

TO THE HONORABLE BOARD OF REGENTS OF THE UNIVERSITY OF TEXAS SYSTEM

Mrs. Johnson and Gentlemen:
The dockets prepared by the component institutions listed below are herewith. submitted with my recommendation for ratification or approval, as appropriate, at the meeting of the Board of Regents on April 29, 1972. 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 Austin
The University of Texas at El Pas
The University of Texas at Arlington
The University of Texas at Dallas
The University of Texas Southwestern Medical School at Dallas
The University of Texas Medical School at San Antonio
The University of Texas Dental School at San Antonio
The University of Texas Medical Branch at Galveston
The University of Texas Medical School at Houston
The University of Texas Dental Branch at Houston
The University of Texas M. D. Anderson Hospital and Tumor Institute at Houston The University of Texas Graduate School of Biomedical Sciences at Houston Division of Graduate Studies
The University of Texas School of Public Health at Houston The University of Texas Nursing School (System-wide)

Listed below are U. T. System and Institutional items which I recommend for the Board's ratification or approval, as appropriate, including my report of budget changes.


## GIFTS

The following gifts have been received. I recommend acceptance by the Board of Regents:

## Donor

Item - Purpose
Amount

1. *Mr. John C. Gibbs, Treasurer
Benson and Edith Ford Fund
2600 Buhl Building
Detroit, Michigan 48226
2. *Anonymous

General University Development
$\$ 10,000$
Purposes


GJEIS
(Continued)
Donor
3. *The University of Texas
Foundation, Inc.
P O. Box 7458 , University
Station
Austin, Texas 78712

Item - Purpose
Amount
Support of Development Activities \$ 5,000
Foundation, Inc.
Station
Austin, Texas 78712
4. Mr. J. H. Creeknore, President

Houston Endowment, Inc.
P. O. Box 52338

Houston, Texas 77052
5. *Mr. Larry Shortes

District Manager
Pioneer Natural Gas Company
P. O. Box 4757

Odessa, Texas 70760

2,100 feet of 2-inch Plastic Gas --Utility Pipeline serving the Administration Building at U. T. Permian Basin

Support for 1972 Program of $\$ 15,000$ The University of Texas Institute of Texan Cultures
*No letter of transmittal from donor.

## PROPOSED CHANGES IN THE CLASSTFIED PERSONNEL PAY PLAN

Salary Rate Changes for University police Titles -- System-wide.
In order to establish on a System-wide basis the same salary rates for all University police titles, it is proposed that the ranges indicated below be made effective September 1, 1972. These changes will change the salary range currently approved for each of the component institutions in the University System.

We have attempted to compare the salary ranges with the Department of Public Safety whose rates are set up by the State Classification Plan. The approach indicated is primarily one of expansion of the salary rates already approved. This approach will least affect most of the component institutions since their currently approved salary rates will fall within the proposed expansion of steps for each of the classifications.

For the Patrolman classification, only Galveston and El Paso are below the proposed minimum and only U. T. Houston is above the proposed maximum. For Sergeant, only El Paso, Galveston, San Antonio, and Dallas are currently below the proposed minimum and only Houston and Dallas Medical are above the proposed maximum. For Captain, only El Paso, Galveston, and San Antonio are currently below the proposed minimum. For the Assistant Chief, only Arlington and Galveston are below the proposed minimum. In most of these cases the differential is slight -- only one or two steps.

Because of the unique situation in which we are involved, however, there is a great deal of concern for the differences in salary rates throughout the System, particularly for this series of classifications. Since there is a great deal of interchange of University Policy with the thrust being toward a System Police Force, we believe that the proposed salary ranges will be a distinct advantage. Also, we believe that our recomendation, which primarily expands the salary ranges, will not be a serious problem for most Business Officers and Personnel Officers. We also plan to not include the Chief-of-Police in the Classified Personnel Pay Plan, which is already excluded at most component institutions. Each range includes eight salary steps.

Proposed

| Code |
| :--- |
| 6335 |
| 6320 |
| 6318 |
| 6306 |

Title
Patrolman, University Police
Sergeant, University Police
Captain, University Police
Assistant Chief-of-Police

| Minimum | Maximum |
| :---: | :---: |
| \$592 | \$ 800 |
| 680 | 910 |
| 770 | 1,050 |
| 870 | 1,200 |

U. T. Permian Basin requests permission to purchase from Dr. John J. Mcketta, Professor of Chenical Ensineering at 0 . 'T. Austin, wenty-three volunes of the Encyclopedia of Chemical Technology at a value set by him of $\$ 20$ per volume amounting to $\$ 460$, plus an additional charge for postage of $\$ 6$, making a cotal of $\$ 466$. Source of funds is from the State appropriation budgetod to the Jearning Resources Center - Books (i.c., Library).

The twenty-three volumes of Encyclopedia of Chemical Technology is listed in Books in Print 1971 as $\$ 50$ per volume list price. Inasmuch as this is a short discount item, the discount quoted by Baker \& Taylor is $16.5 \%$ or $\$ 8.25$ per volume.

## U. T. SAN ANTONIO LEASE AGREEMENT

Lease agreement between the Kroger Properties, Inc. of San Antonio and The University of Texas at San Antonio for 8,037 square feet of space located in the San Jacinto Building at 4242 Piedras Drive East (Suite 250). The term of the lease is for twenty-nine months beginning January 1,1972 and ending May 31, 1974. The rate is 0.4366 cents per square foot per month, amounting to $\$ 3,508.95$ per month. (Board of Control Lease No. U-2392L)

## Office of the Chancellor - Bater House

1. Transfer $\$ 5,000$ from the Chassifice Salaries account to the Maintenance and Operation account to reallocate funds noeded for operating expenses.
(RBC: D-103)

Law Office of The University of Texas System
2. Transfer $\$ 4,500$ from the Available University Fund Unallocated Operating Account to the Law Office Travel account. Unanticipated travel expenditures for trips to El Paso, Arlington, and to other component institutions have exhausted funds oxiginally budgeted to this account. (RBCF D-95)

## Special Services - Security Division

3. Appoint Joseph C. Webb as Deputy Director of Police effective June 1, 1972 at an annual salary rate of $\$ 19,000$. Source of funds: transfer from Mantenance and Operation account. (RBC's \#D-96, D-97)
4. Appoint Robert $K$. Bratten as Special Investigator effective March 6, 1972 at an annual salary rate of $\$ 10,500$. Source of funds: transfer from Maintenance and Operation account. (RBC's $\# \mathrm{FD}-104$, D-105)

## Special Services - Development Division

5. The following transfer of funds reflects the movement of a portion of the development activity from U. T. Austin to System Administration. Personnel involved include Mr. W. D. Blunk, Executive Director, Mr. Joe C. Phillips, Administrative Assistant, and Mrs. Linda K。 Dilday, Administrative Secretary:

Transfer of Funds:

## Account Title Account Number Amount

From:
University Development Board:

| Administrative and Professional Salaries | $14-0605-1009$ | $\$ 20,000$ |
| :--- | ---: | ---: |
| Classified Personnel | $14-0605-1010$ | 10,000 |
| CIerical Assistants | $14-0605-1020$ | 1,000 |
| Maintenance, Operation and Equipment | $14-0605-1050$ | 1,000 |
| Travel | $14-0605-1075$ | 2,000 |
| Publishing and Mailing | $14-0605-1055$ | 6,500 |
| $\quad$ Total |  | $\$ 40,500$ |

To:
Special Services-Development Division
Administrative and Professional Salaries

| $14-0614-1009$ | $\$ 15,500$ |
| ---: | ---: |
| $14-0614-1010$ | 14,500 |
| $14-0614-1020$ | 1,000 |
| $14-0614-1050$ | 1,000 |
| $14-0614-1075$ | 2,000 |
| $14-0614-1055$ | 6,500 |
|  | $\underline{\$ 40,500}$ |
|  |  |

(RBC's $\# \mathrm{D}-196, \mathrm{D}-107$ )
6. Appoint Frank B. Brown as Construction Tospector effective March 20, 1072 at an annual salary rate of $\$ 13,000$. (RBCH D-102)
7. Appoint Bobby Jo Maston as Mechanical Engineer cffective April. 10,1972 at an annual salary rate of $\$ 15,500$. ( $\mathrm{NBC} \% \mathrm{~F}$-108)

## Central Medical Applications Division (Revolving Fund)

8. Transfer $\$ 20,000$ from the Central Medical Applications Division Income Account to a new account to be entitled Student Records Project. This will provide funds to initiate a program in keeping permanent records on students in the medical and dental units of the U. T. System. (RBCFD D-98)

Regional Medical Program of Texas (U. S. Department of
 Health, Education and Welfare Contract Funds)
9. Appoint Janes Co Karsch as Operations Officer effective March 15, 1972 at an annal salary rate of $\$ 13,000$. (RBC\# D-101)
10. Increase the annual salary rate of David K. Ferguson, Director of Program Management and Deputy Coordinator, from $\$ 22,500$ to $\$ 23,500$ effective March 1, 1972. (RBC非 D-99)
11. Increase the anmul saiary rate of Maria A. Flood, Regional Representative, from $\$ 12,000$ to $\$ 13,000$ effective Maxch 1, 1972. (RBCH D-100)

## The University of Texas at San Antonio

12. Appoint Thomas M. Page as Director of Physical Plant Administration effective March 15, 1972 at an annual salary rate of $\$ 17,500$. (RBC湖 SAA-36)
13. Appoint Richard L. Lewis as Director of Admissions effective April 1, 1972 at an annual salary rate of $\$ 17,500$. Source of funds: Unallocated Account. (RBC's FSAA-38, SAA-39)
14. Transfer from the indicated departmental accomes to the institutional Unallocated Account, as follows:

| Department and Budget Category | Amount |
| :--- | ---: |
| Office of the President |  |
| Administrative and Professional Salaries | $\$ 12,560.36$ |
| Classified Salaries | $7,652.21$ |
| Wages | $4,000.00$ |
| Maintenance, Operation, and Equipment | $10,000.00$ |
| Travel | $6,000.00$ |
| Office of Academic Affairs |  |
| Administrative and Professional Salaries | $24,000.00$ |
| Classified Salaries | $6,594.00$ |
| Office of Fiscal Affairs |  |
| Administrative and Professional Salaries | $6,500.00$ |
| Classified Salaries | $13,884.00$ |
| Equipment | $6,000.00$ |
| Data Processing, Services | $28,200.00$ |
| Classified Saliries | $1,000.00$ |
| Wages | $16,500.00$ |
| Maintenance, Operation, and Equipment | $2,000.00$ |
| Travel | 252.00 |

The Universily of Tomas at san Antonto (contimued)
34. Department: and Budset Cintersory Amount:

| Miscellanoous Goneral Institutional Expense |  |
| :---: | :---: |
| Consuttants and Conferences | \$20,000.00 |
| Catalogues and Bulletins | 15,000.00 |
| Office of the Dean of Humanities and Social Science |  |
| Administrative and Professional. Salaries | 21,000.00 |
| Classified Salaries | 4,851.00 |
| Wages | 750.00 |
| Maintenance, Operation, and Equipment | 3,750.00 |
| Travel | 3,000.00 |
| Faculty of Germanic and Slavic Languages |  |
| Administrative and Professional Salaries | 14,000.00 |
| Classified Salaries | 3,374.00 |
| Wages | 300.00 |
| Maintenance, Operation, and Equipment | 2,400.00 |
| Trave 1 | 2,500.00 |
| Faculty of Romance Languages and Linguistics |  |
| Administrative and Professtonal Salaries | . 56 |
| Classified Salaries | 5,784.00 |
| Wages | 450.00 |

