<td><strong>TOTAL - BONDS</strong></td>
<td></td>
<td></td>
<td>6,851,298.31</td>
<td>8.59%</td>
</tr>
<tr>
<td>1,525,000</td>
<td>Commercial Paper: C. I. T. Financial Corp.</td>
<td>100.00</td>
<td>1,525,000.00</td>
<td>9.93%</td>
</tr>
<tr>
<td>1,220,000</td>
<td>Ford Motor Credit Co.</td>
<td>100.00</td>
<td>1,220,000.00</td>
<td>9.55%</td>
</tr>
<tr>
<td>200,000</td>
<td>ITT-Aetna Corp.</td>
<td>100.00</td>
<td>200,000.00</td>
<td>9.90%</td>
</tr>
<tr>
<td>667,000</td>
<td>J. C. Penney Financial Corp.</td>
<td>100.00</td>
<td>667,000.00</td>
<td>9.98%</td>
</tr>
<tr>
<td>975,000</td>
<td>Sears Roebuck Acceptance Corp.</td>
<td>100.00</td>
<td>975,000.00</td>
<td>10.16%</td>
</tr>
<tr>
<td>2,125,000</td>
<td>Westinghouse Credit Corp.</td>
<td>100.00</td>
<td>2,125,000.00</td>
<td>9.86%</td>
</tr>
<tr>
<td><strong>TOTAL - Commercial Paper</strong></td>
<td></td>
<td></td>
<td>6,712,000.00</td>
<td>9.88%</td>
</tr>
<tr>
<td><strong>TOTAL - INVESTMENTS ACQUIRED</strong></td>
<td></td>
<td></td>
<td>$13,563,298.31</td>
<td>9.23%</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Description</th>
<th>Price</th>
<th>Proceeds</th>
<th>Gain or Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BOND MATURITIES AND PREPAYMENTS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>U. S. GOVERNMENT OBLIGATIONS (Direct and Guaranteed):</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short Term Treasuries (Direct)---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bills, 7.06% Discount, due 4/19/74</td>
<td>$100.00</td>
<td>$1,975,290.00</td>
<td>-0-</td>
</tr>
<tr>
<td>Various Government Guaranteed Bonds---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GNMA, Various Pools</td>
<td>100.00</td>
<td>103,859.39</td>
<td>$2,802.03</td>
</tr>
<tr>
<td>Farmers Home Administration</td>
<td>100.00</td>
<td>9,746.02</td>
<td>230.07</td>
</tr>
<tr>
<td>6% Insured Notes, due 12/14/91</td>
<td>100.00</td>
<td>113,605.41</td>
<td>3,032.10</td>
</tr>
<tr>
<td>TOTAL - Various Government Guaranteed Bonds</td>
<td>110,106.60</td>
<td>3,032.10</td>
<td></td>
</tr>
<tr>
<td>FHA Mortgages (Guaranteed)---</td>
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<td></td>
</tr>
<tr>
<td>Principal Payments</td>
<td>100.00</td>
<td>110,106.60</td>
<td>0-</td>
</tr>
<tr>
<td>TOTAL - U. S. Government Obligations (Direct and Guaranteed)</td>
<td>2,199,002.01</td>
<td>3,032.10</td>
<td></td>
</tr>
<tr>
<td><strong>CORPORATE BONDS:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Dow Chemical Co.</td>
<td>100.00</td>
<td>9,200.00</td>
<td>896.24</td>
</tr>
<tr>
<td>5% Notes, due 4/1/91</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shell Oil Co.</td>
<td>100.00</td>
<td>10,000.00</td>
<td>313.49</td>
</tr>
<tr>
<td>4-1/2% Notes, due 4/15/90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL - Corporate Bonds</td>
<td>19,200.00</td>
<td>1,209.73</td>
<td></td>
</tr>
<tr>
<td>TOTAL - BOND MATURITIES AND PREPAYMENTS</td>
<td>2,218,202.01</td>
<td>4,241.83</td>
<td></td>
</tr>
<tr>
<td><strong>COMMERCIAL PAPER:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. I. T. Financial Corp.</td>
<td>100.00</td>
<td>766,000.00</td>
<td>-0-</td>
</tr>
<tr>
<td>Ford Motor Credit Co.</td>
<td>100.00</td>
<td>2,010,000.00</td>
<td>-0-</td>
</tr>
<tr>
<td>ITT-Aetna Corp.</td>
<td>100.00</td>
<td>551,000.00</td>
<td>-0-</td>
</tr>
<tr>
<td>J. C. Penney Financial Corp.</td>
<td>100.00</td>
<td>400,000.00</td>
<td>-0-</td>
</tr>
<tr>
<td>Sears Roebuck Acceptance Corp.</td>
<td>100.00</td>
<td>3,722,000.00</td>
<td>-0-</td>
</tr>
<tr>
<td>Westinghouse Credit Corp.</td>
<td>100.00</td>
<td>1,275,000.00</td>
<td>-0-</td>
</tr>
<tr>
<td>TOTAL - Commercial Paper</td>
<td>8,724,000.00</td>
<td>-0-</td>
<td></td>
</tr>
<tr>
<td>TOTAL - INVESTMENTS DISPOSED OF</td>
<td>$10,942,202.01</td>
<td>$4,241.83</td>
<td></td>
</tr>
</tbody>
</table>
### Bond Maturities and Prepayments

(April, 1974)

<table>
<thead>
<tr>
<th>PAR VALUE</th>
<th>ISSUE</th>
<th>PROCEEDS</th>
<th>PROFIT OR (LOSS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2,000,000.00</td>
<td>U. S. Treasury Bills, 7.06% Discount, due 4/19/74</td>
<td>$1,975,290.00</td>
<td>$ --</td>
</tr>
<tr>
<td>9,746.02</td>
<td>Farmers Home Administration 6% Insured Notes, due 12/14/91</td>
<td>9,746.02</td>
<td>230.07</td>
</tr>
</tbody>
</table>

#### GNMA Pass-Throughs (Guaranteed)

<table>
<thead>
<tr>
<th>PAR VALUE</th>
<th>ISSUE</th>
<th>PROCEEDS</th>
<th>PROFIT OR (LOSS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7,345.07</td>
<td>GNMA, Pass-Through Pool #82, 8%, due 2/15/2001</td>
<td>7,345.07</td>
<td>( 115.32 )</td>
</tr>
<tr>
<td>2,493.55</td>
<td>GNMA, Pass-Through Pool #114, 8%, due 1/15/2001</td>
<td>2,493.55</td>
<td>( 565.79 )</td>
</tr>
<tr>
<td>833.83</td>
<td>GNMA, Pass-Through Pool #152, 8%, due 2/15/2001</td>
<td>833.83</td>
<td>( 181.94 )</td>
</tr>
<tr>
<td>755.68</td>
<td>GNMA, Pass-Through Pool #236, 8%, due 1/15/2001</td>
<td>755.68</td>
<td>( 107.68 )</td>
</tr>
<tr>
<td>1,369.40</td>
<td>GNMA, Pass-Through Pool #558, 8%, due 4/15/2001</td>
<td>1,369.40</td>
<td>( 109.00 )</td>
</tr>
<tr>
<td>7,268.21</td>
<td>GNMA, Pass-Through Pool #650, 8%, due 4/15/2001</td>
<td>7,268.21</td>
<td>( 237.67 )</td>
</tr>
<tr>
<td>1,785.51</td>
<td>GNMA, Pass-Through Pool #682, 7-1/2%, due 5/15/2001</td>
<td>1,785.51</td>
<td>( 56.24 )</td>
</tr>
<tr>
<td>929.40</td>
<td>GNMA, Pass-Through Pool #832, 6-1/2%, due 1/15/2002</td>
<td>929.40</td>
<td>40.89</td>
</tr>
<tr>
<td>2,703.10</td>
<td>GNMA, Pass-Through Pool #852, 6-1/2%, due 1/15/2002</td>
<td>2,703.10</td>
<td>112.45</td>
</tr>
<tr>
<td>5,840.73</td>
<td>GNMA, Pass-Through Pool #905, 6-1/2%, due 7/15/2001</td>
<td>5,840.73</td>
<td>341.10</td>
</tr>
<tr>
<td>398.40</td>
<td>GNMA, Pass-Through Pool #920, 8%, due 9/15/2001</td>
<td>398.40</td>
<td>1.04</td>
</tr>
<tr>
<td>4,914.88</td>
<td>GNMA, Pass-Through Pool #1029, 6-1/2%, due 12/15/2001</td>
<td>4,914.88</td>
<td>311.11</td>
</tr>
<tr>
<td>1,739.72</td>
<td>GNMA, Pass-Through Pool #1033, 6-1/2%, due 2/15/2002</td>
<td>1,739.72</td>
<td>72.37</td>
</tr>
<tr>
<td>959.14</td>
<td>GNMA, Pass-Through Pool #1105, 6-1/2%, due 1/15/2002</td>
<td>959.14</td>
<td>34.53</td>
</tr>
<tr>
<td>9,185.34</td>
<td>GNMA, Pass-Through Pool #1157, 6-1/2%, due 1/15/2002</td>
<td>9,185.34</td>
<td>404.15</td>
</tr>
<tr>
<td>1,869.61</td>
<td>GNMA, Pass-Through Pool #1252, 6-1/2%, due 1/15/2002</td>
<td>1,869.61</td>
<td>59.27</td>
</tr>
<tr>
<td>3,840.60</td>
<td>GNMA, Pass-Through Pool #1306, 6-1/2%, due 1/15/2002</td>
<td>3,840.60</td>
<td>164.38</td>
</tr>
<tr>
<td>12,705.22</td>
<td>GNMA, Pass-Through Pool #1997, 6-1/2%, due 8/15/2002</td>
<td>12,705.22</td>
<td>644.22</td>
</tr>
<tr>
<td>24,712.20</td>
<td>GNMA, Pass-Through Pool #2084, 7%, due 9/15/2002</td>
<td>24,712.20</td>
<td>306.43</td>
</tr>
<tr>
<td>12,209.80</td>
<td>GNMA, Pass-Through Pool #2455, 5-1/2%, due 2/15/99</td>
<td>12,209.80</td>
<td>1,683.73</td>
</tr>
</tbody>
</table>

**Total GNMA Pass-Throughs** | **$103,859.39** | **$2,802.03** |

**Total U. S. Government Obligations (Direct and Guaranteed) (excluding FHA Mortgages)** | **$2,088,895.41** | **$3,032.10** |
CASH STATEMENT
April 30, 1974