Office of the Dean of Natural Sciences and Mathematics
Administrative and Professional Salaries
21,000.00
Classified Salaries
4,851.00 Wages
Maintenance, Operation, and Equipment
900.00 Travel

2,000.00
2,000.00
Faculty of Biological Sciences
Administrative and Professional Salaries 18,000.00 Classified Salaries

5,784.00 Wages
600.00

Maintenance, Operacion, and Equipment
2,750.00 Travel

2,000.00
Office of the Dean of Business
Wages
438.00

Maintenance, Operation, and Equipment
2,000.00
Travel
1,500.00
Dean of Multidisciplinary Studies and Education
Administrative and Professional Salaries 34,500.00
Classified Salaries
4,851.00
750.00

Wages
4,000.00
Faculty of Professional Education
Administrative and Professional Salaries $\quad .56$
Classified Salaries 3,374.00

Wages
Maintenance, Operation, and Equipment
750.00

Travel
1,500.00

Office of the Dean of Fine and Applied Arts
Administrative and Professional Salaries
Classified Salaries
28,000.00
6,468.00
1,000.00
3,500.00
Maintenance, Operation, and Equipment
3,000.00
I, ibrary
Administrative and Professional Sataries $13,400.00$
Classified Salaxies
3,955.00
Wages
Travel
2,000.00
3,000.00

The University of Texas at San Antonio (contemned)


Reallocation of funds from various accounts initially established in the budget via the institutional Unallocated Account provides the source of funds for purchasing (or encumbering) library books and institutional equipment. (RBC's 解SAA-32, SAA-37)

The University of Texas Institute of Texan Cultures at San Antonio

15. The following transfers among the various operating accounts represent reallocation through the institutional Unallocated Account for operating purposes:

From:


To:
Administration - Wages \$ 950.00
Exhibits - Classified Salaries
2,344. 68
Physical Plant - Wages
5,000.00
Unallocated Account
$6,013.84$
TOTAL
\$14, 308. 52
(REC's $\operatorname{FTC} T \mathrm{C}-97, \mathrm{TC}-98, \mathrm{TC}-99, \mathrm{TC}-100, \mathrm{TC}-101, \mathrm{TC}-102, \mathrm{TC}-103$ )
16. The following operating accounts have been established from the piper Foundation grant funds for research on the Negro in Spanish Texas:

| Classified Salaries | $\$ 10,920$ |
| :--- | ---: |
| Maintenance, Operation, and Equipment | 200 |
| Travel | 500 |
| $\quad$MOLA | $\$ 11,620$ |

(ABC's $\% \mathrm{TC}-104, \mathrm{TC}-105, \mathrm{TC}-106$ )


The University of Teas of Un Permian Basin
17. Transfer $\$ 1,500$ from the Office of the Executive Director of Student Services Clerical Assistants account to the Support Services Division Clerical Assistants account. This reallocates funds for utilization as needed for operation of U.T.P.B. (RBC\# PB-89)

## Sincerely, <br> Charles Gide maith/a. <br> Charles A. LeMaistre, M.D. Chancellor

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## April 29, 1972

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The University of Texas at Austin

Office of the President
April 3, 1972

Chancellor Charles A. LeMaistre
The University of Texas System
Austin, Texas 78712

## Dear Chancellor LeMaistre:

The following docket for The University of Texas at Austin is submitted for your approval and submission to the Board of Regents at its meeting in Austin on April 29, 1972.

RESEARCE AND OTHER ACADEMIC CONTRACTS: The following contracts, grants and amendments have been signed by the appropriate official upon recommendation of the respective technical directors, fiscal officers, and the Office of Sponsored Projects.

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

Irecommend your approval and ratification of signatures.

## CONTRACTS and GRANTS (Federal):

1. Modification P00006, Supplemental Agreement to Contract F30602-70-C-0118, by which the Department of the Air Force, Headquarters Rome Air Development Center (AFSC), Griffiss Air Force Base, New York, increases the funds by $\$ 146,895$ to a new total cost of $\$ 483,836$; however, only $\$ 369,726$ is allocated for the period through July 31, 1972. The program entitled, "Development of German-English Machine Translation System, " continues under the direction of Dr. W. P. Lehmann, Ashbel Smith Professor of Linguistics and of Germanic Languages.
2. Modification P00007 to Contract F30602-70-C-0118, by which the Department of the Air Force, Headquarters Rome Air Development Center (AFSC), Grifriss Air Force Base, New York, makes certain administrative changes in the fund citation of the contract. The program entitled, "Development of German-English Machine Translation System," continues under the direction of Dr. W. P. Lehmann, Ashbel Smith Professor of Linguistics and of Germanic Languages.
3. Modification P00004 to Contract $F$ 30602-70-C-0129, by which the Department of the Air Force, Rome Air Development Center, Griffiss Air Force Base, New York, makes certain administrative changes in the fund citation of the contract. The research enticled, "Theoretical Study Effort of High Quality Translation, "was under the direction of Dr. W. P. Lehmann, Ashbel Smith Professor of Linguistics and of Germanic Languages.
4. Modification P00003 to Contract F33615-71-C-1203, by which the Deparment of the Air Force, Air Force Systems Command, Wright-Patterson Air Force Base, Ohio, reduces the cost of the contract by $\$ 150,000$ to a new total estimated cost of $\$ 115,000$, funds an additional $\$ 30,000$ to the allotted amount of $\$ 115,000$, and provides a new termination date of July 31, 1972. The research entitled, "Exploratory Development of Wide Bandwidth Propagation at 15 and 35 GHz , " continues under the direction of Dr. A. W. Straiton, Ashbel Smith Professor of Electrical Engineering.
5. Modification P00002, Supplemental Agreement to Contract F41609-71-C-0001, by which the Department of the Air Force, Aerospace Medical Division, Brooks Air Force Base, Texas, transfers title to cextain items of property to the contract. The research entitled, "Loss of Functional Vision Due to Lasers," continues under the direction of Dr. Ashley J. Welch, Associate Professor of Electrical Engineering.
6. Modification A013, Supplemental Agreement to Contract DA-29-040-AMC-1802, by which the Department of the Army, White Sands Missile Range, New Mexico, increases funds by $\$ 1,380$ and changes the final overhead rate for the period September1, 1969 through August 31, 1970 from $43.5 \%$ to $46 \%$ of salaries and wages. The atmospheric and stratospheric analysis was under the direction of Kenneth H. Jehn, Associate Professor of Meteorology.
7. Modification P00001, Supplemental Agreement to Contract DAAB07-72-C 0086, by which the Department of the Army, U.S. Army Electronics Command, Fort Monmouth, New Jersey, agrees to and authorizes performance of unclassified laboratory work under the contract on the main campus in the Biomedical Laboratories of the Electrical Engineering Department. Other work continues in the Electrical Engineering Research Laboratory under the direction of Dr. Alfred H. LaGrone, Professor of Electrical Engineering.

## 8. Modification P00002, Supplemental Agreement to Contract

 DAAB07-72-C-0086, by which the United States Army, U.S. Army Electronics Command, Fort Monmouth, New Jersey, increases contract funds to $\$ 84,495$ in order to provide $\$ 633$ to cover Unemployment Compensation Insurance. The research continues in Electrical Engineering Research Laboratories under the direction of Dr. Alfred F. LaGrone, Professor of Electrical Engineering.9. Contract DACW56-72-C-0084, by which the Department of the Army, Tulsa District, Corps of Engineers, Tulsa, Oklahoma, provides $\$ 26,200$ for support of a project entitled, "Assessment of the Archeological-Paleontological Resources of Lake Texoma (Denison Restudy) Red River, Texas and Oklahoma Area." The contract is effective for the period February 14, 1972 through August 17, 1972, and the project will be under the direction of David S. Dibble, Acting Director of the Texas Archeological Salvage Project.
10. Modification P-209 to Contract DADA-17-69-C-9067, by which the Deparment of the Army, U.S. Army Medical Research and Development Command, Washington, D. C., makes certain changes to the Accounting and Appropriation Data of the contract. The studies on prophylactic and curative treatment of malaria continues under the direction of Dr. Karl Folkers, Director, Institute for Biomedical Research.
11. Modification P-208, Change Order to Contract DADA17-69-C-9073, by which the Department of the Army, U. S.Army Medical Research and Development Command, Washington, D. C., adds $\$ 251.25$ to the contract funds due to overhead rate adjustment. The research entitled, "Process of Modeling of Biological Waste Treatment," continues under the direction of Dr. David M. Himmelblau, Professor of Chemical Engineering.
12. Modification P00002, Supplemental Agreement to Contract DAHC60-71-C-0053, by which the Department of the
Army, U.S. Army Safeguard System Command, Huntsville, Alabama, extends the period of the contract through July 10, 1972. The research entitled, "Development of an Automated Software Evaluation System, " continues under the direction of Dr. C. V. Ramamoorthy, Professor of Computer Sciences and of Electrical Engineering.
13. Modification No. 02, Supplemental Agreement to Contract N00014-67-A-0126-0014, by which the Department of the Navy, Office of Naval Research, Arlington, Vixginia, provides \$37,500 and increases total funds and the estimated cost to $\$ 112,114$. The period for performance is extended through May 31, 1973, and the research entitled, "Investigation of Pyromagnetic Infrared Radiation Detectors, " continues under the direction of Dr. R. W. Bene, Assistant Professor of Electrical Engineering, and Dr. R. M. Walser, Assistant Professor of Electrical Engineering.
14. Contract N00014-67-A-0126-0017, by which the Department of the Navy, Office of Naval Research, Arlington, Virginia, provides $\$ 19,985$ for support of research entitled, "The Study of Atom-Atom, Electron-Molecule and Photon Molecule Processes." The contract is effective for the period February 1, 1972 through January 31, 1973, and the research will be under the direction of Dr. J. C. Browne, Professor of Computer Sciences and of Physics.
15. Contract N00014-70-A-0166-0009, by which the Department of the Navy, Office of Naval Research, Arlington, Virginia, provides $\$ 20,000$ for support of research entitled, "Echo Structures." The contract is effective for the period February 1, 1972 钴rough January 31, 1973, and its performance will be in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.
16. Modification P00004 to Contract N00024-71-C-1073, by which the Department of the Navy, Naval Ship Systems Command, Washington, D. C., extends the period of the contract through September 30, 1972, or whenever the funds are expended, whichever occurs first. The research continues in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.
17. Contract N00024-72-C-1127, by which the Department of the Navy, Naval Ship Systems Command, Washington,
D. C., provides $\$ 869,000$ for support of research entitled, "Naval Shipyard and TRF Sonar Support and Assistance." The contract is effective for the period February 4, 1972 through January 31, 1973, and the work will be performed in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.
18. Modification P00001, to Contract N00024-72-C-1127, by which the Department of the Navy, Naval Ship Systems Command, Washington, D. C., changes the beginning effective date from February 4, 1972 to February 1, 1972, incorporates the advance payments, findings and authority clauses in accordance with the Advance Payments Pool Agreement between the Government and the University (dated February 3, 1971), and corrects the address of the Administrative Office. The research continues in Applied Research Laboratories under the direction of Chester M. Mckinney, Jr., Director.
19. Contract N00024-72-C-1228 by which the Department of the Navy, Naval Ship Systems Command, Washington,
D. C., provides $\$ 72,000$ for support of a project entitled,
"Swimmer Delivery Vehicle Mark VII Sonar Installation." The contract is effective for the period February 15, 1972 through December 14, 1972, and includes an anticipatory cost clause allowing charges to begin December 31, 1971. The work is performed by Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.
20. Modification P00001 to Contract N00024-72-C-1228, by which the Department of the Navy, Naval Ship Systems Command, Washington, D. C., adds to the Schedule the provision: "Pro rata share of ARL's building, as provided by Contract NOw-66-0078m, 'Agreement for Special Use Allowance'," without changing the estimated cost of the contract. The Swimmer Delivery Vehicle Mark VII Sonar Installation continues in Applied Research Laboratories under the direction of Dr. Chester $M$. McKinney, Jr., Director.
21. Modification P00003, Supplemental Agreement to Contract N00123-69-C-2116, by which the Department of the Navy, Naval Regional Procurement Office, Los Angeles, California, provides $\$ 1,172$ for reimbursement of a cost overrun generated by a negotiated increase in overhead rate set at $17 \%$ of salaries and wages for the period ended. August 31, 1970, and increases the estimated cost of the contract to $\$ 96,905$. The research utilizing a pulse compression radar, conducting flight tests, and data gathering as requested was pexformed by Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.

## 22. Modification P00002 to Contract N00612-72-C-0220, by

 which the Department of the Navy, Naval Supply Center, Charleston, South Carolina, incorporates into the contract the advance payments and authority clauses in accordance with the Advance Payment Pool Agreement, dated February 3, 1971, between the Government and the University. The technical support for AN/FQM-10(V) test equipment continues in Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.23. Contract N66604-72-C-0181 by which the Department of the Navy, Naval Underwater Systems Center, Newport,
Rhode Island, provides \$3,000 for the period February 16, 1972, through April 30, 1972, to cover cost of travel, per diem, and salaries required to acquire and process transducer data in addition to that set forth in Contract N00024-70-C-1117. The research entitled, "High Level Impedance Measurements (USS DAMATO) is performed by Applied Research Laboratories under the direction of Dr. Chester M. McKinney, Jr., Director.
24. Modification No, 2, Supplemental Agreement to Coniract AT-(40-1)-4023, by which the United States Atomic Energy Commission, Oak Ridge, Tenaessee, adds $\$ 30,000$ additional funds and extends the period of the contract through December 31, 1972. The research entitled, "Studies of Drosophila Dispersal and Migration by Neutron Activation and Genetic Techniques, "continues under the direction of Dr. R. H. Richardson, Associate Professor of Zoology.

## 25. Amendment No. 25 to Contract NAS 9-10976, by which

 the National Aeronautics and Space Administration, Manned Spacecraft Center, Houston, Texas, provices $\$ 10,000$ additional funds and extends the period of the contract through December 31, 1972. The research entitled, "The Influence of Euselage Nose Bluntness on the Aerothermodynamic Environment Around Space Shuttle Configuretions," continues under the direction of Dr. John J. Bertin, Associate Professor of Aerospace Engineering and Engineering Mechanics.26. Contract No. 14-10-3-930-22\%, by which the Department of the Interior, National Park Service, Arizona Archeological Center, University of Arizona, Tucson, Arizona, provides \$4,762 for a project enticled, "Imvestigation of the Cultural and Related Environmental Resources at the EIPaso Local Protection Project, Range Dam, El Paso County, Texas," The contract is effective for the period January 26, 1972 through March 13, 1972, and the project will be under the direction of David S. Dibble, Acting Director of the Texas Archeological Salvage Project.
27. Change Order No. 3 to Contract No. 14-10-7:931-24, by which the Deparment of the Interiox, National Park Service, Arizona Archeological Center, University of Arizona, Tucson, Arizona, extends the period of the contract through September 30, 1972. The test excavations at selected archeological sites in the North Fork Reservoir, Texas, continue under the direction of David S. Dibble, Acting Dixector, Texas Archeological Salvage Project.
28. Change Order No. 2 to Contract No. 14-10-7:931-44, by which the Department of the nerior, National Park Service, Arizona, Archeological Center, University of Arizona, Tucson, extends the period of the contract through August 31, 1972. The test excavations at selected archeological sites in the Wallisville Reservoir, Texas, continue under the direction of DavidS. Dibble, Acting Director, Texas Archeological Salvage Project.
29. Modification No. 5, Supplemental Agreement to Contract No. 81-46-70-24, by which the U. S. Department of Labor, Manpower Administration, Washington, D. C., provides \$70,000 additional funds and extends the period of the contract through September 30, 1973. The research encitled, "Negro Employment in the South: The Federal Service and the Comstraction Industry," continues under the direction of Dr. Wh. Ray Marshall, Professor of Economics.
30. Modification No, 2, Supplemental Agreement to Contract No. 82-48-71-18, by which the U.S.Deparment of $L_{\text {abor, }}$ Manpower Administration, Washington, D. C., provides $\$ 83,000$ additional funds and extends the period of the contract through January 30, 1973. The research entitled, "Nonapprentice Entry to Selected Construction Trades, "continues under the direction of Dr. F. Ray Marshall, Professor of Economics.
31. Modification No, 3 to Contract No. 82-48-71-38, by which the U. S. Department of Labox, Manpower Administration, Washington, D. C. extends the period of the contract through February 20, 1973. The pilot project to overcome barriers to employment of minority women in white collar jobs continues under the direction of Dr. E. Ray Marshall, Professor of Economics.

Modification No. 2 to Geant No. 91-46-70-35, by which the U. S. Deparment of Labor, Manpower Administration, Waskington, D.C., extends the period of the grant through March 31, 1973. The research entitled, "Doctoral Dissertation Research in Relationships between Population Decrease and Tertiary Employment Opoortunities in Agricultural Communities," continues under the direction of Dr. Robert C. Maysield, Professor of Geography.
33. Grant No. 92-48-72-06, by which the U. S. Department of Labor, Manpower Administration, Washington, D. C., provides $\$ 40,747$ for support of research entitled, "Employment and Manpower Implications of Uuban Fields and Nonmetropolitan Development." The grant is elfective for the period Februaryl, 1972 through September 30, 1972, and the research will be under the direction of Dr. Niles M. Hansen, Professor of Economics.
34. Action No. 1 to Grant No. 60051[formerly CG-6611 A/O], by which the Office of Economic Opportunity, Washington, D. C., extends the period of the grant for one month through January 31, 1972, without additional sunds. The research entitled, "Planning for Growth and Development in Rural Areas in the Context of a National System of Regions," continues under the direction of Dr. Niles M. Hansen, Professor of Economics.
35. Grant R-800987 (formerly \#17090 EPW), by which the Environmental Protection Agency, Washington, D. C., provides $\$ 28,611$ for support of research entitled, "Center for Competence for Document Processing in the Area of Wastewater Treatment." The grant is effective for 销e period February 1, 1972, through January 31,1973 , and the research continues under the direction of Dr. R. E. Speece, Professor of Environmental Health Engineering.
36. Award Letter dated January 18, 1972, by which the Department of Fealth, Education, and Welfare, Office of Education, Washington, D.C., provides 10 new two-year fellowships in Junior College Administration for 1972-73; this program will be under the direction of Dr. John E. Roueche, Professor of Educational Administration. In addition, it provides 7 new oneyear fellowships in Library-Educational Technology for 1972-73, and this program will be under the direction of Stanley McFlderry, Dean, Graduate School of Library Science.
37. OEC-6-72-0724-(509), by which the Office of Education, Department of Health, Education, and Welfare, Washington, D. C., provides $\$ 9,998$ for support of research entitled, "A Study to Determine the Effectiveness of Plectronically Paced Typewriting Instruction for Blind Students." The contract is effective for the period February 1, 1972 through April 30, 1973, and the research will be under the direction of Dr. Faborn Etier, Associate Professor of Office Administration.
38. Grant AI 08286-04A1, by which the Department of Health, Education, and Welfare, Public Fiealth Service, Bethesda, Maryland, provides $\$ 25,888$ for support of research entitled, "Regulation of Bacterial Cell Division." The grant is effective for the period Jamuary 1, 1972 through December 31, 1974, and the $\$ 25,888$ now appropriated is for the period January 1, 1972 through December 31, 1972. The research continues under the direction of Dr. James R. Walker, Associate Professor of Microbiology.
39. Grant GM18775-01, by which the Department of Health, Education, and Welfare, Public Health Sexvice, Bethesda, Maryland, provides $\$ 34,384$ for support of research entitled,
"Factors Controlling Protein Biosynthesis." The grant is effective for the period January 1, 1972 through December 31, 1974, and the $\$ 34,384$ now appropriated is for the period January 1,1972 through December 31, 1972. The research will be under the direction of Dx. Joanne M. Ravel, Assistant Dixector of the Clayton Foundation Biochemical Institute.
40. Revised Grant HD 04149-04, by which the Department of Health, Fducation, and Welfare, Public Healch Service, Bethesda, Maryland, reduces funding by $\$ 24,704$ to a new total of $\$ 7,074$ and changes the texmination date to October 31, 1971. The research entitled, "Regulation of Reproduction in Rodent Populations," was conducted under the direction of Dr. Franklin H. Bronson, Associate Professor of Zoology.
41. Amendment No. 7 to Indematy Agreement No. E-25, between The University of Texas at Austin and the
U.S. Atomic Energy Commission, relative to the University's Nuclear Reactor Laboratory. This amendment has been issued to reflect the recent amendment to 10 CFP. Paxt 140 , "Financial Protection Requirements and Indemaity Agreements," effective March 1, 1972, increasing from $\$ 82,000,000$ to $\$ 95,000,000$ the available nuclear energy liability insurance provided by Nuclear Energy Liability Insurance Association and Mutual Aromic Energy Liability Underwriters. Dr. D. Linn Draper is the current Director of the Universityis Nuclear Readior Laboratory.
42. Grant HD 06481-01, by which the Department of Health, Education, and Weltare, Public Health Service,
Bethesda, Maryland, provides $\$ 34,601$ for support of research entitled, "NA and Protein Systhesis in the Mammalian Oviduct." The grant is effective for the period February 1, 1972 through January 31, 1975, and the $\$ 34,601$ now appropriated is for the period February 1, 1972 through January 31, 1973. The research will be under the direction of Dr. Terell F. Hamilton, Professor of Zoology.
43. Revised Grant NS 08251-04, by which the Department of Health, Education, and Welrare, Public Health Service, Bethesda, Maryland, increases funds by $\$ 1,805$ to a new total of \$14,625. The research entitled, "Physiology of Chemoreception," was under the direction of Dx. Frank $E$. Hanson, Assistant Professor of Zoology.
44. Grant 5 T01 GM00337-13, by which the Department of Health, Education, and Welfare, Public Health Service, Bethesda, Maryland, provides $\$ 143,099$ for support of a training program entitled, "Genetics and Cell Biology."The grant is effective for the period July 1,1972 through June 30,1975 , and the $\$ 143,099$ now appropriated is for the period July 1,1972 through June 30, 1973. The program continues under the direction of Dr. Robert P. Wagner, Professor of Zoology.
45. Grant 5 T01 GM00600~13, by which the Department of Health, Education, and Welfare, Public Health Service, Bethesda, Maryland, provides $\$ 68,510$ for support of a training program in microbiology. The grant is effective for the period July 1,1972 through June 30,1975 , and the $\$ 68,510$ now appropriated is for the period July 1, 1972 through June 30, 1973. The program continues under the direction of Dr. Orville Wyss, Professor of Microbiology.
46. Grant 5 K02 MH1174-05, Research Scientist Development Award-Research Careex Program, by which the Deparment of Health, Education, and Welfare, Public Health Service, Bethesda, Maryland, provides $\$ 27,505$ for support of research entitled, "Single Cone Substitution and Behavior in Mice." The grant is effective for the period Jamuary l, 1972 through December 31, 1972, and the research will be under the direction of Dr. DelbertD. Thiessen, Professor of Psychology, and Dr. Janet T. Spence, Professor of Psychology and of Educational Psychology.