<table>
<thead>
<tr>
<th>REVENUES:</th>
<th>Permanent Fund</th>
<th>Available Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>From General Land Office</td>
<td>$2,709,767.36</td>
<td></td>
</tr>
<tr>
<td>From Disposition of Securities:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U. S. Government Obligations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treasury Securities</td>
<td>1,975,290.00</td>
<td></td>
</tr>
<tr>
<td>GNMA Principal Payments</td>
<td>103,859.39</td>
<td></td>
</tr>
<tr>
<td>Farmers Home Administration</td>
<td>9,746.02</td>
<td></td>
</tr>
<tr>
<td>FHA Mortgages</td>
<td>110,106.60</td>
<td></td>
</tr>
<tr>
<td>Corporate Bonds</td>
<td>19,200.00</td>
<td></td>
</tr>
<tr>
<td>Commercial Paper</td>
<td>8,724,000.00</td>
<td></td>
</tr>
<tr>
<td>Interest Collected:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U. S. Government Obligations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treasury Securities</td>
<td>$262,083.62</td>
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</tr>
<tr>
<td>GNMA Interest Payments</td>
<td>145,929.07</td>
<td></td>
</tr>
<tr>
<td>FHA Mortgages</td>
<td>75,072.82</td>
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<tr>
<td>Various Guaranteed Bonds</td>
<td>9,256.11</td>
<td></td>
</tr>
<tr>
<td>Corporate Bonds</td>
<td>898,380.69</td>
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</tr>
<tr>
<td>Convertible Debentures</td>
<td>102,710.00</td>
<td></td>
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<td>Commercial Paper</td>
<td>166,804.53</td>
<td></td>
</tr>
<tr>
<td>Dividends Collected:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common and Preferred Stocks</td>
<td>1,080,933.50</td>
<td></td>
</tr>
<tr>
<td>Amortization of Premium</td>
<td>3,362.58</td>
<td></td>
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<tr>
<td>TOTAL RECEIPTS</td>
<td>13,655,331.95</td>
<td>$2,741,170.34</td>
</tr>
<tr>
<td>Cash on Hand 4/1/74</td>
<td>91,016.59</td>
<td></td>
</tr>
<tr>
<td>TOTAL RECEIPTS AND CASH</td>
<td>$13,746,348.54</td>
<td></td>
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</tbody>
</table>
## CASH STATEMENT
April 30, 1974
(Continued)

### DISBURSEMENTS:

<table>
<thead>
<tr>
<th>Securities Acquired:</th>
<th>Permanent Fund</th>
<th>Available Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>U. S. Government Obligations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treasury Securities</td>
<td>$ 2,261,187.50</td>
<td>$2,741,170.34</td>
</tr>
<tr>
<td>Various Guaranteed Bonds</td>
<td>3,559,332.75</td>
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</tr>
<tr>
<td>Corporate Bonds</td>
<td>1,030,778.06</td>
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</tr>
<tr>
<td>Commercial Paper</td>
<td>6,712,000.00</td>
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</tr>
<tr>
<td>Amortization of Discount</td>
<td>32,516.92</td>
<td></td>
</tr>
<tr>
<td><strong>To Clear Out Available Fund</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL DISBURSEMENTS</strong></td>
<td>13,395,815.23</td>
<td>$2,741,170.34</td>
</tr>
<tr>
<td>Cash on Hand 4/30/74</td>
<td>150,533.31</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL DISBURSEMENTS AND CASH</strong></td>
<td>$13,746,348.54</td>
<td></td>
</tr>
</tbody>
</table>
For Month Ended March 31, 1974

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 March, 1974. The Associate Deputy Chancellor for Investments, Trusts and Lands recommends approval by the Board of Regents of these transactions.

INVESTMENTS ACQUIRED

<table>
<thead>
<tr>
<th>Par Value</th>
<th>Description and Fund</th>
<th>Total Net Cost</th>
<th>Yield at Cost</th>
</tr>
</thead>
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<tr>
<td></td>
<td>CORPORATE BONDS:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>See Bond Purchase Schedule for Detail</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$ 25,000</td>
<td>Jack G. Taylor Endowment Fund</td>
<td>$ 24,687.50</td>
<td>8.50%</td>
</tr>
<tr>
<td>30,000</td>
<td>Winedale Stagecoach Inn - Varner Acreage</td>
<td>29,625.00</td>
<td>8.50</td>
</tr>
<tr>
<td>25,000</td>
<td>The L. D. and Marie Gale Unitrust</td>
<td>24,687.50</td>
<td>8.50</td>
</tr>
<tr>
<td>60,000</td>
<td>AH - Anderson-Mayfair Mortgage Retirement Fund</td>
<td>54,802.80</td>
<td>8.00</td>
</tr>
<tr>
<td></td>
<td>TOTAL - Corporate Bonds</td>
<td>$133,802.80</td>
<td>8.30%</td>
</tr>
<tr>
<td></td>
<td>(TOTAL - LONG TERM INVESTMENTS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SHORT TERM PAPER:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$ 76,200</td>
<td>Austin National Bank 8-1/2% CD, due 3/25/74</td>
<td>$ 76,200.00</td>
<td>8.50%</td>
</tr>
<tr>
<td></td>
<td>(Common Trust Fund purchased from holdings in three funds on 3/14/74)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>522,000</td>
<td>SRAC 8-1/4% Note, due 3/29/74</td>
<td>522,000.00</td>
<td>8.30</td>
</tr>
<tr>
<td></td>
<td>(Common Trust Fund)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9,200</td>
<td>SRAC 7-7/8% Note, due 4/3/74</td>
<td>9,200.00</td>
<td>7.93</td>
</tr>
<tr>
<td></td>
<td>(Common Trust Fund purchased from holdings in two funds as follows: 3,800 on 3/14/74, 5,400 on 3/25/74)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>465,000</td>
<td>J. C. Penney 8.65% Note, due 4/19/74</td>
<td>465,000.00</td>
<td>8.71</td>
</tr>
<tr>
<td></td>
<td>($856,000 - Common Trust Fund 9,000 - Common Trust Fund - Undistributed Receipts)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>110,000</td>
<td>FMC 8.70% Note, due 4/23/74</td>
<td>110,000.00</td>
<td>8.76</td>
</tr>
<tr>
<td></td>
<td>($AMS - Sudden Infant Death Research Fund)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>157,000</td>
<td>CIT 8.80% Note, due 4/25/74</td>
<td>157,000.00</td>
<td>8.86</td>
</tr>
<tr>
<td></td>
<td>(GMB - Clark W. Thompson Trust)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>251,000</td>
<td>FMC 9% Note, due 4/29/74</td>
<td>251,000.00</td>
<td>9.07</td>
</tr>
<tr>
<td></td>
<td>($236,000 - Common Trust Fund 15,000 - Common Trust Fund - Undistributed Receipts)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>200,000</td>
<td>Austin National Bank 9% CD, due 4/30/74</td>
<td>200,000.00</td>
<td>9.00</td>
</tr>
<tr>
<td></td>
<td>(Common Trust Fund)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>95,000</td>
<td>ITT-Aetna 8-7/8% Note, due 5/31/74</td>
<td>95,000.00</td>
<td>9.03</td>
</tr>
<tr>
<td></td>
<td>(Common Trust Fund - Undistributed Receipts)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>105,000</td>
<td>American National Bank 8-1/4% CD, due 5/31/74</td>
<td>105,000.00</td>
<td>8.25</td>
</tr>
<tr>
<td></td>
<td>(Common Trust Fund - Undistributed Receipts)</td>
<td></td>
<td></td>
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</tbody>
</table>
## INVESTMENTS DISPOSED OF

<table>
<thead>
<tr>
<th>Far Value</th>
<th>Description and Fund</th>
<th>Total Net Proceeds</th>
<th>Gain or Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 19,300.49</td>
<td>Common Trust Fund</td>
<td>$ 19,300.49 ($) 460.25</td>
<td></td>
</tr>
<tr>
<td>1,807.01</td>
<td>The William Buchanan Chair in Internal Medicine - DMS</td>
<td>1,807.01 (17.87)</td>
<td></td>
</tr>
<tr>
<td>198.20</td>
<td>Reserve for Possible Fire Losses - Temporary Student Housing Units</td>
<td>198.20 2.36</td>
<td></td>
</tr>
<tr>
<td>462.89</td>
<td>Texas Union Building Fund</td>
<td>462.89 40.41</td>
<td></td>
</tr>
<tr>
<td>953.90</td>
<td>Student Property Deposit Scholarship Fund</td>
<td>953.90 4.04</td>
<td></td>
</tr>
<tr>
<td>758.19</td>
<td>Student Property Deposit Scholarship Fund - Temporary</td>
<td>758.19 30.45</td>
<td></td>
</tr>
<tr>
<td>9,873.38</td>
<td>U.T. System - General Tuition Revenue Bonds, Series 1971, 1972, &amp; 1972A - Reserve Fund</td>
<td>9,873.38 300.21</td>
<td></td>
</tr>
<tr>
<td>577.20</td>
<td>U.T. Austin - Dormitory Revenue Bond Fund, Series 1954 - Reserve Fund</td>
<td>577.20 (15.88)</td>
<td></td>
</tr>
<tr>
<td>337.07</td>
<td>U.T. Austin - Dormitory Revenue Bond Fund, Series 1956 - Reserve Fund</td>
<td>337.07 (11.85)</td>
<td></td>
</tr>
<tr>
<td>720.57</td>
<td>U.T. Austin - Student Housing Revenue Bonds of 1963 - Reserve Fund</td>
<td>720.57 (7.90)</td>
<td></td>
</tr>
<tr>
<td>1,900.69</td>
<td>U.T. Austin - Housing System Revenue Bonds, Series 1967 - Reserve Fund</td>
<td>1,900.69 (10.65)</td>
<td></td>
</tr>
<tr>
<td>1,490.95</td>
<td>U.T. Austin - Combined Fee Revenue Bonds, Series 1970, 1971 &amp; 1972 - Reserve Fund</td>
<td>1,490.95 38.84</td>
<td></td>
</tr>
<tr>
<td>105.81</td>
<td>U.T. Austin - Student Union Revenue Bonds, Series 1958 - Reserve Fund</td>
<td>105.81 1.22</td>
<td></td>
</tr>
<tr>
<td>1,288.52</td>
<td>Galveston Medical Branch - Dormitory Revenue Bonds, Series 1955 - Reserve Fund</td>
<td>1,288.52 0.33</td>
<td></td>
</tr>
<tr>
<td>124.97</td>
<td>M.D. Anderson Hospital - Endowment and Hospital Revenue Bonds, Series 1972 - Interest &amp; Sinking Fund</td>
<td>124.97 7.25</td>
<td></td>
</tr>
<tr>
<td>4,040.56</td>
<td>M.D. Anderson Hospital - Endowment and Hospital Revenue Bonds, Series 1972 - Reserve Fund</td>
<td>4,040.56 223.96</td>
<td></td>
</tr>
<tr>
<td>86.16</td>
<td>U.T. El Paso - Student Housing Revenue Bonds of 1961 - Reserve Fund</td>
<td>86.16 2.46</td>
<td></td>
</tr>
<tr>
<td>299.76</td>
<td>U.T. El Paso - Student Union Building Revenue Bonds, Series A and B, 1957 - Reserve Fund</td>
<td>299.76 (2.81)</td>
<td></td>
</tr>
</tbody>
</table>
### INVESTMENTS DISPOSED OF

(Continued)

<table>
<thead>
<tr>
<th>Par Value</th>
<th>Description and Fund</th>
<th>Total Net Proceeds</th>
<th>Gain or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$</td>
<td>U. S. GOVERNMENT OBLIGATIONS (Guaranteed): (Continued)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$ 249.73</td>
<td>U. T. Arlington - Housing System Revenue Bonds - Series 1963 - Reserve Fund</td>
<td>$ 249.73</td>
<td>$ 1.36</td>
</tr>
<tr>
<td>271.56</td>
<td>U. T. Arlington - Student Center Fee Bonds, Series 1960 - Reserve Fund</td>
<td>271.56</td>
<td>-0-</td>
</tr>
<tr>
<td>280.05</td>
<td>U. T. Arlington - Gymnasium Fee Bonds - Series 1961 - Reserve Fund</td>
<td>280.05</td>
<td>-0-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>- GNMA Pass-Throughs, Various Pools</td>
<td>50,521.28</td>
<td>122.07</td>
</tr>
</tbody>
</table>