Amendment No. 1 to Grant No. 44-P-30062/6-07, hy which the Department of Health, Education, and Wulfare, Social and Rehabilitation Service, Rehabilitation AdministrationDivision of Training, Washington, D. C. decreases the budget due to over-estimated balancefrom - 06 year. Total amount of award remains the same. The training program in mental retardation continues under the direction of Dr. Jack Otis, Professor and Dean, Graduate School of Social Work.
48. Amendment No. 1 to Grant No, 44-P-30063/6-09, by which the Department of Health, Education and Welfare, Social and Rehabilitation Service, Rehabiltation Services Admin-istration-Division of Training, Washington, D.C., increases the grant funds by $\$ 6,475$. The teaching grant and traineeships in speech pathology and audiology continues under the direction of Dr. Lennart L. Kopra, Professor of Speech and Education.
49. Revised Amendment No. 1 to Grant No. 44-P-30067/6-07, by which the Department of Healch, Education, and
Welfare, Social and Rehabilitation Service, Rehabilitation Services Administration-Division of Training, Washington, D. C., applies reported unobligated balance of $\$ 1,275$ from the -06 year toward the current budget. Total federal budget for -07 year remains unchanged. The rehabilitation counselor training program continues under the direction of Dr. Giles D. Carnes, Associate Professor of Special Education.
50. Amendment No. 2 to Grant No, 44-P-30067/6-07, by which the Department of Health, Education, and Welfare, Social and Rehabilitation Service, Rehabilitation Services Admin-istration-Division of Training, Washington, D. C., adds \$21, 427 to the grant funds and increases total funds to $\$ 119,699$ for the period through August 31, 1972. The rehabilitation counselor training program continues under the direction of Dr. Giles D. Carnes, Associate Professor of Special Education.
51. Amendment No. 1 to Grant No. 84-P-30017/6-07, by which the Department of Health, Education, and Welfare, Social and Rehabilitation Service-Community Services Administration, Washington, D. C., adjusts the budget to allow expenditure of additional unobligated funds remaining from previous budget. This training program [former Grant CWT - 70-33] was continued for the period July 1, 1971 through June 30, 1972, by a new grant incorrectly designated as No, 84-P-30017/6-03, which instead should have been No. 84-P-30017/6-07 as reflected on the current amendment. The training program entitled, "Child Welfare Field Instruction Unit and Developmental Work in Field Instruction, " continues under the direction of Dr. Jack Otis, Dean, Graduate School of Social Work.
52. Amendment No. 1 to Grant GB-27493, by which the National Science Foundation, Washington, D. C., provides $\$ 117,600$ additional funds and extends the period of the grant through June 30, 1973. The project entilled, "Coordination of Integrated Research Programs in the Environmental Management Component of the U.S. International Biological Program, "continues under the direction of Dr. W. Frank Blair, Prosessor of Zoology.
53. Modification No. 1 to Grant GB-27937X, by which the National Science Eoundation, Washington, D. C., provides $\$ 30,000$ additional funds and extends the period of the grant through September 30, 1973. The research entitled, "Biochemistry of Hemoglobins and Certain Other Proteins," continues under the direction of Dr. Austen $F$. Riggs, Professor of Zoology.
54. Grant GK-32595X, by which the National Science Foundation, Washington, D. C., provides $\$ 25,000$ for support of research entitled, "Real-time Visual Recognition by Digital Computer." The grant is effective for the period February 15, 1972, through July 31, 1973, and the research will be under the direction of Dr. J.K. Aggarwal, Associate Professor of Electrical Engineering.
55. Amendment No. I to Grant GJ-A92, by which the

National Science Eoundation, Washington, D. C., extends the period of the grant through August 31, 1972, without additional funds. The research entitled, "Investigation of the User Microprogrammable Computing Systems," continues under the direction of Dr. C. V, Ramamoorthy, Professox of Compues Sciences and of Electrical Engineering.
56. Amendment No, 1 to Grant CJ-778, by which the National Science Foundation, Washington, D. C. provides \$34, 200 additional funds and extends the period of the grant through November 30, 1974. The research enthtled, "Tormal Theory of Programming Language Definition, "contranes under the direction of Dr. Terrence W. Pratt, Assistant Professor of Computer Sciences.
57. Amendment No. I to Grant GN-. 28893, by which the

National Science Foundation, Washington, D.C., provides \$5,000 additional funds and extends the period of the grant through October 12, 1972. The research entilled, "Legai Aspects of Information Systern and Data Bases," continues under the direction of Dr. Michael A. Duggan, Associate Professor of Business Law and of Computer Sciences.
58. Amendment No. 1 to Grant GP-13951, by which the National Science Foundation, Washington, D. C., extends the period of the grant through August 31, 1972. The research entitled, "Revision of Reference Catalogue of Bright Galaxies," continues under the direction of Dr. G. H. de Vaucouleurs, Professor of Astronomy.
59. Amendment No. 1 to Grant GP-25199, by which the National Science Eoundation, Washington, D. C., extends the period of the grant through September 30,1972 . The research entitled, "Spectroscopy and Relaxation of Solids Containing Dilute Impurities," continues under the direction of Dr. A. Wilson Nolle, Professor of Physics.
60. Amendment No. 2 to Grant GS-3221, by which the National

Science Foundation, Washington, D. C., extends the period of the grant through June 30, 1972. The doctoral dissertation research in linguistics continues under the direction of Dr. Edgar C. Polomer, Professor of Germanic Languages and of Einguistics and of Oriental and African Languages and Literatures.
61. Grant GW-7544, by which the National Science Foundation, Washington, D. C., provides $\$ 20,181$ for support of a project entitled, "Student Science Training Program (PreCollege)." The grant is effective for the period February 25, 1972 through Octobex 31, 1972, and the project will be under the direction of Dr. Irwin Spear, Professor of Botany.
62. Grant GY-9727, by which the National Science Foundation, Washington, D. C., provides $\$ 68,900$ for support of a College Science Improvement Program (Cooperative Projects for Two-Year Colleges). The grant is effective for the period February 11, 1972 through December 31, 1973, and the program will be under the direction of Dr. Robert $\mathbb{E}$. Boyer, Professor of Geology and Education.
63. Grant GZ-2508, by which the National Science Foundation, Washington, D. C., provides $\$ 152,750$ for support of 26 continuation graduate traineeships; of these, 15 are thirdyear continuations of new traineeships granted in 1970, and 11 are fourth-year continuations of traineeships granted in 1969. The grant is effective for the period Eebruary 23, 1972 through September 30, 1973, and the program continues to be coordinated by Dr. Fred P. Ellison, Associate Dean of the Graduate School.

1. Grant No. 1mC4-949, by which the Texas Cximinal Justice Council, Executive Office of the Governor, Austin, Texas, provides $\$ 22,010$ for support of the delinquency rehabilitation and curriculum development project. The grant is effective for the period March 1, 1972 through August 31, 1972, and the project continues under the direction of Dr. Jack Otis, Dean, Graduate School of Social Work.
2. Agreement between the City of Austin Police Department and the Bureau of Government Research, The University of Texas at Austin, dated February 14, 1972, by which the City of Austin Police Deparment provides $\$ 4,053.60$ for support of an evaluation of police community relations program. The agreement is effective beginning Eebruary 14, 1972, for a period of one-year, and the program will be under the direction of Dr. Nicholas P. Thomas, Director, Bureau of Government Research, Iyndon B. Johnson School of Public Affairs.

CONTRACTS, GRANTS and AGREEMENTS (Non-Governmental):

1. Grant Award Lettex dated March 6, 1972 [Extension to Award Letter dated March 3, 1971], by which the American Association of Petroleum Geologists, Tulsa, Oklahoma, provides $\$ 6,239$ for support of research entitled, "Mapping of Equilibrium Bottomhole Temperatures in Texas and Oklahoma." The grant is effective January 1,1972 and extends through Decembex 1 , 1972, and the research continues under the direction of Dr. Ralph O. Kehle, Associate Professor of Geology.

## 2. Contract APL/JHU No. 372041, by which The Johns

 Hopkins University, Applied Physics Laboratory, Silver Spring, Maryland, provides $\$ 68,365$ for support of research entitled, "Geodetic and Upper Atmosphere Studies." The contract is effective for the period January 31,1972 through February 28 , 1973, and the work will be performed by Applied Research Laboratories under the direction of Dr. ChesterM.McKinney, Jr., Director.3. Grant No. $72 / 48$, by which The Moody woundation, Galveston, Texas, provides $\$ 14,270$ for support of development of a graduate course on college teaching techniques in engineering and science. The grant is effective for the period February 18, 1972 through August 31, 1973, and the program will be under the direction of Dr. James 国, Stice, Associate Professor of Chemical Engineering.
4. Purchase Order No. 2360, by which The Population