### COMMON STOCKS:

See Stock Sales Schedule for Detail

<table>
<thead>
<tr>
<th>Par Value</th>
<th>Description and Fund</th>
<th>Total Net Proceeds</th>
<th>Gain or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tom Slick Memorial Trust for The University of Texas at Austin</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GMB - Clark W. Thompson Trust</td>
<td>7,714.50</td>
<td>(1,251.00)</td>
</tr>
<tr>
<td></td>
<td>AH - Barbara G. Horowitz Fund</td>
<td>182,865.00</td>
<td>11,569.81</td>
</tr>
<tr>
<td></td>
<td>DHSC - Dr. Eugene P. Frenkel Research Fund</td>
<td>163,105.31</td>
<td>(12,483.79)</td>
</tr>
<tr>
<td></td>
<td>DHSC - Dr. Bryan Williams Student-Faculty Fund</td>
<td>16,471.29</td>
<td>(75.58)</td>
</tr>
<tr>
<td></td>
<td>SAMS - Dr. Witten B. Russ Chair in Surgery</td>
<td>16,471.29</td>
<td>(75.59)</td>
</tr>
<tr>
<td></td>
<td>TOTAL - Common Stocks</td>
<td>396,377.39</td>
<td>(1,541.31)</td>
</tr>
</tbody>
</table>

### TOTAL - BONDS AND STOCKS DISPOSED OF

<table>
<thead>
<tr>
<th>Par Value</th>
<th>Description and Fund</th>
<th>Total Net Proceeds</th>
<th>Gain or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 446,898.67</td>
<td>(Common Trust Fund)</td>
<td>($1,419.24)</td>
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</tbody>
</table>

### SHORT TERM PAPER:

<table>
<thead>
<tr>
<th>Par Value</th>
<th>Description and Fund</th>
<th>Total Net Proceeds</th>
<th>Gain or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80,000</td>
<td>FMC 7-7/8% Note, due 3/14/74 (Common Trust Fund)</td>
<td>$ 80,000.00</td>
<td>-0-</td>
</tr>
<tr>
<td>10,000</td>
<td>FMC 7-7/8% Note, due 3/21/74 (Common Trust Fund)</td>
<td>10,000.00</td>
<td>-0-</td>
</tr>
<tr>
<td>76,200</td>
<td>Austin National Bank 8-1/2% CD, due 3/23/74 (Sold to Common Trust Fund on 3/14/74 as follows: $25,000 - Jack G. Taylor Endowment Fund 26,200 - Winedale Stagecoach Inn - Varner Acreage 25,000 - The L. D. and Marie Gale Unitrust)</td>
<td>76,200.00</td>
<td>-0-</td>
</tr>
<tr>
<td>Par Value</td>
<td>Description and Fund</td>
<td>Total Net Proceeds</td>
<td>Gain or (Loss)</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------------------------------------</td>
<td>--------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>$ 61,000</td>
<td>Austin National Bank 8-1/2% CD, due 3/25/74</td>
<td>$ 61,000.00</td>
<td>-0-</td>
</tr>
<tr>
<td></td>
<td>(§ 5,400 - Common Trust Fund</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7,100 - Texas Union Building Fund</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>48,500 - AH - Anderson-Mayfair Mortgage Retirement Fund</td>
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<td></td>
</tr>
<tr>
<td>9,200</td>
<td>SRAC 7-7/8% Note, due 4/3/74</td>
<td>9,200.00</td>
<td>-0-</td>
</tr>
<tr>
<td></td>
<td>(Sold to Common Trust Fund as follows:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>§3,800 - Winedale Stagecoach Inn - Varner Acreage on 3/14/74</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>5,400 - AH - Anderson-Mayfair Mortgage Retirement Fund on 3/25/74</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND

**(March, 1974)**

**BOND MATURITIES AND PREPAYMENTS**

<table>
<thead>
<tr>
<th>PAR VALUE</th>
<th>ISSUE</th>
<th>PROCEEDS</th>
<th>PROFIT OR (LOSS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$3,816.50</td>
<td>GNMA, Pass-Through Pool #95, 8%, due 12/15/2000</td>
<td>$3,816.50</td>
<td>($205.33)</td>
</tr>
<tr>
<td>4,059.91</td>
<td>GNMA, Pass-Through Pool #163, 8%, due 2/15/2001</td>
<td>4,059.91</td>
<td>(218.42)</td>
</tr>
<tr>
<td>65.40</td>
<td>GNMA, Pass-Through Pool #548, 8%, due 4/15/2001</td>
<td>65.40</td>
<td>(3.54)</td>
</tr>
<tr>
<td>472.24</td>
<td>GNMA, Pass-Through Pool #650, 8%, due 4/15/2001</td>
<td>472.24</td>
<td>(25.55)</td>
</tr>
<tr>
<td>129.88</td>
<td>GNMA, Pass-Through Pool #708, 6-1/2%, due 11/15/2001</td>
<td>129.88</td>
<td>6.07</td>
</tr>
<tr>
<td>1,487.34</td>
<td>GNMA, Pass-Through Pool #852, 6-1/2%, due 1/15/2002</td>
<td>1,487.34</td>
<td>145.02</td>
</tr>
<tr>
<td>9,269.22</td>
<td>GNMA, Pass-Through Pool #920, 8%, due 9/15/2001</td>
<td>9,269.22</td>
<td>(158.50)</td>
</tr>
<tr>
<td>$19,300.49</td>
<td></td>
<td>$19,300.49</td>
<td>($460.25)</td>
</tr>
</tbody>
</table>

### THE WILLIAM BUCHANAN CHAIR IN INTERNAL MEDICINE - DALLAS MEDICAL SCHOOL

**(March, 1974)**

**BOND MATURITIES AND PREPAYMENTS**

<table>
<thead>
<tr>
<th>PAR VALUE</th>
<th>ISSUE</th>
<th>PROCEEDS</th>
<th>PROFIT OR (LOSS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,638.50</td>
<td>GNMA, Pass-Through Pool #650, 8%, due 4/15/2001</td>
<td>$1,638.50</td>
<td>($30.64)</td>
</tr>
<tr>
<td>168.51</td>
<td>GNMA, Pass-Through Pool #852, 6-1/2%, due 1/15/2002</td>
<td>168.51</td>
<td>12.77</td>
</tr>
<tr>
<td>$1,807.01</td>
<td></td>
<td>$1,807.01</td>
<td>($17.87)</td>
</tr>
<tr>
<td>NO. OF SHS SOLD</td>
<td>ISSUE</td>
<td>NET SALES PROCEEDS</td>
<td>PROFIT OR (LOSS)</td>
</tr>
<tr>
<td>----------------</td>
<td>----------------------------------------------------------------------</td>
<td>--------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>200 Shs.</td>
<td>American Telephone &amp; Telegraph Co. Common Stock</td>
<td>$10,366.74</td>
<td>$266.74</td>
</tr>
<tr>
<td>520 &quot;</td>
<td>Anaconda Co. Capital Stock</td>
<td>13,602.13</td>
<td>(7,977.87)</td>
</tr>
<tr>
<td>200 &quot;</td>
<td>Armco Steel Corp. Common Stock</td>
<td>4,729.73</td>
<td>(145.27)</td>
</tr>
<tr>
<td>500 &quot;</td>
<td>Borg-Warner Corp. Common Stock</td>
<td>10,430.01</td>
<td>(4,663.99)</td>
</tr>
<tr>
<td>1,200 &quot;</td>
<td>Champion Spark Plug Co. Common Stock</td>
<td>18,066.61</td>
<td>7,658.61</td>
</tr>
<tr>
<td>312 &quot;</td>
<td>Exxon Corp. Common Stock</td>
<td>27,421.87</td>
<td>5,712.87</td>
</tr>
<tr>
<td>120 &quot;</td>
<td>The Gillette Co. Common Stock</td>
<td>4,690.39</td>
<td>1,999.61</td>
</tr>
<tr>
<td>100 &quot;</td>
<td>Great Lakes Dredge &amp; Dock Co. Common Stock</td>
<td>1,572.45</td>
<td>(696.55)</td>
</tr>
<tr>
<td>400 &quot;</td>
<td>IU International Corp. Common Stock</td>
<td>7,943.09</td>
<td>243.09</td>
</tr>
<tr>
<td>30 &quot;</td>
<td>Jones &amp; Laughlin Steel Corp. Common Stock</td>
<td>580.44</td>
<td>(153.66)</td>
</tr>
<tr>
<td>400 &quot;</td>
<td>Liggett &amp; Myers Inc. Common Stock</td>
<td>12,495.38</td>
<td>(2,304.62)</td>
</tr>
<tr>
<td>200 &quot;</td>
<td>Niagara Mohawk Power Corp. Common Stock</td>
<td>2,702.56</td>
<td>(1,090.44)</td>
</tr>
<tr>
<td>100 &quot;</td>
<td>Ohio Edison Co. Common Stock</td>
<td>1,929.76</td>
<td>(789.24)</td>
</tr>
<tr>
<td>200 &quot;</td>
<td>Pacific Lighting Corp. Common Stock</td>
<td>4,185.18</td>
<td>(1,352.82)</td>
</tr>
<tr>
<td>100 &quot;</td>
<td>Public Service Electric &amp; Gas Co. Common Stock</td>
<td>1,965.47</td>
<td>(847.53)</td>
</tr>
<tr>
<td>59 &quot;</td>
<td>South Jersey Industries, Inc. Common Stock</td>
<td>1,055.39</td>
<td>511.61</td>
</tr>
<tr>
<td>100 &quot;</td>
<td>The Southern Company Common Stock</td>
<td>1,634.05</td>
<td>(1,034.95)</td>
</tr>
<tr>
<td>148 &quot;</td>
<td>Stewart-Warner Corp. Capital Stock</td>
<td>4,304.51</td>
<td>255.49</td>
</tr>
<tr>
<td>565 &quot;</td>
<td>Tenneco Inc. Common Stock</td>
<td>13,104.58</td>
<td>(385.42)</td>
</tr>
<tr>
<td>219 &quot;</td>
<td>Union Oil Co. of California Common Stock</td>
<td>10,013.34</td>
<td>(3,181.66)</td>
</tr>
<tr>
<td>200 &quot;</td>
<td>United States Steel Corp. Common Stock</td>
<td>8,311.19</td>
<td>624.19</td>
</tr>
<tr>
<td>68 &quot;</td>
<td>Vulcan Materials Co. Common Stock</td>
<td>1,820.44</td>
<td>401.44</td>
</tr>
</tbody>
</table>