Council, New York, New York, provides \$17, 787 for support of research in providing a leutinizing releasing hormone (LRH). The purchase order is effective February 14,1972 , and the research will be under the direction of Dr. Karl Folkers, Director, Institute for Biomedical Research.
5. Grant No. 6368, by which the Research Corporation, New York, New York, provides $\$ 6,510$ for support of research entitled, "X-ray $X$-ray Coincidence Studies in Heavy Ion Reactions." The grant is effective for the period beginning March 1, 1972, and the research will be under the direction of Dr. Patrick Richard, Associate Professor of Physics.
6. Grant No. 6469, by which the Research Corporation, New York, New York, provides $\$ 6,500$ for support of research entitled, "X-xay Emission from Molecular Ions." The grant is effective for the period beginning March 1, 1972, and the research will be under the direction of Dr. C. Fred Moore, Professor of Physics.
7. Extension to Agreement between Solution Mining Research Institute, Inc., Flossmoor, Illinois, which provides additional funds of $\$ 25,000$ and extends the period of SMRI Contract No. 30852-2 through December 31, 1972. The research entitled, "Dissolution Mechanism," continues uader the direction of Dr. Frank W. Jessen, Professor of Petroleum Engineering.
8. Subcontract No. 3661, by which Union Carbide Corporation, Nuclear Division, Oak Ridge, Tennessee, provides \$10,000 for support of research entitled, "An Evaluation of the Creep Behavior of Concrete." The subcontract is effective for the period January 3, 1972 through June 30, 1972, and the research will be under the direction of Dr. Thomas Kennedy, Associate Professor of Civil Engineering.
9. Renewal Grant F"041, by which The Robert A, Welch Foundation, Houston, Texas, provides $\$ 15,000$ for support of research entitled, "Magnetic Resonance of Metal Ion Solutions and Compounds." The grant is effective for the period May 1, 1972 through April 30, 1973, and the research continues under the direction of Dr. L. O. Morgan, Professor of Chemistry and Education.
10. Grant F-350, by which The Robert A. Welch Foundation, Houston, Texas, provides $\$ 15,000$ for support of research entitled, "ther-containing Lipids and Their Influence on Biological Membrane Metabolism." The grant is effective for the period May 1, 1972 through April 30, 1973, and the research will be under the direction of Dr. Guy A. Thompson, Jr., Associate Professor of Botany.
11. Grant $F-365$, by which The Robert A. Welch Foundation, Houston, Texas, provides $\$ 50,000$ for support of research entitled, "Non-equilibrium Thermodynamics and Statistical Mechanics." The grant is effective for the period May 1, 1972, through April 30, 1974, and the research will be under the direction of Dr. Ilya Prigogine, Professor of Physics and of Chemical Engineering.
12. Grant $F$ - 489 , by which The Robert A. Welch Foundation, Houston, Texas, provides $\$ 40,000$ for support of research entitled, "Measurement of Eoxbidden Transition Probabilities in Highly Ionized Species." The grant is effective for the period May 1, 1972 through April 30, 1974, and the research will be under the direction of Dr. Roger D. Bengtson, Assistant Professor of Physics, and Dr. William E. Drummond, Professor of Physics.
13. Grant $F-493$, by which The Robert A. Welch Foundation, Houston, Texas, provides $\$ 24,000$ for support of research entitled, "Mass Spectrometric Metastable Ions." The grant is effective for the period May 1, 1972 through April 30, 1974, and the research will be under the direction of Dr. C. Cone, Assistant Professor of Chemistry.
14. Grant $F-496$, by which The Robert A. Welch Foundation, Houston, Texas, provides $\$ 30,000$ for support of research entitled, "The Origin of the Chemical Elements." The grant is effective for the period May l, 1972 through April 30, 1974, and the research will be under the direction of Dr. Cary N. Davids, Assistant Professor of Physics.
15. Grant F-508, by which The Robert A. Welch Foundation, Houston, Texas, provides $\$ 24,000$ for support of research entitled, "Conformational Studies by Electron Diffraction." The grant is effective for the period May 1, 1972 through April 30, 1974, and the research will be under the direction of Dr. Denis Alan Kohl, Assistant Professor of Chemistry.
16. Supplemental Grant F-261-1-196 to Grant F-261, by which

The Robert A. Welch Foundation, Houston, Texas, provides $\$ 4,500$ additional funds for the year May 1,1971 through April 30, 1972. The research entitled, "Ion Electron Scattering," continues under the direction of Dr. C. Fred Moore, Professor of Physics.
17. Supplemental Grant E-424-1-195 to Grant E-424, by which The Robert A. Welch Foundation, Houston, Texas, provides $\$ 4,500$ additional funds for the year May 1,1971 through April 30, 1972. The research eatitled, "X-rays and Auger Electrons from Atom-Ion Collisions," continues under the direction of Dr. Patrick Richard, Associate Professor of Physics.

ACADEMIC AND BUSINESS CONTRACTS. The following contracts have been executed at The University of Texas at Austin by the official indicated. I recommend approval and ratification of signatures.

1. Amendment NO. I to Interagency Cooperation Contract No. IAC (72-73)-207, between The University of Texas at
Austin (Computation Center) and the Office of the Governor (Division of Planning Coordination), signed by Vice President James H. Colvin, whereby the termination date is extended from February 28, 1972 to May 31, 1972. All other terms remain the same.
2. Interagency Cooperation Contract No. IAC (72-73)-405, between The Texas State Department of Health and The University of Texas at Austin (The Division of Extension), signed by Vice President James H. Colvin, whereby the University agrees to provide training session for the purpose of insuring an adequate staff of professional and supervisory personnel skilled in the techniques of instruction and to improve the efficiency and relationship of supervisor and employees. The period covered is from February 7, 1972 to June 30, 1972. Total amount of the contract not to exceed $\$ 305$.
3. Interagency Cooperation Contract No. IAC (72-73)-413, between The University of Texas at Austin (Computation Center) and the Central Texas Council of Governments, signed by Vice President James H. Colvin, whereby the University agrees to furnish the services of its Computation Center and its equipment on available time basis. Period covered is from February 1, 1972 to August 31, 1972. Total amount of the contract not to exceed $\$ 12,000$.
4. Interagency Cooperation Contract No. IAC (72-73)-425, between The University of Texas at Austin (Center for Building Research - College of Engineering) and the Texas Department of Community Affairs, signed by Vice President James H. Colvin, whereby the University will appoint Mr. Clayford T. Grimm to serve as executive secretary to the Technical Testing and Evaluation Council of the State of Texas Building Materials and Systems Testing Laboratory. Period covered is from March 1, 1972 to September 1, 1972. Total amount of the contract not to exceed $\$ 6,000$.
5. Interagency Cooperation Contract No. IAC (72-73)-432, between The Houston-Galveston Area Council and The University of Texas at Austin (Computation Center), signed by Vice President James H . Colvin, whereby the University agrees to furnish the services of the Computation Center and its equipment on available time basis. Period covered is from March 1, 1972 to August 31, 1972. Total amount of the contract not to exceed $\$ 5,000$.
6. Permit for Archeological Investigation No. 24, between The University of Texas at Austin (Texas Archeological Research Laboratory) and the Antiquities Committee of the State of Texas, signed by Vice President James H. Colvin, which grants the University an exclusive permit for archeological investigation of an area on lands owned or controlled by Harris County, more particularly described as Sites $41 H R 80$ and 41HR85 at Harris County Boys School on Mud Lake. Period covered is from January 10, 1972 to January 9, 1973.

TRAVEL FOR FACULTY AND STAFF. The following trips are reported in accordance with Section 12 of the Budget Rules and Procedures for 1971-72 when expenses are paid from funds not specifically designated for travel; and in accordance with Section 13.23 of Chapter III of Part Two of the Rules and Regulations of the Board of Regents for the Government of The University of Texas when the absence is for a longer period than twenty-nine days.

1. Stanley $N$. Werbow, Dean of the College of Humanities, March 16, 1972 to Dallas, Texas, to act as representative of The University of Texas at Austin at a meeting of the American Association for the Advancement of Slavic Studies. Expenses in the approximate amount of $\$ 51$ to be paid from Miscellaneous Administrative Expenses.
2. 

James A. Dengate, Assistant Professor of Classics, February 25, 1972 to February 26, 1972, to Houston, Texas, to deliver a talk to the Gulf Coast Classical Society; to discuss the Summer Master of Arts program with teachers and talk. to high school students about the opportunities at UT Austin; to establish liaison with high schools in Eastern Texas. Expenses in the approximate amount of $\$ 46$ to be paid from Classics Academic Development Fund.

## 3. Gareth Morgan, Acting Chairman of the Department of Classics, February 25, 1972 to February 26, 1972, to

 Houston, Texas, to deliver a talk to the Gulf Coast Classical Society; to discuss Summer Master of Arts program with teachers and talk to high school students about the opportunities at UT Austin, to establish liaison with high schools in Eastern Texas. Expenses in the approximate amount of $\$ 46$ to be paid from Classics Academic Development Fund.4. Joseph F. Doherty, Assistant Professor of English, April 5, 1972 to April 7, 1972, to Toledo, Ohio, to deliver an original research paper at the Popular Culture Association meeting. Expenses in the approximate amount of $\$ 204$ to be paid from American Studies Program.
5. Joseph E. Slate, Associate Professor of English, February 18, 1972 to February 19, 1972, to Gaiveston, Texas, to deliver a research paper at a meeting of Texas Association of Junior College Teachers. Expenses in the approximate amount of $\$ 22.50$ to be paid from Academic Development Fund, Dean's Office.
6. Joseph H. Matluck, Associate Professor of Spanish Portuguese, February 18, 1972 to February 19, 1972, to Galveston, Texas, to present an original research paper at the Texas Junior College Teachers Association meeting. Expenses in the approximate amount of $\$ 17.50$ to be paid from Academic Development Funds, Dean's Office.

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Carlos Sole, Associate Professor of Spanish-Portuguese, March 17, 1972 to March 19, 1972, to attend the Keller Method Workshop Conference. Expenses in the approximate amount of $\$ 48$ to be paid from Humanities Dean Academic Development Fund.
9. Ralph R. Robbins, Assistant Professor of Astronomy, June 1, 1972 to July 1, 1972, to Liege, Belgium, to attend the 18 th Liege Symposium (Colloque Enternational d'Astrophysique), to present an original paper. Expenses in the approximate amount of $\$ 216$ to be paid from Attendance at Professional Meetings.
10. William T. Eaton, Associate Professor of Mathematics, March 13, 1972, to March 14, 1972, to Longview, Texas, to give an address as part of UT Mathematics Department Speakers Panel at LaTourneau College. Expenses in the approximate amount of $\$ 85$ to be paid from Academic Development Fund.

## 11. Edward L. Powers, Professor of Zoology, December 23, 1971 to June 1, 1972, to Jerulsalem to read a paper

 at The Conference on Molecular Mechanisms of Radiation Effects in Cells held at the Hebrew University in Jerusalem, Israel; to take residence in Manchester, England for research at the Christie Hospital on mechanisms of radiation damage. Expenses in the approximate amount of $\$ 1,000$ per diem to be paid over a continuous period from PHS GM 13557-06 Travel funds; Transportation to be paid from NDEA Title IV Program, O.E. \#l (Powers).12. Hafez F. Farmayan, Associate Professor of History and Center for Middle Eastern Studies, March 9, 1972, to March 12, 1972, to Salc Lake City, Utah, to represent the University on an inter-university committee which will select fellowship students for the summer program in which the University participates. Expenses in the approximate amount of $\$ 221.78$ to be paid from Center for Middle Eastern Studies Program Development Funds.
13. Warner Barnes, Advisor, Education for Health Professions, Division of General and Comparative Studies, February 12, 1972, to Houston to participate in Project 75 Conference: a conference on minorities in the health professions. Expenses in the approximate amount of $\$ 4$ to be paid from Office of the Provost Academic Development Fund/Division of General and Comparative Studies.

## 14. Donald A. Larson, Director, Education for the Health Professions, Division of General and Comparative

 Studies, April 11, 1972 to April 13, 1972, to San Antonio, Texas, to participate by invitation of the national officers in the Association of American Medical Colleges group in student affairs meetings. Expenses in the approximate amount of $\$ 49.80$ to be paid from Office of the Provost Academic Development Fund/Division of General and Comparative Studies.15. John Frederick Schunk, Assistant Professor of Speech, March 15, 1972 to March 18, 1972, to Ardmore, Oklahoma, to accompany UT debate team to National Debate Tournament District III Qualifying Tournament. Expenses in the approximate amount of $\$ 110$ to be paid from Texas Forensic Union Funds. April 24, 1972 to May 2, 1972, to Portland, Oregon, to attend the annual meeting and present a paper to the Western Psychological Association; and to evaluate several west coast psychiatric centers used for internships of graduate student in The University of Texas Clinical Psychology Training Program. Expenses in the approximate amount of $\$ 240$ for transportation to be paid from Academic Development Funds; per diem expenses in the approximate amount of \$105 to be paid from Grant No. 5-TO-MHO8293-09, NIMH School Psychology Training Grant travel funds.