**Total**

$163,105.31  ($12,483.79)  5.29%
<table>
<thead>
<tr>
<th>NO. OF SHARES SOLD</th>
<th>ISSUE</th>
<th>NET SALES PROCEEDS</th>
<th>PROFIT OR (LOSS)</th>
<th>YIELD AT SALE PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>150 Shs.</td>
<td>Texas Instruments Inc. Common Stock</td>
<td>$16,471.29</td>
<td>($75.58)</td>
<td>0.62%</td>
</tr>
<tr>
<td>150 Shs.</td>
<td>Texas Instruments Inc. Common Stock</td>
<td>$16,471.29</td>
<td>($75.59)</td>
<td>0.62%</td>
</tr>
<tr>
<td>500 Shs.</td>
<td>Federated Capital Corp. Common Stock</td>
<td>$9,750.00</td>
<td>$774.84</td>
<td>2.56%</td>
</tr>
<tr>
<td>22,120 Shs.</td>
<td>American National Financial Corp. Common Stock</td>
<td>$182,865.00</td>
<td>$11,569.81</td>
<td>4.81%</td>
</tr>
<tr>
<td>417 Shs.</td>
<td>VCA Corp. Common Stock (Tender)</td>
<td>$7,714.50</td>
<td>($1,251.00)</td>
<td>2.38%</td>
</tr>
<tr>
<td>PAR VALUE</td>
<td>ISSUE</td>
<td>COST</td>
<td>YIELD AT COST</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------------------------</td>
<td>--------</td>
<td>---------------</td>
<td></td>
</tr>
<tr>
<td>$25,000</td>
<td>NCNB Corp. 8-3/8% SF Debs., due 3/1/99</td>
<td>$98.75</td>
<td>8.50%</td>
<td></td>
</tr>
<tr>
<td>$30,000</td>
<td>NCNB Corp. 8-3/8% SF Debs., due 3/1/99</td>
<td>$98.75</td>
<td>8.50%</td>
<td></td>
</tr>
<tr>
<td>$25,000</td>
<td>NCNB Corp. 8-3/8% SF Debs., due 3/1/99</td>
<td>$98.75</td>
<td>8.50%</td>
<td></td>
</tr>
<tr>
<td>$60,000</td>
<td>Public Service Electric &amp; Gas Co. 6-5/8% Debs., due 3/1/77</td>
<td>$91.338</td>
<td>8.00%</td>
<td></td>
</tr>
</tbody>
</table>

BOND PURCHASES
(March, 1974)
### GNMA PASS-THROUGH MATURITY AND PREPAYMENTS

(March, 1974)

<table>
<thead>
<tr>
<th>ISSUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #852, 6-1/2%, due 1/15/2002</td>
</tr>
<tr>
<td>GNMA, Pool #852, 6-1/2%, due 1/15/2002</td>
</tr>
<tr>
<td>GNMA, Pool #121, 8%, due 11/15/2000</td>
</tr>
<tr>
<td>GNMA, Pool #184, 6%, due 4/15/2001</td>
</tr>
<tr>
<td>GNMA, Pool #852, 6-1/2%, due 1/15/2002</td>
</tr>
<tr>
<td>GNMA, Pool #1524, 6-1/2%, due 5/15/2002</td>
</tr>
<tr>
<td>GNMA, Pool #3415, 8%, due 1/15/2004</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ISSUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #194, 8%, due 1/15/2001</td>
</tr>
<tr>
<td>GNMA, Pool #708, 6-1/2%, due 11/15/2001</td>
</tr>
<tr>
<td>GNMA, Pool #1029, 6-1/2%, due 12/15/2001</td>
</tr>
<tr>
<td>GNMA, Pool #1745, 6-1/2%, due 9/15/2002</td>
</tr>
<tr>
<td>GNMA, Pool #2283, 8%, due 9/15/2001</td>
</tr>
<tr>
<td>GNMA, Pool #308, 8%, due 4/15/2001</td>
</tr>
<tr>
<td>GNMA, Pool #3415, 8%, due 1/15/2004</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ISSUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #184, 8%, due 4/15/2001</td>
</tr>
<tr>
<td>GNMA, Pool #548, 8%, due 4/15/2001</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ISSUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #548, 8%, due 4/15/2001</td>
</tr>
<tr>
<td>GNMA, Pool #650, 8%, due 4/15/2001</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ISSUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #184, 8%, due 4/15/2001</td>
</tr>
<tr>
<td>GNMA, Pool #650, 8%, due 4/15/2001</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>
## GNMA Pass-Through Maturities and Prepayments (Continued)

(March, 1974)

### U. T. Austin - Housing System Revenue Bonds, Series 1967 - Reserve Fund:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #121, 8%, due 11/15/2000</td>
<td>$134.75</td>
<td>$7.48</td>
</tr>
<tr>
<td>GNMA, Pool #184, 8%, due 4/15/2001</td>
<td>257.99</td>
<td></td>
</tr>
<tr>
<td>GNMA, Pool #548, 8%, due 4/15/2001</td>
<td>90.97</td>
<td>(5.33)</td>
</tr>
<tr>
<td>GNMA, Pool #650, 8%, due 4/15/2001</td>
<td>1,061.15</td>
<td>(32.79)</td>
</tr>
<tr>
<td>GNMA, Pool #708, 6-1/2%, due 11/15/2001</td>
<td>40.48</td>
<td>1.89</td>
</tr>
<tr>
<td>GNMA, Pool #1029, 6-1/2%, due 12/15/2001</td>
<td>89.70</td>
<td>5.36</td>
</tr>
<tr>
<td>GNMA, Pool #1524, 6-1/2%, due 5/15/2002</td>
<td>219.65</td>
<td>12.74</td>
</tr>
</tbody>
</table>

Total Profit or (Loss): $1,900.69 ($10.65)

### U. T. Austin - Building Revenue Bonds, Series 1969

#### Utility Plant - Student Fee Revenue Bonds - Reserve Fund:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #121, 8%, due 11/15/2000</td>
<td>$866.76</td>
<td>($47.33)</td>
</tr>
<tr>
<td>GNMA, Pool #548, 8%, due 4/15/2001</td>
<td>78.93</td>
<td>(4.34)</td>
</tr>
<tr>
<td>GNMA, Pool #920, 8%, due 9/15/2001</td>
<td>1,170.98</td>
<td>16.98</td>
</tr>
</tbody>
</table>

Total Profit or (Loss): $2,116.67 ($34.69)


<table>
<thead>
<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #184, 8%, due 4/15/2001</td>
<td>$59.40</td>
<td></td>
</tr>
<tr>
<td>GNMA, Pool #1029, 6-1/2%, due 12/15/2001</td>
<td>465.22</td>
<td>21.35</td>
</tr>
<tr>
<td>GNMA, Pool #1524, 6-1/2%, due 5/15/2002</td>
<td>286.85</td>
<td>16.64</td>
</tr>
<tr>
<td>GNMA, Pool #3415, 8%, due 1/15/2004</td>
<td>679.48</td>
<td>0.85</td>
</tr>
</tbody>
</table>

Total Proceeds: $1,490.95

Total Profit or (Loss): $38.84

### U. T. Austin - Student Union Revenue Bonds, Series 1958 - Reserve Fund:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #184, 8%, due 4/15/2001</td>
<td>$84.86</td>
<td></td>
</tr>
<tr>
<td>GNMA, Pool #1524, 6-1/2%, due 5/15/2002</td>
<td>20.95</td>
<td>1.22</td>
</tr>
</tbody>
</table>

Total Proceeds: $105.81

Total Profit or (Loss): $1.22

### Galveston Medical Branch - Dormitory Revenue Bonds, Series 1955 - Reserve Fund:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #184, 8%, due 4/15/2001</td>
<td>$733.22</td>
<td></td>
</tr>
<tr>
<td>GNMA, Pool #852, 6-1/2%, due 1/15/2002</td>
<td>555.30</td>
<td>0.33</td>
</tr>
</tbody>
</table>

Total Proceeds: $1,288.52

Total Profit or (Loss): $0.33

### M. D. Anderson Hospital - Endowment and Hospital Revenue Bonds, Series 1972 - Interest & Sinking Fund:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #1524, 6-1/2%, due 5/15/2002</td>
<td>$124.97</td>
<td>$7.25</td>
</tr>
</tbody>
</table>

### M. D. Anderson Hospital - Endowment and Hospital Revenue Bonds, Series 1972 - Reserve Fund:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #1279, 6-1/2%, due 7/15/2002</td>
<td>$3,107.84</td>
<td>$170.93</td>
</tr>
<tr>
<td>GNMA, Pool #1524, 6-1/2%, due 5/15/2002</td>
<td>35.08</td>
<td>2.04</td>
</tr>
<tr>
<td>GNMA, Pool #1710, 6-1/2%, due 9/15/2002</td>
<td>897.64</td>
<td>50.99</td>
</tr>
</tbody>
</table>

Total Proceeds: $4,040.56

Total Profit or (Loss): $223.96
### U. T. EL PASO - STUDENT HOUSING REVENUE BONDS OF 1961 - RESERVE FUND:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #852, 6-1/2%, due 1/15/2002</td>
<td>$86.16</td>
<td>$2.46</td>
</tr>
</tbody>
</table>

### U. T. EL PASO - BUILDING REVENUE BONDS, SERIES 1969 - RESERVE FUND:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #121, 8%, due 11/15/2000</td>
<td>$121.98</td>
<td>$2.45</td>
</tr>
<tr>
<td>GNMA, Pool #184, 8%, due 4/15/2001</td>
<td>251.20</td>
<td>-0-</td>
</tr>
<tr>
<td>GNMA, Pool #920, 8%, due 9/15/2001</td>
<td>206.31</td>
<td>4.85</td>
</tr>
<tr>
<td>GNMA, Pool #1029, 6-1/2%, due 12/15/2001</td>
<td>358.63</td>
<td>21.41</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$938.12</strong></td>
<td><strong>$28.71</strong></td>
</tr>
</tbody>
</table>

### U. T. EL PASO - STUDENT UNION BUILDING REVENUE BONDS, SERIES A AND B, 1967 - RESERVE FUND:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #184, 8%, due 4/15/2001</td>
<td>$268.17</td>
<td>$-0-</td>
</tr>
<tr>
<td>GNMA, Pool #548, 8%, due 4/15/2001</td>
<td>31.59</td>
<td>(2.81)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$299.76</strong></td>
<td><strong>(2.81)</strong></td>
</tr>
</tbody>
</table>

### U. T. EL PASO - COMBINED FEE REVENUE BONDS, SERIES 1970, 1971 & 1973 - RESERVE FUND:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #194, 8%, due 1/15/2001</td>
<td>$709.94</td>
<td>($25.91)</td>
</tr>
<tr>
<td>GNMA, Pool #920, 8%, due 9/15/2001</td>
<td>689.21</td>
<td>10.48</td>
</tr>
<tr>
<td>GNMA, Pool #1029, 6-1/2%, due 12/15/2001</td>
<td>39.91</td>
<td>2.38</td>
</tr>
<tr>
<td>GNMA, Pool #1524, 6-1/2%, due 5/15/2002</td>
<td>168.92</td>
<td>9.80</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,607.98</strong></td>
<td><strong>(3.25)</strong></td>
</tr>
</tbody>
</table>

### U. T. ARLINGTON - HOUSING SYSTEM REVENUE BONDS - SERIES 1963 - RESERVE FUND:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #184, 8%, due 4/15/2001</td>
<td>$220.65</td>
<td>$-0-</td>
</tr>
<tr>
<td>GNMA, Pool #708, 6-1/2%, due 11/15/2001</td>
<td>29.08</td>
<td>1.36</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$249.73</strong></td>
<td><strong>1.36</strong></td>
</tr>
</tbody>
</table>

### U. T. ARLINGTON - STUDENT CENTER FEE BONDS, SERIES 1960 - RESERVE FUND:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #184, 8%, due 4/15/2001</td>
<td>$271.56</td>
<td>$-0-</td>
</tr>
</tbody>
</table>

### U. T. ARLINGTON - GYMNASIUM FEE BONDS - SERIES 1961 - RESERVE FUND:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #184, 8%, due 4/15/2001</td>
<td>$280.05</td>
<td>$-0-</td>
</tr>
</tbody>
</table>

### U. T. ARLINGTON - STUDENT FEE REVENUE BONDS - SERIES 1964, SERIES 1966, AND SERIES 1968 - RESERVE FUND:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #121, 8%, due 11/15/2000</td>
<td>$64.06</td>
<td>4.10</td>
</tr>
<tr>
<td>GNMA, Pool #548, 8%, due 4/15/2001</td>
<td>130.80</td>
<td>(7.19)</td>
</tr>
<tr>
<td>GNMA, Pool #852, 6-1/2%, due 1/15/2002</td>
<td>171.86</td>
<td>4.90</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$366.72</strong></td>
<td><strong>1.81</strong></td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #708, 6-1/2%, due 11/15/2001</td>
<td>$41.58</td>
<td>1.94</td>
</tr>
<tr>
<td>GNMA, Pool #1029, 6-1/2%, due 12/15/2001</td>
<td>32.89</td>
<td>1.51</td>
</tr>
<tr>
<td>GNMA, Pool #3415, 8%, due 1/15/2004</td>
<td>289.66</td>
<td>0.36</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$364.13</strong></td>
<td><strong>3.81</strong></td>
</tr>
</tbody>
</table>
For Month Ended April 30, 1974

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 April, 1974. The Associate Deputy Chancellor for Investments, Trusts and Lands recommends approval by the Board of Regents of these transactions.

INVESTMENTS ACQUIRED

<table>
<thead>
<tr>
<th>Par Value</th>
<th>Description and Fund</th>
<th>Total Net Cost</th>
<th>Yield at Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>$275,000</td>
<td>Common Trust Fund</td>
<td>$277,750.00</td>
<td>8.875%</td>
</tr>
</tbody>
</table>

U. S. GOVERNMENT OBLIGATIONS (Guaranteed): See Bond Purchase Schedule for Detail

CORPORATE BONDS:
See Bond Purchase Schedule for Detail

<table>
<thead>
<tr>
<th>Par Value</th>
<th>Description and Fund</th>
<th>Total Net Cost</th>
<th>Yield at Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,000</td>
<td>Common Trust Fund</td>
<td>2,792.80</td>
<td>9.00</td>
</tr>
<tr>
<td>15,000</td>
<td>AH - Anderson-Mayfair Mortgage Retirement Fund</td>
<td>13,987.35</td>
<td>8.50</td>
</tr>
<tr>
<td></td>
<td>TOTAL - Corporate Bonds</td>
<td>16,780.15</td>
<td>8.58</td>
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</tbody>
</table>

COMMON STOCKS:
See Stock Purchase Schedule for Detail

<table>
<thead>
<tr>
<th>Description and Fund</th>
<th>Total Net Cost</th>
<th>Yield at Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Business Administration Foundation - George M. Kozmetsky Memorial Scholarship</td>
<td>8.45</td>
<td>--</td>
</tr>
<tr>
<td>College of Business Administration Foundation - Anonymous Gift - General Purposes</td>
<td>1.30</td>
<td>--</td>
</tr>
<tr>
<td>TOTAL - Common Stocks</td>
<td>9.75</td>
<td>--</td>
</tr>
</tbody>
</table>

TOTAL - BONDS AND STOCKS $294,539.90 8.86%

SHORT TERM PAPER:

<table>
<thead>
<tr>
<th>Amount</th>
<th>Description</th>
<th>Total Net Cost</th>
<th>Yield at Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,000</td>
<td>Austin National Bank 8-1/2% CD, due 4/10/74 (Winedale Stagecoach Inn - Varner Acreage purchased from CTF on 4/5/74)</td>
<td>$3,000.00</td>
<td>8.50%</td>
</tr>
<tr>
<td>46,000</td>
<td>FMC 8-5/8% Note, due 4/19/74 (Common Trust Fund - Undistributed Receipts purchased from CTF on 4/10/74)</td>
<td>46,000.00</td>
<td>8.69</td>
</tr>
<tr>
<td>5,000</td>
<td>CIT 9-3/4% Note, due 5/9/74 (Winedale Stagecoach Inn - Varner Acreage)</td>
<td>5,000.00</td>
<td>9.83</td>
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<tr>
<td>18,000</td>
<td>FMC 10% Note, due 5/22/74 (Common Trust Fund - Undistributed Receipts)</td>
<td>18,000.00</td>
<td>10.08</td>
</tr>
<tr>
<td>Par Value</td>
<td>Description and Fund</td>
<td>Total Net Cost</td>
<td>Yield at Cost</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------</td>
<td>----------------</td>
<td>---------------</td>
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<tr>
<td><strong>SHORT TERM PAPER:</strong> (Continued)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$ 40,700</td>
<td>ITT-Aetna 9-3/4% Note, due 5/30/74 ($7,100 - Common Trust Fund - Undistributed Receipts 600 - Jack G. Taylor Endowment Fund 8,100 - Littlefield Fund for Southern History - Reserve for Publications 2,100 - C. J. Thomsen Gift 1,800 - Tom Slick Memorial Trust 1,800 - DMS - The William Buchanan Chair in Internal Medicine 17,000 - GMB - Courtney Townsend Lectureship in Medical Ethics 2,200 - C. Aubrey Smith Professorship in Accounting)</td>
<td>$ 40,700.00</td>
<td>9.90%</td>
</tr>
<tr>
<td>136,000</td>
<td>SRAC 9.90% Note, due 5/30/74 ($35,000 - Common Trust Fund - Undistributed Receipts 13,600 - Common Trust Fund 6,900 - Maud McCain Harding Fund 4,600 - W. A. (Bill) Cunningham Professorship 1,400 - C. Aubrey Smith Professorship in Accounting 17,800 - W. C. Hogg Fund 7,500 - GMB - James W. McLaughlin Fellowship Fund 18,600 - AH - Barbara G. Horowitz Fund 2,100 - The George M. Oliver Charitable Trust 2,100 - The Leila A. Oliver Charitable Trust 1,100 - The L. D. and Marie Gale Unitrust 24,300 - GMB - Clark W. Thompson Trust)</td>
<td>$ 136,000.00</td>
<td>10.02%</td>
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<tr>
<td>304,000</td>
<td>Westinghouse Credit 9-1/4% Note, due 5/31/74 ($54,000 - Common Trust Fund - Undistributed Receipts 125,000 - AH - Robert Welch Chair in Chemistry 125,000 - HMS - Robert Welch Chair in Chemistry)</td>
<td>$ 304,000.00</td>
<td>9.39%</td>
</tr>
<tr>
<td>133,000</td>
<td>Westinghouse Credit 9-3/4% Note, due 5/31/74 ($88,400 - Common Trust Fund - Undistributed Receipts 16,700 - AH - Anderson-Mayfair Mortgage Retirement Fund 26,500 - AH - Barbara G. Horowitz Fund 1,400 - DMS - The William Buchanan Chair in Internal Medicine)</td>
<td>$ 133,000.00</td>
<td>9.85%</td>
</tr>
<tr>
<td>Par Value</td>
<td>Description and Fund</td>
<td>Total Net Proceeds</td>
<td>Gain or Loss</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------</td>
<td>-------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>$11,991.85</td>
<td>Common Trust Fund</td>
<td>$11,991.85</td>
<td>($255.81)</td>
</tr>
<tr>
<td>950.90</td>
<td>The William Buchanan Chair in Internal Medicine - DMS</td>
<td>950.90</td>
<td>0.01</td>
</tr>
<tr>
<td>220.52</td>
<td>Reserve for Possible Fire Losses - Temporary Student Housing Units</td>
<td>220.52</td>
<td>2.62</td>
</tr>
<tr>
<td>515.01</td>
<td>Texas Union Building Fund</td>
<td>515.01</td>
<td>44.96</td>
</tr>
<tr>
<td>2,268.48</td>
<td>Student Property Deposit Scholarship Fund</td>
<td>2,268.48</td>
<td>12.78</td>
</tr>
<tr>
<td>2,480.55</td>
<td>Student Property Deposit Scholarship Fund - Temporary</td>
<td>2,480.55</td>
<td>102.15</td>
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<tr>
<td>2,470.91</td>
<td>U.T. Austin - Dormitory Revenue Bond Fund, Series 1954 - Reserve Fund</td>
<td>2,470.91</td>
<td>(130.25)</td>
</tr>
<tr>
<td>625.60</td>
<td>U.T. Austin - Dormitory Revenue Bond Fund, Series 1956 - Reserve Fund</td>
<td>625.60</td>
<td>(30.73)</td>
</tr>
<tr>
<td>644.94</td>
<td>U.T. Austin - Student Housing Revenue Bonds of 1963 - Reserve Fund</td>
<td>644.94</td>
<td>20.87</td>
</tr>
<tr>
<td>7,660.96</td>
<td>U.T. Austin - Housing System Revenue Bonds, Series 1967 - Reserve Fund</td>
<td>7,660.96</td>
<td>296.06</td>
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<tr>
<td>21,372.77</td>
<td>U.T. Austin - Building Revenue Bonds, Series 1969 - Utility Plant - Student Fee Revenue Bonds - Reserve Fund</td>
<td>21,372.77</td>
<td>(1,161.00)</td>
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<tr>
<td>369.01</td>
<td>U.T. Austin - Student Union Revenue Bonds, Series 1958 - Reserve Fund</td>
<td>369.01</td>
<td>20.40</td>
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<tr>
<td>767.44</td>
<td>Galveston Medical Branch - Dormitory Revenue Bonds, Series 1955 - Reserve Fund</td>
<td>767.44</td>
<td>0.37</td>
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<tr>
<td>1,151.15</td>
<td>M.D. Anderson Hospital - Endowment and Hospital Revenue Bonds, Series 1972 - Interest &amp; Sinking Fund</td>
<td>1,151.15</td>
<td>66.77</td>
</tr>
<tr>
<td>2,231.05</td>
<td>M.D. Anderson Hospital - Endowment and Hospital Revenue Bonds, Series 1972 - Reserve Fund</td>
<td>2,231.05</td>
<td>126.93</td>
</tr>
<tr>
<td>95.84</td>
<td>U.T. El Paso - Student Housing Revenue Bonds of 1961 - Reserve Fund</td>
<td>95.84</td>
<td>2.73</td>
</tr>
<tr>
<td>6,438.08</td>
<td>U.T. El Paso - Building Revenue Bonds, Series 1969 - Reserve Fund</td>
<td>6,438.08</td>
<td>265.80</td>
</tr>
<tr>
<td>318.54</td>
<td>U.T. El Paso - Student Union Building Revenue Bonds, Series A and B, 1967 - Reserve Fund</td>
<td>318.54</td>
<td>(13.09)</td>
</tr>
<tr>
<td>2,278.41</td>
<td>U.T. El Paso - Combined Fee Revenue Bonds, Series 1970 &amp; 1971 - Reserve Fund</td>
<td>2,278.41</td>
<td>111.44</td>
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</table>
## INVESTMENTS DISPOSED OF

(Continued)

<table>
<thead>
<tr>
<th>Par Value</th>
<th>Description and Fund</th>
<th>Total Net Proceeds</th>
<th>Gain or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$312.02</td>
<td>U.T. Arlington - Housing System Revenue Bonds - Series 1963 - Reserve Fund</td>
<td>$312.02</td>
<td>$12.47</td>
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<tr>
<td>55.41</td>
<td>U.T. Arlington - Student Center Fee Bonds, Series 1960 - Reserve Fund</td>
<td>55.41</td>
<td>-0-</td>
</tr>
<tr>
<td>57.15</td>
<td>U.T. Arlington - Gymnasium Fee Bonds - Series 1961 - Reserve Fund</td>
<td>57.15</td>
<td>-0-</td>
</tr>
<tr>
<td>924.64</td>
<td>U.T. Arlington - Combined Fee Revenue Bonds, Series 1971, 1971A &amp; 1973 - Reserve Fund</td>
<td>924.64</td>
<td>32.71</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>- GNMA Pass-Throughs, Various Pools</strong></td>
<td><strong>91,417.05</strong></td>
<td><strong>553.38</strong></td>
</tr>
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</table>