## 17. Betty Broadhurst, Visiting Lecturer in the School of Social

 Work, February 27, 1972, to February 29, 1972, to Denver, Colorado, to learn what is going on in other education programs in the region, specifically in relation to linking BA with MA programs, the needs of ethnic and minority groups, and rural practice. Expenses in the approximate amount of $\$ 136$ to be paid from Academic Excellent Expenses.
## 18. Buford E. Farris, Ir., Assistant Professor of Social Work,

 March 30, 1972 to April 1, 1972, to San Antonio, Texas, to participate in conference with Sociologists and Social Scientists around the issues of "Alternative Life Styles" especially in the middle class, and their implications for human services. Expenses in the approximate amount of $\$ 70$ to be paid from Academic Excellence Expenses.19. Hortense Kilpatrick, Instructor of Social Work, March 23, 1972 to March 25, 1972, to Richmond, Virginia, to attend CSWE seminar on Issues in Teaching Social Work Practice Theory to bring back information for students to use in studies. Expenses in the approximate amount of $\$ 255$ to be paid from Academic Excellence Expenses.
20. 

Dale G. Bettis, Assistant Professor of Aerospace Engineering and Engineering Mechanics, December 16, 1971, to January 15, 1972, to visit the University of Cambridge, Cambridge, England; the European Space Operations Center of ESRO in Germany; and the Swiss Federal Institute of Technology in Zurich, Switzerland to confer with personnel of these institutions regarding present research, both personal and graduate students. Expenses in the approximate amount of $\$ 825$ to be paid from NAS8-27931 - Other Expenses.

USE OF TEXTBOOKS WRITTEN BY FACULTY. In accordance with Chapter III, Section 24 of Part One of the Regents' Rules and Regulations for the Government of The University of Texas, I recommend approval of the use of the following faculty authored books as textbooks for the 1971-72 fiscal year:

| Author (s) $\quad$Cost toRoyalty <br> Per volume <br> Student |
| :--- |
| Per author |

COLLEGE OF SOCIAL AND BEHAVIORAL SCIENCES
Department of Government


## COLLEGE OF EDUCATION

Department of Curriculum and Instruction

| * Supervising Clinical <br> Experiences in the <br> Classroom | W.A. Bennie | 7.50 | $10 \%$ |
| :--- | :--- | :--- | :--- |
| * Diagnostic reading | F. J. Guszak | 5.95 | $10 \%$ |

* Diagnostic reading instruction in the elementary school

CHANGE IN 1972-73 PERSONNEL PAY PLAN. A change in the Building
 Services Supervisor (6215) salary range is recommended as a result of a change in the duties and responsibilities of the position effective September 1, 1972. One of the incumbents occupying this position in the Physical Plant area is going to be recommended for a promotion to a higher position effective September 1, 1972; the only other person using this title is in the Housing and Food area and does not perform duties or have responsibilities that would justify the approved 1972-73 pay range. Therefore it is recommended that the salary range be changed to reflect the proposed change in the duties and responsibilities involved.

FROM:

| Code | Title |  |
| :--- | :--- | :--- |
| 6215 | Building Services Supervisor | $910-1150$ |

TO:
6215 Building Services Supervisor 710-870


JOHN LEWIS KEEL MEMORIAL SCHOLARSHIP FUND. Mrs. John Lewis Keel and Mrs. Helen K. Keel Gould have given the University of Texas at Austin $\$ 1,250$ to establish a scholarship fund in the memory of John Lewis Keel. Mr. Keel received his Bachelor of Science in Physical Education from the University in 1930; and his Master of Education
in 1938 from the University. He also served as Manager of the football and track teams at the University in 1929. The scholarship award is to be made biannually in the amount of $\$ 100$ provided the endowment shall yield that amount. At the time the endowment reaches a sufficient size the award may be made annually. The selection of candidates shall be made through the Director of Student Financial Aids.

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

## COLLEGE OF NATURAL SCIENCES

## Department of Physics

Professor Bryce S. DeWitt
Associate Professor Lawrence C. Shepley

## COLLEGE OF SOCIAL AND BEHAVIORAL SCIENCES

Department of History
Associate Professor Lewis Ludlow Gould Associate Professor Richard Graham

## COLLEGE OF FINE ARTS

Department of Music
Associate Professor Warren Edwin George
Professor Karl Korte
Associate Professor Leeman L. Perkins
Professor Leonard Posner

FACULTY LEGISIATION. The following legislation has been passed by the University Council and/or General Faculty. I recommend approval.

Deferred See P. 8.

1. The University Council on February 21, 1972, adopted without a dissenting vote the proposed change concer ing the Prortional Admission Program forwarded to them by President Stephen H. Spuly The proposal is as follows.
Present wording of General Information Catalog for 971-72, pp. 35-36. Provisional Admission Program:-Any Texas resident who has never attended a college, who has graduated from an accredited high school with the required units and subjects prescribed, but whose total score on the College Entrance Exaffination Board Scholastic Aptitude Test does not meet the miniprim requirement for adsission, may enter the University provided that he is enrolled in coursesselected from English, mathematics, or language in the sprience, semester or the two symmer terms (the entire summer session) for whth he is regisfered initially. The student who demonstrates ability to perform sellege-level work by passing each course and maintaining an

2. The University Council in its meeting on February 21, 1972, adopted the proposed changes in the College of Engineering Catalogue ( $D \& P$ 5015) with one exception. The changes as adopted are as follows.

## recommendations of the college of engineering

1970-1972 Catalogue (page 28)
Special Regulations in the College of Engineering
2. Any student who receives a grade below a $C$ in any required course that is a prerequisite to a later course must repeat that course until a grade of C or higher is made. This applies also to transferred courses.

COURSES INCLUDED IN ALL ENGINEERING DEGREE PLANS (pages 33 and 34)

1972-1974 Catalogue: Special Regulations in the College of Engineering 2. Omit

## Changes in PLAN l - (LEADING TO THE DEGREE OF BACHELOR OF SCIENCE IN AEROSPACE ENGINEERING)

| For the Courses in the | Substitute in the |
| :---: | :---: |
| 1970-1972 Catalogue: | 1972-1974 Catalogue: |
| (pages 34-37) |  |
| Aerospace Engineering | Aerospace Engineering |
| 211. Aerospace Engineering | 305 Introduction to Aerospace Engineering |
| 120 K Applications of Fluid | 311 Engineering Computation |
| Mechanics | 363P Experimental Mechanics |
| 461 K Aerospace Vehicle Design | 370 K Dynamics of Particles |
| 362 K Compressible Fluid | and Rigid Bodies |
| Mechanics | 370L Dynamics of Systems |


| 162M Applied Compressible Fluid Mechanics |  |  |
| :---: | :---: | :---: |
| 264K | Experimental Structural |  |
|  | Analysis |  |
| 365 | Structural Dynamics |  |
| 366 K | Orbital Mechanics |  |
| 367 K | Flight Mechanics |  |
| 376 K | Propulsion |  |
| Chemistry |  | Approved Natural Science |
| 302 | Principles of Chemistry | Elective <br> 3 semester hours |
| Engineering Mechanics |  | Engineering Mechanics |
| 305 | Mechanics I | 306 Statics |
| 310 | Mechanics II | 311 Dynamics |
| 362 | Mechanical Behavior of Materials |  |
| 370 | Intermediate Dynamics |  |
| English |  | English 301 |
| Spe. 319 | Business and Professional Speaking |  |
| Physics |  | Physics <br> 403K Mechanics, Heat and |
| $415$ | Heat, Wave-Motion, and Optics | 403K Mechanics, Heat and Sound |
| 416 | Electricity and Magnetism | 403L Electricity and Magnetism, Light, Atomic and Nuclear Physics |
| Approved Humanistic and Social |  | Approved Non-technical |
| Science Electives |  | Electives |
| 9 semester hours |  | 9 semester hours |
| Block Courses 9 semester hours |  | Block Courses |
|  |  | 21 semester hours |
|  |  | Total number of hours changed from 130 to 126 |
|  | Option P AEROSPACE | rams <br> GINEERING |

## Block Courses I, General

Aerospace Engineering
Any nine semester hours of upperdivision technical courses which include aerospace engineering courses from at least two different disciplines. A student selecting this block must have his program approved in advance by the department chairman.

Block I, Special Programs
Using this block option a student can develop a program of study not covered by the standard block options. Study plans covered here include interdisciplinary programs, such as biomedical engineering and environmental engineering, and preparatory programs for further professional training in medicine, dentistry, business, law, or
public affairs. (see Option Programs, p._ Students selecting this option must have their program approved in advance by the department chairman.

Block Courses II, Aerothermodynamics and Propulsion
A.S.E. 362L, Advanced Compressible Fluid Mechanics.
A.S.E. 379L, Studies in Aerospace

Engineering
Topic l, Continuum mechanics.
Topic 2, Advanced propulsion.
Topic 3, Hydrodynamics.
Topic 4, Airfoil and wing theory.
Topic 5, Mechanics of viscous fluids.
Topic 11, Selected topics in fluid mechanics.
Topic 12, Introduction to physical gas dynamics
*Approved technical elective (3 hours).

## Block Courses III, Structural

Mechanics
A.S.E. 379L, Studies in Aerospace Engineering
Topic 1, Continuum mechanics
Topic 6, Aeroelasticity
Topic 7, Selected topics in structural analysis.
Topic 9, Structural analysis of submersible vehicles
Topic 10, Advanced Structural analysis.
*Approved technical elective (3hours).

Block Courses IV, Orbital
Mechanics and Flight Mechanics
A.S.E. 366L, Applied Orbital Mechanics
A.S.E. 367L, Advanced Flight Mechanics
A.S.E. 379L. 8 , Studies in Aerospace Engineering: Flight Test and Simulation.

Block II, Aerothermodynamics
This option enables a student to study advanced fluid mechanics, gasdynamics, heat transfer, aerodynamics, propulsion and experimental fluid mechanics. Knowledge gained in this area can be applied to the design of environmental systems, vehicles subjected to aerodynamic or hydrodynamic loads, and propulsion systems. Courses pertinent to this discipline include
A.S.E. 342, Airfoil and Wing Theory.
A.S.E. 362 K , Compressible Fluid Mechanics.
A.S.E. 363 R, Experimental Fluid Mechanics.
A.S.E. 376 K, Propulsion.

Block III, Structural Mechanics
This option enables a student to study advanced structural analysis, structural dynamics. materials, aeroelasticity, experimental structural mechanics, and design and optimization. Knowledge gained in these subjects is applicable to the design of aerospace vehicles, high-speed ground transportation vehicles and marine vehicles. Recommended courses include
A.S.E. 363Q. Experimental Structural Mechanics
A.S.E. 365, Structural Dynamics
A.S.E. 352, Advanced Structural Analysis.
E.M. 362, Mechanical Behavior of Materials.

Block IV, Vehicle Dynamics
This block enables a student to learn about the dynamics of such vehicles as aircraft, rockets, spacecraft, reentry vehicles, hovercraft, hydrofoil craft, deep submersible vehicles, and high-speed ground vehicles. Topics such as performance,
*Approved technical elective (3 hours).

Block Courses VI - NONE

Block Courses VII - NONE
stability, aerodynamic and automatic control, optimization and the effects of flexible structures are considered. Fundamental courses are
A.S.E. 355, Aeroelasticity.
A.S.E. 367 K , Vehicle Dynamics.
A.S.E. 367L, Selected Topics in Vehicle Dynamics
A.S.E. 379L.15, Systems

Optimization
Block V, Orbital Mechanics
This block combines classical and celestial mechanics with aerospace vehicle technology to improve the quality of life through better communications, natural resource sensing, weather forecasting, ship and aircraft navigation, etc. The goal is to achieve a better understanding of man and the universe through the use of satellites, orbiting laboratories and space probes. Basic courses include
A.S.E. 366 K , Orbital Mechanics
A.S.E. 366L, Applied Orbital Mechanics.
A.S.E. 367K, Vehicle Dynamics. A.S.E. 379L. 15, Systems Optimization

Block VI, Experimental Mechanics
This block option enables a student to pursue technical interests in the areas of experimental fluid mechanics and structural mechanics. Topics covered include instrumentation, design of experiments, testing procedures and interpretation and analysis of test data. Pertinent courses for this block option include
A.S.E. 361 K, Vehicle Design.
A.S.E. $363 Q$, Experimental Structural Mechanics.
A.S.E. 363 R , Experimental Fluid Mechanics.
E.M. 362, Mechanical Behavior of Materials.