### CORPORATE BONDS:

See Bond Maturities and Prepayments Schedule for Detail

<table>
<thead>
<tr>
<th>Par Value</th>
<th>Description and Fund</th>
<th>Total Net Proceeds</th>
<th>Gain or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>26,000</td>
<td>AH - Anderson-Mayfair Mortgage Retirement Fund</td>
<td>26,000.00</td>
<td>-0-</td>
</tr>
<tr>
<td>8,000</td>
<td>Winedale Stagecoach Inn - Varner Acreage</td>
<td>8,000.00</td>
<td>-0-</td>
</tr>
<tr>
<td>2,083.33</td>
<td>Jack G. Taylor Endowment Fund</td>
<td>2,083.33</td>
<td>-0-</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>- Corporate Bonds</strong></td>
<td><strong>36,083.33</strong></td>
<td><strong>-0-</strong></td>
</tr>
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</table>

### COMMON STOCKS:

See Stock Sales Schedule for Detail

<table>
<thead>
<tr>
<th>Description and Fund</th>
<th>Par Value</th>
<th>Yield At Sale</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH - Barbara G. Horowitz Fund</td>
<td>37,222.56</td>
<td>3.89%</td>
<td>8,039.56</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>- BONDS AND STOCKS DISPOSED OF</strong></td>
<td><strong>$73,305.89</strong></td>
<td><strong>$8,592.94</strong></td>
</tr>
</tbody>
</table>

### SHORT TERM PAPER:

<table>
<thead>
<tr>
<th>Description and Fund</th>
<th>Par Value</th>
<th>Total Net Proceeds</th>
<th>Gain or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16,700</td>
<td>SRAC 7-7/8% Note, due 4/3/74</td>
<td>$16,700.00</td>
<td>-0-</td>
</tr>
<tr>
<td>($14,000 - Student Property Deposit Scholarship Fund 2,700 - Texas Union Building Fund)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3,000</td>
<td>Austin National Bank 8-1/2% CD, due 4/10/74</td>
<td>3,000.00</td>
<td>-0-</td>
</tr>
<tr>
<td>(Common Trust Fund sold to Winedale Stagecoach Inn - Varner Acreage on 4/5/74)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Par Value</td>
<td>Description and Fund</td>
<td>Total Net Proceeds</td>
<td>Gain or (Loss)</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------------------------------------------</td>
<td>--------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>$46,000</td>
<td>FMC 8-5/8% Note, due 4/19/74 (Common Trust Fund sold to CTF - Undistributed Receipts on 4/10/74)</td>
<td>$46,000.00</td>
<td>-0-</td>
</tr>
<tr>
<td>278,000</td>
<td>FMC 8-5/8% Note, due 4/19/74 (Common Trust Fund)</td>
<td>278,000.00</td>
<td>0-</td>
</tr>
<tr>
<td>5,000</td>
<td>SRAC 9.15% Note, due 4/24/74 (Common Trust Fund)</td>
<td>5,000.00</td>
<td>0-</td>
</tr>
<tr>
<td>15,000</td>
<td>FMC 9% Note, due 4/26/74 (Common Trust Fund)</td>
<td>15,000.00</td>
<td>0-</td>
</tr>
<tr>
<td>PAR VALUE</td>
<td>ISSUE</td>
<td>UNIT</td>
<td>COST</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------------------------------------------------------</td>
<td>------</td>
<td>----------</td>
</tr>
<tr>
<td>$ 275,000</td>
<td>Farmers Home Administration Certificates of Beneficial Ownership (Insured Notes) 9%, due 4/23/89</td>
<td>$101.00</td>
<td>$ 277,750.00</td>
</tr>
</tbody>
</table>

**Corporate Bonds**

<table>
<thead>
<tr>
<th>PAR VALUE</th>
<th>ISSUE</th>
<th>UNIT</th>
<th>COST</th>
<th>TOTAL</th>
<th>YIELD AT COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 4,000</td>
<td>Baltimore Gas &amp; Electric Co. 4-7/8% SF Debs., due 6/15/86</td>
<td>69.82</td>
<td>$ 280,542.80</td>
<td>9.00</td>
<td></td>
</tr>
</tbody>
</table>

**BOND MATURITIES AND PREPAYMENTS**

<table>
<thead>
<tr>
<th>PAR VALUE</th>
<th>ISSUE</th>
<th>PROCEEDS</th>
<th>PROFIT OR (LOSS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 218.07</td>
<td>GNMA, Pass-Through Pool #95, 8%, due 12/15/2000</td>
<td>$ 218.07</td>
<td>($ 11.73)</td>
</tr>
<tr>
<td>7,638.37</td>
<td>GNMA, Pass-Through Pool #163, 8%, due 2/15/2001</td>
<td>7,638.37</td>
<td>( 410.94)</td>
</tr>
<tr>
<td>546.47</td>
<td>GNMA, Pass-Through Pool #548, 8%, due 4/15/2001</td>
<td>546.47</td>
<td>( 29.90)</td>
</tr>
<tr>
<td>220.03</td>
<td>GNMA, Pass-Through Pool #650, 8%, due 4/15/2001</td>
<td>220.03</td>
<td>( 11.84)</td>
</tr>
<tr>
<td>1,192.34</td>
<td>GNMA, Pass-Through Pool #708, 6-1/2%, due 11/15/2001</td>
<td>1,192.34</td>
<td>55.68</td>
</tr>
<tr>
<td>1,654.82</td>
<td>GNMA, Pass-Through Pool #852, 6-1/2%, due 1/15/2002</td>
<td>1,654.82</td>
<td>161.34</td>
</tr>
<tr>
<td>521.75</td>
<td>GNMA, Pass-Through Pool #920, 8%, due 9/15/2001</td>
<td>521.75</td>
<td>( 8.92)</td>
</tr>
<tr>
<td>$ 11,991.85</td>
<td>GNMA, Pass-Through Pool #920, 8%, due 9/15/2001</td>
<td>$ 11,991.85</td>
<td>( 255.81)</td>
</tr>
</tbody>
</table>
## BARBARA G. HOROWITZ FUND - ANDERSON HOSPITAL

(April, 1974)

### STOCK SALES

<table>
<thead>
<tr>
<th>NO. OF SHARES SOLD</th>
<th>ISSUE</th>
<th>NET SALES PROCEEDS</th>
<th>PROFIT OR (LOSS)</th>
<th>PRICE AT SALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,014 Shs.</td>
<td>Colgate-Palmolive Co. Common Stock</td>
<td>$26,617.50</td>
<td>$12,696.50</td>
<td>2.04%</td>
</tr>
<tr>
<td>196 &quot;</td>
<td>Detroit Edison Co. 5-1/2% Conv. Cum. Preferred Stock</td>
<td>6,395.12</td>
<td>(3,354.88)</td>
<td>8.21</td>
</tr>
<tr>
<td>200 &quot;</td>
<td>National Fuel Gas Co. Common Stock</td>
<td>4,209.94</td>
<td>(1,302.06)</td>
<td>9.01</td>
</tr>
</tbody>
</table>

**Total:** $37,222.56

### COLLEGE OF BUSINESS ADMINISTRATION FOUNDATION - GEORGE M. KOZMETSKY MEMORIAL SCHOLARSHIP

(April, 1974)

### STOCK PURCHASES

<table>
<thead>
<tr>
<th>NO. OF SHS. PURCHASED</th>
<th>ISSUE</th>
<th>UNIT</th>
<th>TOTAL</th>
<th>YIELD AT COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>65/100 Sh.</td>
<td>Teledyne, Inc. Common Stock</td>
<td>$13.00</td>
<td>$8.45</td>
<td>--</td>
</tr>
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</table>

### COLLEGE OF BUSINESS ADMINISTRATION FOUNDATION - ANONYMOUS GIFT - GENERAL PURPOSES

(April, 1974)

### STOCK PURCHASES

<table>
<thead>
<tr>
<th>NO. OF SHS.</th>
<th>ISSUE</th>
<th>UNIT</th>
<th>TOTAL</th>
<th>YIELD</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/100 Sh.</td>
<td>Teledyne, Inc. Common Stock</td>
<td>$13.00</td>
<td>$1.30</td>
<td>--</td>
</tr>
<tr>
<td>PAR VALUE</td>
<td>ISSUE</td>
<td>PROCEEDS</td>
<td>PROFIT OR (LOSS)</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>-------</td>
<td>----------</td>
<td>-----------------</td>
<td></td>
</tr>
<tr>
<td>$ 23,000</td>
<td>Louisiana Power &amp; Light Co. 3% 1st Mtge., due 4/1/74</td>
<td>$ 23,000.00</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>3,000</td>
<td>Beneficial Loan Corp. 3-3/8% Notes, due 4/1/74</td>
<td>$ 3,000.00</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>$ 26,000</td>
<td></td>
<td>$ 26,000.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAR VALUE</th>
<th>ISSUE</th>
<th>UNIT</th>
<th>COST</th>
<th>TOTAL</th>
<th>YIELD AT COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 15,000</td>
<td>Chesapeake &amp; Ohio Railway Co. 2nd Equipment Trust Certificates 5-7/8% of 1967, due 4/1/77</td>
<td>$ 93.249</td>
<td>$ 12,987.35</td>
<td>8.30%</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAR VALUE</th>
<th>ISSUE</th>
<th>PROCEEDS</th>
<th>PROFIT OR (LOSS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 8,000</td>
<td>Beneficial Loan Corp. 3-3/8% Notes, due 4/1/74</td>
<td>$ 8,000.00</td>
<td>--</td>
</tr>
</tbody>
</table>
### JACK G. TAYLOR ENDOWMENT FUND
(April, 1974)

**BOND MATURITIES AND PREPAYMENTS**

<table>
<thead>
<tr>
<th>PAR VALUE</th>
<th>ISSUE</th>
<th>PROCEEDS</th>
<th>PROFIT OR (LOSS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2,083.33</td>
<td>Universal Telephone, Inc. 8% Conv. Note, due 4/1/75</td>
<td>$2,083.33</td>
<td>-0-</td>
</tr>
</tbody>
</table>

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### THE WILLIAM BUCHANAN CHAIR IN INTERNAL MEDICINE - DALLAS MEDICAL SCHOOL
(April, 1974)

**BOND MATURITIES AND PREPAYMENTS**

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>PROCEEDS</th>
<th>PROFIT OR (LOSS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pass-Through Pool 6650, 8%, due 4/15/2001</td>
<td>$763.41</td>
<td>($14.20)</td>
</tr>
<tr>
<td>187.49</td>
<td></td>
<td>14.21</td>
</tr>
<tr>
<td>GNMA, Pass-Through Pool #852, 6-1/2%, due 1/15/2002</td>
<td>187.49</td>
<td></td>
</tr>
<tr>
<td>$950.90</td>
<td></td>
<td>$0.01</td>
</tr>
</tbody>
</table>
### GNMA Pass-Through Maturities and Prepayments (April, 1974)

**Issue Proceeds Profit or (Loss)**

**Reserve for Possible Fire Losses - Temporary Student Housing Units:**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #852, 6-1/2%, due 1/15/2002</td>
<td>$220.52</td>
<td>$2.62</td>
</tr>
</tbody>
</table>

**Texas Union Building Fund:**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #852, 6-1/2%, due 1/15/2002</td>
<td>$515.01</td>
<td>$44.96</td>
</tr>
</tbody>
</table>

**Student Property Deposit Scholarship Fund:**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #121, 8%, due 11/15/2000</td>
<td>$944.23</td>
<td>($26.34)</td>
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<tr>
<td>GNMA, Pool #184, 8%, due 4/15/2001</td>
<td>50.57</td>
<td>-0-</td>
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<tr>
<td>GNMA, Pool #852, 6-1/2%, due 1/15/2002</td>
<td>551.76</td>
<td>0.33</td>
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<tr>
<td>GNMA, Pool #1524, 6-1/2%, due 5/15/2002</td>
<td>651.48</td>
<td>38.70</td>
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<tr>
<td>GNMA, Pool #3415, 8%, due 1/15/2004</td>
<td>70.44</td>
<td>0.09</td>
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<td><strong>Total</strong></td>
<td><strong>$2,258.48</strong></td>
<td><strong>$12.78</strong></td>
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**Student Property Deposit Scholarship Fund - Temporary:**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
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<tbody>
<tr>
<td>GNMA, Pool #708, 6-1/2%, due 11/15/2001</td>
<td>$1,862.73</td>
<td>$77.68</td>
</tr>
<tr>
<td>GNMA, Pool #852, 6-1/2%, due 1/15/2002</td>
<td>617.82</td>
<td>24.47</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$2,480.55</strong></td>
<td><strong>$102.15</strong></td>
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</table>


<table>
<thead>
<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #194, 8%, due 1/15/2001</td>
<td>$275.41</td>
<td>($10.05)</td>
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<tr>
<td>GNMA, Pool #708, 6-1/2%, due 11/15/2001</td>
<td>744.13</td>
<td>15.33</td>
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<tr>
<td>GNMA, Pool #1029, 6-1/2%, due 12/15/2001</td>
<td>4,919.97</td>
<td>229.76</td>
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<tr>
<td>GNMA, Pool #1745, 6-1/2%, due 9/15/2002</td>
<td>7,607.94</td>
<td>423.00</td>
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<td>GNMA, Pool #2229, 8%, due 9/15/2001</td>
<td>1,005.42</td>
<td>37.00</td>
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<td>GNMA, Pool #2308, 8%, due 4/15/2001</td>
<td>105.17</td>
<td>3.81</td>
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<td>GNMA, Pool #3415, 8%, due 1/15/2004</td>
<td>45.03</td>
<td>0.06</td>
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<td><strong>Total</strong></td>
<td><strong>$14,703.07</strong></td>
<td><strong>$617.29</strong></td>
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**U. T. Austin - Dormitory Revenue Bond Fund, Series 1954 - Reserve Fund:**

<table>
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<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #184, 8%, due 4/15/2001</td>
<td>$58.88</td>
<td>($-0-)</td>
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<tr>
<td>GNMA, Pool #548, 8%, due 4/15/2001</td>
<td>2,412.03</td>
<td>($130.25)</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$2,470.91</strong></td>
<td><strong>($130.25)</strong></td>
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**U. T. Austin - Dormitory Revenue Bonds Fund, Series 1956 - Reserve Fund:**

<table>
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<tr>
<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
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<tr>
<td>GNMA, Pool #548, 8%, due 4/15/2001</td>
<td>$496.22</td>
<td>($26.80)</td>
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<tr>
<td>GNMA, Pool #650, 8%, due 4/15/2001</td>
<td>129.38</td>
<td>3.93</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$625.60</strong></td>
<td><strong>($30.73)</strong></td>
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**U. T. Austin - Student Housing Revenue Bonds of 1963 - Reserve Fund:**

<table>
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<th>Issue</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNMA, Pool #184, 8%, due 4/15/2001</td>
<td>$87.97</td>
<td>($-0-)</td>
</tr>
<tr>
<td>GNMA, Pool #650, 8%, due 4/15/2001</td>
<td>129.38</td>
<td>3.93</td>
</tr>
<tr>
<td>GNMA, Pool #1524, 6-1/2%, due 5/15/2002</td>
<td>427.59</td>
<td>24.80</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$644.94</strong></td>
<td><strong>$20.87</strong></td>
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</table>
### GNMA PASS-THROUGH MATURITIES AND PREPAYMENTS (Continued)
(April, 1974)

<table>
<thead>
<tr>
<th>Issue Description</th>
<th>Proceeds</th>
<th>Profit or (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>U. T. AUSTIN - HOUSING SYSTEM REVENUE BONDS, SERIES 1967 - RESERVE FUND:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GNMA, Pool #121, 8%, due 11/15/2000</td>
<td>$3,209.79</td>
<td>$178.14</td>
</tr>
<tr>
<td>GNMA, Pool #184, 8%, due 4/15/2001</td>
<td>52.64</td>
<td>-0</td>
</tr>
<tr>
<td>GNMA, Pool #548, 8%, due 4/15/2001</td>
<td>810.29</td>
<td>(43.76)</td>
</tr>
<tr>
<td>GNMA, Pool #650, 8%, due 4/15/2001</td>
<td>494.41</td>
<td>(15.03)</td>
</tr>
<tr>
<td>GNMA, Pool #708, 6-1/2%, due 11/15/2001</td>
<td>371.58</td>
<td>17.35</td>
</tr>
<tr>
<td>GNMA, Pool #1029, 6-1/2%, due 12/15/2001</td>
<td>867.73</td>
<td>51.80</td>
</tr>
<tr>
<td>GNMA, Pool #1524, 6-1/2%, due 5/15/2002</td>
<td>1,854.52</td>
<td>107.56</td>
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<tr>
<td><strong>Total</strong></td>
<td>$7,660.96</td>
<td>$296.06</td>
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</tbody>
</table>

| **U. T. AUSTIN - BUILDING REVENUE BONDS, SERIES 1969**             |          |                 |
| **UTILITY PLANT - STUDENT FEE REVENUE BONDS - RESERVE FUND:**     |          |                 |
| GNMA, Pool #121, 8%, due 11/15/2000                                 | $20,647.32| ($1,127.34)    |
| GNMA, Pool #548, 8%, due 4/15/2001                                  | 659.54   | (34.62)         |
| GNMA, Pool #920, 8%, due 9/15/2001                                  | 65.91    | 0.96            |
| **Total**                                                           | $21,372.77| ($1,161.00)   |

| GNMA, Pool #184, 8%, due 4/15/2001                                  | $12.13   | $-0             |
| GNMA, Pool #1029, 6-1/2%, due 12/15/2001                            | 4,500.57 | 206.58          |
| GNMA, Pool #1524, 6-1/2%, due 5/15/2002                             | 2,662.63 | 154.43          |
| GNMA, Pool #3415, 8%, due 1/15/2004                                 | 527.29   | 0.66            |
| **Total**                                                           | $7,702.62| $361.67         |

| **U. T. AUSTIN - STUDENT UNION REVENUE BONDS, SERIES 1958 - RESERVE FUND:** |          |                 |
| GNMA, Pool #184, 8%, due 4/15/2001                                  | $17.32   | $-0             |
| GNMA, Pool #1524, 6-1/2%, due 5/15/2002                             | 351.69   | 20.40           |
| **Total**                                                           | $369.01  | $20.40          |

| **GALVESTON MEDICAL BRANCH - DORMITORY REVENUE BONDS, SERIES 1955 - RESERVE FUND:** |          |                 |
| GNMA, Pool #184, 8%, due 4/15/2001                                  | $149.62  | $-0             |
| GNMA, Pool #852, 6-1/2%, due 1/15/2002                              | 617.82   | 0.37            |
| **Total**                                                           | $767.44  | $0.37           |

| **M. D. ANDERSON HOSPITAL - ENDOWMENT AND HOSPITAL REVENUE BONDS, SERIES 1972 - INTEREST & SINKING FUND:** |          |                 |
| GNMA, Pool #1524, 6-1/2%, due 5/15/2002                             | $1,151.15| $66.77          |

| **M. D. ANDERSON HOSPITAL - ENDOWMENT AND HOSPITAL REVENUE BONDS, SERIES 1972 - RESERVE FUND:** |          |                 |
| GNMA, Pool #1279, 6-1/2%, due 7/15/2002                             | $463.38  | $25.49          |
| GNMA, Pool #1524, 6-1/2%, due 5/15/2002                              | 864.80   | 50.16           |
| GNMA, Pool #1710, 6-1/2%, due 9/15/2002                              | 902.87   | 51.28           |
| **Total**                                                           | $2,231.05| $126.93         |
### GNMA PASS-THROUGH MATURITIES AND PREPAYMENTS (Continued) (April, 1974)

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>PROCEEDS</th>
<th>PROFIT OR (LOSS)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>U. T. EL PASO - STUDENT HOUSING REVENUE BONDS OF 1961 - RESERVE FUND:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GNMA, Pool #852, 6-1/2%, due 1/15/2002</td>
<td>$95.84</td>
<td>$2.73</td>
</tr>
<tr>
<td><strong>U. T. EL PASO - BUILDING REVENUE BONDS, SERIES 1969 - RESERVE FUND:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GNMA, Pool #121, 8%, due 11/15/2000</td>
<td>$2,905.77</td>
<td>$58.41</td>
</tr>
<tr>
<td>GNMA, Pool #184, 8%, due 4/1/2001</td>
<td>31.26</td>
<td>-0-</td>
</tr>
<tr>
<td>GNMA, Pool #920, 8%, due 9/15/2001</td>
<td>11.62</td>
<td>0.27</td>
</tr>
<tr>
<td>GNMA, Pool #1029, 6-1/2%, due 12/15/2001</td>
<td>3469.43</td>
<td>207.12</td>
</tr>
<tr>
<td><strong>U. T. EL PASO - STUDENT UNION BUILDING REVENUE BONDS, SERIES A AND B, 1967 - RESERVE FUND:</strong></td>
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<td></td>
</tr>
<tr>
<td>GNMA, Pool #184, 8%, due 4/15/2001</td>
<td>$54.72</td>
<td>$-0-</td>
</tr>
<tr>
<td>GNMA, Pool #548, 8%, due 4/15/2001</td>
<td>263.82</td>
<td>($13.09)</td>
</tr>
<tr>
<td><strong>U. T. EL PASO - COMBINED FEE REVENUE BONDS, SERIES 1970, 1971 &amp; 1973 - RESERVE FUND:</strong></td>
<td></td>
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</tr>
<tr>
<td>GNMA, Pool #194, 8%, due 1/15/2001</td>
<td>$208.44</td>
<td>($7.61)</td>
</tr>
<tr>
<td>GNMA, Pool #920, 8%, due 9/15/2001</td>
<td>38.79</td>
<td>0.59</td>
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<tr>
<td>GNMA, Pool #1029, 6-1/2%, due 12/15/2001</td>
<td>386.14</td>
<td>23.05</td>
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<tr>
<td>GNMA, Pool #1524, 6-1/2%, due 5/15/2002</td>
<td>1,665.04</td>
<td>95.41</td>
</tr>
<tr>
<td><strong>U. T. ARLINGTON - HOUSING SYSTEM REVENUE BONDS - SERIES 1963 - RESERVE FUND:</strong></td>
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<td></td>
</tr>
<tr>
<td>GNMA, Pool #184, 8%, due 4/15/2001</td>
<td>$45.02</td>
<td>$-0-</td>
</tr>
<tr>
<td>GNMA, Pool #708, 6-1/2%, due 11/15/2001</td>
<td>267.00</td>
<td>12.47</td>
</tr>
<tr>
<td><strong>U. T. ARLINGTON - STUDENT CENTER FEE BONDS, SERIES 1960 - RESERVE FUND:</strong></td>
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<tr>
<td>GNMA, Pool #184, 8%, due 4/15/2001</td>
<td>$55.41</td>
<td>$-0-</td>
</tr>
<tr>
<td><strong>U. T. ARLINGTON - GYMNASIUM FEE BONDS - SERIES 1961 - RESERVE FUND:</strong></td>
<td></td>
<td></td>
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<tr>
<td>GNMA, Pool #184, 8%, due 4/15/2001</td>
<td>$57.15</td>
<td>$-0-</td>
</tr>
<tr>
<td><strong>U. T. ARLINGTON - STUDENT FEE REVENUE BONDS - SERIES 1964, SERIES 1966, AND SERIES 1968 - RESERVE FUND:</strong></td>
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<td></td>
</tr>
<tr>
<td>GNMA, Pool #121, 8%, due 11/15/2000</td>
<td>$1,525.97</td>
<td>$97.66</td>
</tr>
<tr>
<td>GNMA, Pool #548, 8%, due 4/15/2001</td>
<td>1,092.95</td>
<td>($59.02)</td>
</tr>
<tr>
<td>GNMA, Pool #852, 6-1/2%, due 1/15/2002</td>
<td>191.21</td>
<td>7.59</td>
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<tr>
<td>GNMA, Pool #708, 6-1/2%, due 11/15/2001</td>
<td>$381.70</td>
<td>$17.83</td>
</tr>
<tr>
<td>GNMA, Pool #1029, 6-1/2%, due 12/15/2001</td>
<td>318.16</td>
<td>14.60</td>
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<tr>
<td>GNMA, Pool #3415, 8%, due 1/15/2004</td>
<td>224.78</td>
<td>0.28</td>
</tr>
<tr>
<td><strong>U. T. ARLINGTON - STUDENT HOUSING REVENUE BONDS OF 1961 - RESERVE FUND:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GNMA, Pool #852, 6-1/2%, due 1/15/2002</td>
<td>$924.64</td>
<td>$32.71</td>
</tr>
</tbody>
</table>
RE ADDITIONS.--The Associate Deputy Chancellor for Investments, Trusts and Lands recommends that the following additions made to the Common Trust Fund endowment account on March 1, 1974, at a market unit value of $2.201731380, be approved.