Block VII, Ocean Engineering
This option deals with engineer-


345 Environmental Systems in Building
Chemistry
302 Principles of Chemistry

Approved Natural Science
Elective
3 semester hours

Civil Engineering
216 Introduction to Surveying
Engineering Mechanics
Civil Engineering
Omit C.E. 216
Engineering Mechanics
305 Mechanics I
306 Statics
311 Dynamics
Physics
Physics
415 Heat, Wave-Motion, and Optics

403K Mechanics, Heat and Sound
416 Electricity and Magnetisim
403L Electricity and Magnetism, Light, Atomic and Nuclear Physics

Approved Humanistic and Social
Science Electives
6 semester hours
Approved Non-technical
Elective
3 semester hours
Total number of hours remains 129

Option Programs ARCHITECTURAI ENGINEERING

Block Courses I, Building
Structures and Engineering
Ar.E. 261, Integration of Building Components II.
Ar.E. 362, Design of Structural Systems in Steel and Concrete.
Ar.E. 262I, Design of Structural Systems in Timber.
C.E. 357 , Elementary Soil Mechanics.
Approved technical electives (5hours).

Block I, Structural Engineering
The structural engineering option places emphasis upon design and analysis of building structures and foundations. The basic curriculum courses in design, materials, construction, and environmental systems serve as an excellent complement for the structural engineering option. Upon graduation, students find employment in consulting engineering or industrial firms as structural engineers.

Ar.E. 261, Integration of Building Components II.
Ar.E. 362, Design of Structural Systems in Steel and Concrete.
Ar.E. 362L, Design of Structural Systems in Timber.
C.E. 357, Elementary Soil Mechanics.
Approved block electives (4 hours).

Block Courses II, Industrial
Building Design
Ar.E. 258, Building Contracts.
Ar.E. 261, Integration of Building Components II.
M.E. 311, Materials Engineering I.
M.E. 373 K , Basic Industrial Engineering
Approved technical electives (5 hours).

Block Courses III, General
Building Construction
Acc. 311, Fundamentals of Financial Accounting.
Acc. 312, Fundamentals of Managerial Accounting. Ar.E. 258, Building Contracts.
Ar.E. 261, Integration of Building Components II. Approved technical electives (5 hours).

Block Courses IV, Environmental

## Systems

Ar.E.367, Illumination Engineering.
Ar.E. 377 K , Studies in Architectural
Engineering。
M.E. 367 L , Air Conditioning.

Approved technical electives ( 6 hours).

Block II, Construction Management

In the construction management courses, the student will learn modern techniques for the planning, control, and administration of building construction projects. The architectural engineering graduate from this program will be prepared for an engineering management career in the construction industry.

Acc. 311, Fundamentals of Finanical Accounting
Acc. 312, Fundamentals of Managerial Accounting
Ar.E. 358, Building Contracts.
Ar.E. 261, Integration of Building Components II.
Approved block electives (4 hours).

Block III, Environmental Systems
Engineering the controlled environment is of growing importance to the building industry. The Architectural Engineering graduate is able to assume a position of responsibility in companies dealing with the selection and design of mechanical and electrical equipment and systems for building. This option also develops expertise in the solution of accoustical and illumination problems in building and industrial facilities. Ar.E. 367, Illumination Engineering.
M.E. 364 K , Air Conditioning . Approved block electives ( 9 hours).

Omit.

For the courses in the 1970-1972 Catalogue: (pages 40-43)

Substitute in the
1972-1974 Catalogue:

| Chemical Engineering |  | Chemical Engineering |
| :---: | :---: | :---: |
| 353 | Transport Phenomena | 453 Transport Phenomena |
| 153 M | Transport Phenomena Laboratory | 253M Chemical Engineering Fundamentals Laboratory |
| 354 | Unit Operations I: Fluid Flow, Heat Transfer, and Mass Transfer | 454 Unit Operations I: <br> Fluid Flow, Heat Transfer, and Mass Transfer |
| 364 | Chemical Engineering Laboratory | 264 Chemical Engineering Process and Projects Laboratory |
|  |  | Elective - 3 semester hours |
| Chemistry |  | Chemistry |
| 3-hour upper-division elective |  | Omit upper-division elective |
| English |  | Communication Skills |
| 305 | Rhetoric and Composition | 9 semester hours with a |
| 317 | Technical Writing | minimum requirement of: |
| 3-hour elective (literature) |  | English |
|  |  | 301 English Composition |
|  |  | 305 Rhetoric and Composition |
|  |  | 317 Technical Writing, or |
|  |  | Spe. 319 Business and Professional Speaking |
| Engineering Mechanics |  | Engineering Mechanics |
| 305 | Mechanics I | 314 Mechanics |
| 310 | Mechanics II |  |
| Physics |  | Physics |
| $415$ | Heat, Wave-Motion, and Optics | 403K Mechanics, Heat and |
| 416 | Electricity and Magnetism | 403L Electricity and Magnetism, Light, Atomic and Nuclear Physics |
| Speech |  | Speech |
| 319 | Business and Professional | Omit Spe. 319 |
|  | Speaking |  |
| Approved Humanistic or Social |  | Approved Non-technical elective |
| Science Elective <br> 3 semester hours |  | 3 semester hours |
|  |  | Technical Electives |
|  |  | 6 semester hours |
| Block Courses 15 semester hours |  | Block Courses |
|  |  | 9 semester hours |
|  |  | Total number of hours changed from 130 to 129 |

Block Courses I, Engineering Analysis Ch.E. 360, Automatic Process

Block I, Computer Applications, Process Analysis and Control The chemical process industry

Control
Ch.E. 376, Process Analysis and Simulation.
Ch.E. 376 K , Process Evaluation.
Ch.E. 379.24, Topics in Chemical Engineering: Computer Applications in Chemical Engineering.
Upper-division mathematics or computer science courses. (No more than 6 hours of mathematics may be selected.)
*Upper-division chemical engineering courses.
*Upper-division chemical engineering courses acceptable for the several blocks announced at the time of offering.

Block Courses II, Engineering
Chemistry
Ch.E. 355, Introduction to Polymer Engineering.
Ch.E. 362L, Advanced Thermodynamics.
Ch.E. 365, Water Treatment Engineering: Corrosion.
Ch.E. 369, Physical Properties of Solids.
Ch.E. 379.25, Topics in Chemical Engineering: Technology, Pollution, and the Environment.
Upper-division chemistry courses. (no more than 6 hours of chemistry may be selected.)
*Upper-division chemical engineering courses.
is one of the most advanced in the applications of modern control techniques and computer technology. These rapidly developing techniques are of great utility to the practicing engineer.
*Ch.E. 360, Automatic Process Control.
*Ch.E. 379.24, Computer Applications in Chemical Engineering.
*Ch.E. 376. Process Analysis and Simulation.
Ch.E. 376 K , Process Evaluation.
C.S. 348 , Survey of Numerical Techniques.

NOTE: Each Chemical Engineer-ing block contains one or more core courses which are denoted by an asterisk (*). At least one such course must be taken to satisfy the requirements of that block. The remaining courses may be selected from those listed or others approved by the Chairman. These specific courses do not constitute an exclusive list for block courses, but merely illustrate the type of courses which are generally suitable for a given block. Those listed require only prerequisites that most chemical engineering juniors or seniors would have.

[^1]Block Courses III, Engineering
Operations
Ch.E. 355, Introduction to Polymer Engineering.
Ch.E. 360, Automatic Process Control.
Ch.E. 376, Process Analysis and Simulation.
Ch.E. 376 K , Process Evaluation.
Ch.E. 379.24, Topics in Chemical Engineering: Computer Applications in Chemical Engineering.
Ch.E. 379.26, Topics in Chemical Engineering: Optimization Theory and Practice.
M.E. 353, Engineering Economic Analysis.
M.E. 366L, Introduction to Operations Research.
Upper-division courses closely related to this block given in any engineering department.
*Upper-division chemical engineering courses.

Block Courses IV, Engineering
Materials
Ch.E. 350, Chemical Engineering Materials.
Ch.E.355, Introduction to Polymer Engineering.
Ch.E. 369, Physical Properties of Solids.
Ch.E. 370, Properties of Hydrous Silicates.
Ch.E. 431, Inorganic Chemistry.
Materials courses in electrical or mechanical engineering. (No more than 6 hours may be selected.)
*Upper-division chemical engineering courses.
M.E. 378 K , Mechanical Metallurgy.
Ch. 471, Inorganic Chemistry Quantum Mechanics).
Ch. 354, Physical Chemistry.
Block III, Management and
Management Decision Making
Many practicing engineers eventually assume positions invoiving some managerial responsibilities. The decision making process used by modern managers is sophisticated and worthy of study as are the important questions of finance and human relations.
*Ch.E. 356, Optimization: Theory and Practice.
Man. 335, Operations Management.
Man. 367, Production.
M.E. 353, Engineering Economic Analysis.
M.E. 366L, Introduction to Operations Research.
M.E. 375 K , Production Engineering Management.
Fin. 357, Business Finance.
Fin. 374 , Financial Planning and Policy.
B.L. 323, Business Law.
B.L. 324, Business Law.

## Block IV, Environmental Improve-

 mentThe problems of industrial waste management become more and more acute as the complexity of the process industry increases. To develop satisfactory solutions to these problems, it is necessary to understand their general nature as well as the details of potential gas, liquid, or solid waste treatment processes.
*Ch.E. 356, Technology and Its Impact on the Environment.
*Ch.E. 365, Water Treatment.
C.E. 369 L , Air Pollution and Industrial Hygiene.
C.E. 369 M , Industrial Waste Treatment.
Mic. 316, Elementary Microbiology.

Block V, Chemical Processing<br>The chemical engineering

Ch.E. 365, Water Treatment Engineering: Corrosion.
Ch.E. 379.24, Topics in Chemical Engineering: Computer Applications in Chemical Engineering.
Ch.E. 379.25, Topics in Chemical Engineering: Technology, Pollution and the Environment.
C.E. 342, Water supply and WasteWater Disposal.
C.E. 369L, Air Pollution and Industrial Hygiene.
C.E. 369 M , Industrial Waste Treatment.
Mic. 316 , Elementary Microbiology.
*Upper-division chemical engineering courses.

## Block Courses VI, Engineering

## Management

Ch.E. 379.26, Topics in Chemical Engineering: Optimization Theory and Practice.
M.E. 353, Engineering Economic Analysis.
M.E. 366L, Introduction to Operations Research.
Upper-division courses in business administration or economics approved by the Block VI Committee of the Chemical Engineering Department.
graduate most often enters some phase of chemical processing as his first assignment. By an appropriate selection of courses from this block, the student has the opportunity to study a particular area in considerable detail.