<table>
<thead>
<tr>
<th>Fund</th>
<th>Recommended Additions</th>
<th>No. Units Added</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jennie and Carl Sundberg Scholarship Fund</td>
<td>$4,000.00</td>
<td>1,817</td>
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<tr>
<td>(College of Arts and Sciences Foundation) ($28,278.85 already in CTF)</td>
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<tr>
<td>J. C. Dolley Finance Education Fund</td>
<td>3.50</td>
<td>2</td>
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<tr>
<td>(College of Business Administration) ($187.95 already in CTF)</td>
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<tr>
<td>Mavis Alexander Fitzgerald Award</td>
<td>5.18</td>
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<tr>
<td>(College of Business Administration) ($272.62 already in CTF)</td>
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<tr>
<td>The Gilbreth Award Fund</td>
<td>9.79</td>
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<tr>
<td>(College of Business Administration) ($558.42 already in CTF)</td>
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<tr>
<td>Joseph Martín Hernandez, Jr., Memorial Scholarship</td>
<td>12.08</td>
<td>5</td>
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<tr>
<td>(College of Business Administration) ($1,176.20 already in CTF)</td>
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<tr>
<td>Karl and Helen McGinnis Scholarship</td>
<td>50.00</td>
<td>23</td>
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<tr>
<td>(College of Business Administration) ($3,890.00 already in CTF)</td>
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<tr>
<td>C. Aubrey Smith Professorship in Accounting</td>
<td>12,157.89</td>
<td>5,522</td>
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<tr>
<td>(College of Business Administration) ($66,595.38 already in CTF)</td>
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<tr>
<td>The Accounting Education Fund</td>
<td>1,520.00</td>
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<tr>
<td>(College of Business Administration Foundation) ($67,189.49 already in CTF)</td>
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<tr>
<td>Leo G. Blackstock Memorial Scholarship Fund</td>
<td>405.00</td>
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<tr>
<td>(College of Business Administration Foundation) ($3,933.75 already in CTF)</td>
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<tr>
<td>Marquis G. Eaton Accounting Education Fund</td>
<td>500.00</td>
<td>227</td>
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<tr>
<td>(College of Business Administration Foundation) ($13,297.00 already in CTF)</td>
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<tr>
<td>George M. Kozmetsky Memorial Fund</td>
<td>7,000.00</td>
<td>3,179</td>
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<tr>
<td>(College of Business Administration Foundation) ($44,317.26 already in CTF)</td>
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<tr>
<td>Betty and Glenn Mortimer Student-Faculty Excellence Award</td>
<td>26,437.66</td>
<td>12,008</td>
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<tr>
<td>(College of Business Administration Foundation) ($24,328.75 already in CTF)</td>
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<tr>
<td>Arthur Young Distinguished Professorship Fund</td>
<td>1,050.00</td>
<td>477</td>
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<tr>
<td>(College of Business Administration Foundation) ($90,100.00 already in CTF)</td>
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</tbody>
</table>

Additions - March 1, 1974
<table>
<thead>
<tr>
<th>Fund</th>
<th>Recommended Additions</th>
<th>No. Units Added</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charles Robert Devall Journalism Scholarship</td>
<td>$1,000.00</td>
<td>454</td>
</tr>
<tr>
<td>(School of Communication - Department of Journalism)</td>
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<tr>
<td>Journalism Foundation - Paul J. Thompson-DeWitt</td>
<td>100.00</td>
<td>45</td>
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<tr>
<td>Reddick Society</td>
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<td></td>
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<tr>
<td>(School of Communication - Department of Journalism)</td>
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<tr>
<td>Dewitt Reddick Journalism Scholarship Fund</td>
<td>2,888.81</td>
<td>1,312</td>
</tr>
<tr>
<td>(School of Communication - Department of Journalism)</td>
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<tr>
<td>W. A. (Bill) Cunningham Professorship</td>
<td>6,870.37</td>
<td>3,120</td>
</tr>
<tr>
<td>(College of Engineering Foundation)</td>
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<tr>
<td>Alfred and Nellie King Graduate Fellowship</td>
<td>5,885.11</td>
<td>2,673</td>
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<tr>
<td>(College of Engineering Foundation)</td>
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<td></td>
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<tr>
<td>1966 M. E. Class Fund</td>
<td>15.44</td>
<td>7</td>
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<tr>
<td>(College of Engineering Foundation)</td>
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<tr>
<td>T. U. Taylor Scholarship Fund</td>
<td>449.97</td>
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<tr>
<td>(College of Engineering Foundation)</td>
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<tr>
<td>Lillian Barkley Scholarship Fund</td>
<td>200.00</td>
<td>91</td>
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<tr>
<td>(College of Fine Arts Foundation)</td>
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<tr>
<td>E. William Doty Scholarship Fund</td>
<td>286.07</td>
<td>130</td>
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<tr>
<td>(College of Fine Arts Foundation)</td>
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<tr>
<td>Department of Drama Ex-Students Scholarship Fund</td>
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<td>(Geology Foundation)</td>
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Additions - March 1, 1974
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<th>Fund</th>
<th>Recommended Additions</th>
<th>No. Units Added</th>
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<tr>
<td>Hal P. Bybee Memorial Fund (Geology Foundation) ($251,791.01 already in CTF)</td>
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<td>Common Stock on hand 2/28/74, transferred at market close 2/28/74, last business day of quarter: 2 shares Exxon Corporation @ 83-5/8.</td>
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<td>(Sub-total - Additions to Hal P. Bybee Memorial Fund)</td>
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<td>Miss Effie Graves Scholarship Fund (Geology Foundation) ($11,025.00 already in CTF)</td>
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<td>Guy E. Green Scholarship Fund (Geology Foundation) ($15,578.00 already in CTF)</td>
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<td>Dr. F. L. Whitney Memorial Scholarship Fund (Geology Foundation) ($23,236.75 already in CTF)</td>
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<td>Pharmaceutical Research Fund (College of Pharmacy) ($1,590.80 already in CTF)</td>
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<td>Raoul Daniel Rene &quot;Daddy&quot; Cline Memorial Endowment Fund (Pharmaceutical Foundation) ($1,277.69 already in CTF)</td>
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Additions - March 1, 1974
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<td>($2,181.79 already in CTF)</td>
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Additions - March 1, 1974
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<th>Fund</th>
<th>Recommended Additions</th>
<th>No. Units Added</th>
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<tr>
<td>Bashour Memorial Lectureship (Dallas Medical School)</td>
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<tr>
<td>Dr. Eugene P. Frenkel Research Fund (Dallas Medical School)</td>
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<tr>
<td>Gillette Professorship of Obstetrics and Gynecology (Dallas Medical</td>
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<td>156,104.99</td>
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<td>Dr. Lee Hudson-Robert R. Penn Chair (Dallas Medical School)</td>
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<td>Holman Taylor, Sr., M. D. and Holman Taylor, Jr., M. D. Scholarship</td>
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<td>No. Units Added</td>
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<td>James Wade Rockwell Endowment Fund (Galveston Medical Branch)</td>
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Additions — March 1, 1974
### THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND

(Continued)

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<th>Fund</th>
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<td>Andy and Syd Cohen Endowment Fund (U. T. El Paso) ($2,207.65 already in CTF)</td>
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</tr>
<tr>
<td>Gladys Johnston Memorial Fund (U. T. El Paso) ($11,471.93 already in CTF)</td>
<td>10,000.00</td>
<td>4,542</td>
</tr>
<tr>
<td>Library Endowment Fund (U. T. El Paso) ($17,503.83 already in CTF)</td>
<td>1,887.65</td>
<td>857</td>
</tr>
<tr>
<td>The President's Associates Endowment Fund (U. T. El Paso) ($26,286.00 already in CTF)</td>
<td>12,162.00</td>
<td>5,524</td>
</tr>
<tr>
<td>Patrick Romanell Visiting Professorship in Philosophy (U. T. El Paso) ($5,333.38 already in CTF)</td>
<td>76.53</td>
<td>35</td>
</tr>
<tr>
<td>Julia Ann Ross Memorial Scholarship (U. T. El Paso) ($8,981.53 already in CTF)</td>
<td>660.93</td>
<td>300</td>
</tr>
<tr>
<td>Capt. James R. Valtr Memorial Scholarship Fund (U. T. El Paso) ($3,841.68 already in CTF)</td>
<td>20.00</td>
<td>9</td>
</tr>
<tr>
<td>The Mr. and Mrs. William Henry Wooldridge Library Fund (U. T. El Paso) ($24,124.06 already in CTF)</td>
<td>500.00</td>
<td>227</td>
</tr>
</tbody>
</table>

**TOTAL ADDITIONS TO COMMON TRUST FUND ON MARCH 1, 1974**

$1,393,838.43  
633,064

The results of the above additions will be THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND with a total book value of $43,707,709.79 with 19,259,498 units outstanding as of March 1, 1974.

**SUMMARY**

- Cash Added 3/1/74: $1,371,896.18
- Securities Added 3/1/74: 21,942.25

**TOTAL ADDITIONS TO COMMON TRUST FUND 3/1/74**

$1,393,838.43