Ch.E. 355, Introduction to Polymer Engineering.
Ch.E. 360, Automatic Process Control.
Ch.E. 362L, Advanced Thermodynamics.
Ch.E.365, Water Treatment Engineering: Corrosion.
*Ch.E. 376, Process Analysis and Simulation.
*Ch.E. 376 K , Process Evaluation.
Ch.E. 379.24, Computer Applications in Chemical Engineering.
Ch.E. 357, Technology and Its Impact on the Environment.
Ch.E. 356, Optimization: Theory and Practice.

## Block VI, Biomedical Engineer-

 ing*Ch.E. 379.29, Transport Phenomena in Bioengineering.
Ch.E. 355, introduction to Polymer Engineering.
Ch.E. 376, Process Analysis and Simulation.
Ch.E. 316 K , Introduction to Biochemistry.
E.E. 374 K , Biomedical Electronics.

Zoo. 365L, Vertebrate Physiology I.
Zoo. 365N, Vertebrate Physiology II.
Upper-division courses closely related to this block may be substituted with approval.

[^2]dentistry, business or law. For further details on non-engineering professional programs, see page $\qquad$ - To arrange a special program, the student should consult his adviser. All programs must be approved by the department chairman.


| 416 | Electricity and Magnetism | 403L Electricity and Magnetism, Light, Atomic and Nuclear Physics |
| :---: | :---: | :---: |
| Approved | Humanistic and Social | Approved Humanistic or Social |
| Science | Electives | Science Electives |
| 6 sem | ester hours | 3 semester hours |
| Block Courses 12 semester hours |  | Approved Block Electives |
|  |  | 18 semester hours |
|  |  | Total number of hours changed from 130 to 127 |
| Option Programs CIVIL ENGINEERING |  |  |

The following blocks of courses are listed for the guidance of civil engineering students with Blocks II through VIII indicating courses closely related to specific areas. Blocks other than those shown may be arranged with the approval of the departmental chairman. At least six hours of technical electives must be taken from civil engineering.

## Block Courses I, General Civil Engineering

Any twelve hours of approved technical electives that include civil engineering courses from three different areas.

Block Courses II, Environmental Health Engineering<br>C.E. 364, Design of Water and Waste-Water Systems.

The following blocks of courses are listed for the guidance of civil engineering students with Blocks II through $X$ indicating courses closely related to specific areas. Blocks other than those shown may be arranged with the approval of the departmental chairman. In order to maintain a versatile general background for Civil Engineering students, one course must be selected from each of three different areas of Civil Engineering. Typical. supporting electives are not to be considered a part of the area with which they are listed. At least four elective courses must be Civil Engineering courses.

Block I, General Civil Engineering
Any eighteen hours of approved technical electives that include civil engineering courses from three different areas. This option program also can be utilized as preparation for further professional training in medicine, dentistry, business, or law. The student should consult the departmental undergraduate advisor for details and program approval. Further details are given on page $\qquad$ of this catalogue.

[^3]C.E. 365 K , Hydraulic Engineering.
C.E. 3691, Air Pollution and Industrial Hygiene.
C.E. 369M, Industrial Waste Treatment.
C.E. $274 \mathrm{~K}, 374 \mathrm{~K}$, Fydrology. Typical Supporting Electives:
Ch. 310, Elementary Organic Chemistry
M. 372, Fourier Series and Boundary Value Problems.
Met. 374, Microclimatology.
Mic. 316, Elementary Micobiology.

## Block Courses III, Transportation

## Engineering

C.E. 366 K , Design of Bituminous Mixtures.
C.E. 367, Highway Engineering.
C.E. 375, Earth Structures and Soil Stabilization.
C.E. 376, Airport Design.
C.E. 377 K .1 , Studies in Civil Engineering: Introduction to Systems Engineering。
Typical Supporting Electives:
Arc. 369 K, Planning $I$.
C.E. 368, Analytical Photogrammetry.
C.E. $374 \mathrm{~K}, \mathrm{Hydrology}$.
M. 427L, Advanced Calculus for Applications II (or M. 418E).
engineering program for students interested in evaluating environmental quality and instituting engineering pollution controls.
Area Courses:
C.E. 342, Water Pollution Control.
C.E. 364, Design of Pollution Control Systems.
C.E. 3691, Air Pollution and Industrial Hygiene.
C.E. 369 M , Solid and Industrial Waste Engineering.
C.E. 377 K , Environmental Sampling and Analyses.
Typical Supporting Electives:
Fydraulics and Hydrology (3 hours).
Ocean Engineering (3 hours).
Meteorology (3 hours).
Chemistry or Microbiology (3 hours).

Block III, Transportation Engineering

Transporting people and goods safely, efficiently, and economically requires the optimum use of innovative technology in planning, designing, constructing, operating, and maintaining an integrated transportation system. This option introduces students to the engineering aspects of providing practical ground and air transport for individuals, groups, or materials and provides a basis for interrelating the technical, economic, social, and environmental factors involved.
Area Courses:
C.E. 323, Site Layout and Photogrammetry.
C.E. 366 K , Design of Bituminous Mixtures.
C.E. 367 , Highway Engineering.
C.E. 367 T, Traffic Engineering.
C.E. 376, Airport Design.
C.E. 377 K .12 , Introduction to Systems Engineering.
Typical Supporting Electives:
C.E.331, Reinforced Concrete Theory.
C.E. 334, Engineering Materials.
C.E. 368, Analytical Photogrammetry.
C.E. 374 K, Hydrology.

Block Courses IV, Hydraulic

## Engineering

C.E. 364, Desi gn of Water and Waste-Water Systems.
C.E. 365 K , Hydraulic Engineering. C.E. 368 K , Photogrammetry and Mapping.
C.E. 374K, Hydrology.
C.E. 375 , Earth Structures and Soil Stabilization.
C.E. 377 K .21 , Studies in Civil Engineering: Introductory Ocean Engineering。
Typical Supporting Electives:
M. 427L, Advanced Calculus for Applications II (or M. 418F.).
M.E. 366I, Introduction to Operations Research.
Met. 327, Engineering Meteorology.
Met. 376, Physical Oceanography.
P.En. 323, Fluid Flow in Porous Media.

Block Courses V, Materials
C.E. 334, Engineering Materials; or
M.E. 311, Materials Engineering I. C.E. 362 M , Reinforced Concrete Design
C.E. 366K, Design of Bituminous Mixtures.
C.E. 275, 375, Earth Structures and Soil Stabilization.
C.E. 377K, Studies in Civil Engineering (Advanced Materials of Construction).
C.E. 375, Earth Structures and Soil Stabilization.
C.E. 377 K .91 , Advanced Computational Methods for Civil Engineering.

Block IV, Eydraulic Engineering
Hydraulic engineering is concerned with the physical aspects of water resources development and control for purposes such as municipal and industrial use, irrigation, navigation, flood control, and water power.

Employment opportunities are in numerous agencies at all governmental levels and with consulting engineering and construction firms.
Area Courses:
C.E.342, Water Pollution Control.
C.E. 365 K , Hydraulic Structures and Machinery.
C.E. 374 K , Hydrology.

Typical Supporting Electives:
C.E. 368 , Analytical Photogrammetry.
C.E.375. Earth Structures and Soil Stabilization.
C.E. 377 K .21 , Studies in Civil Engineering: Introductory Ocean Engineering.
Met. 376, Physical Oceanography
Met. 327 , Engineering Meteorology.
M. 427E, Advanced Calculus for Applications II (or M. 418E).
M.E. 366 L , Introduction to Operations Research.
P.En. 323, Fluid Flow in Porous Media.

## Block V. Materials

The basic purpose of the block program for materials is to expand the student's understanding of the mechanical and durability properties of a broad range of construction materials including silicate. organic, and metalic materials. Students completing the program may choose from a range of opportunities including applied materials engineering, research and development of new construc-

Typical Supporting Electives:
Ar.E. 335K, Materials and Methods of Building Construction I.
Ar.E. 335L, Materials and Methods of Building Construction II.
Ar.E. 262L, Design of Structural Systems in Timber.
E.M. 370, Intermediate Dynamics.
M.E. 360K, Physical Metallurgy.

Block Courses VI, Soil Mechanics
and Foundation Engineering
C.E. 360K, Foundation Engineering. C.E. 362 M , Reinforced Concrete Design.
C.E. 366K, Design of Bituminous Mixtures.
C.E. 374 K , Hydrology.
C.E. 375, Earth Structures and Soil Stabilization.
Typical Supporting Electives:
C.E. 334, Engineering Materials.
M. 427L, Advanced Calculus for

Applications II (Or M. 418E).
P.En. 323, Fluid Flow in Porous Media.
tion materials, and continued studies in the graduate school. Area Courses:
C.E. 334 , Engineering Materials, or
M.E. 311, Materials Engineering I.
C.E. 366 K , Design of Bituminous Mixtures.
C.E. 375, Earth Structures and Soil Stabilization.
C.E. 377K, Studies in Civil Engineering (Advanced Materials of Construction).
Typical Supporting Electives:
Ar.E. 362L, Design of Structural Systems in Timber.
Ch.E. 355, Introduction to Polymer Engineering.
M.E. 311Q, Manufacturing Materials and Processes.
M.E. 378 K , Mechanical Metallurgy.
M.E. 360K, Physical Metallurgy.
C.E. 329K, Elementary Design in Metals.
C.E. 331, Reinforced Concrete.

Block VI, Soil Mechanics and Foundation Engineering

The courses in this option are designed to enlarge the student's understanding of soil as a material of construction and to further develop his ability to solve design problems in soil mechanics and foundation engineering.
Area Courses:
C.E. 360 K , Foundation Engineering.
C.E. 375, Earth Structures and Soil Stabilization。
Typical Supporting Electives:
C.E. 329K, Elementary Design in Metals.
C.E. 331, Reinforced Concrete Theory.
C.E. 362 M , Reinforced Concrete Theory.
C.E. 362 N , Steel Design.
C.E. 366K, Design of Bituminous Materials.
C.E. 377 K .91 , Computer Methods for Civil Engineering . Geo. 316 M , Depositional Processes.

Block Courses VII, Structural Engineering
C.E. 360K, Foundation Engineering.
C.E. 362 M , Reinforced Concrete Design.
C.E. 362 N , Steel Design.
C.E. 363, Indeterminate Structures.
Typical Supporting Electives:
Ar.E. 262L, Design of Structural Systems in Timber.
E.M. 370, Intermediate Dynamics. M. 427L, Advanced Calculus for Applications II (or M.418E).

Block Courses VIII, Surveying and Photogrammetry
C.E. 322, Principles of Engineering Mapping.
C.E. 340, Engineering Geodesy. C.E. 268, 368, Analytical Photogrammetry. C.E. $274 \mathrm{~K}, 374 \mathrm{~K}$, Hydrology.
C.E. 377 K , Studies in Civil Engineering (Boundary Surveying).

Block VII, Structural Engineering

The Structural Engineering
option provides advanced programs in the analysis, design, and construction of structural systems for buildings, bridges, and other public and industrial facilities. It emphasizes current design procedures in reinforced concrete, metals, and timber.
Area Courses:
C.E. 329K, Elementary Design in Metals, or
C.E. 331, Reinforced Concrete Theory.
Conly one of these courses is to be considered an elective. The other is required for all degree candidates.)
C.E. 362 M , Reinforced Concrete Design.
C.E. 362 N , Steel Design. C.E. 363, Indeterminate Structures.
C.E. 377 K .91 , Studies in Civil Engineering: Computer Methods for Civil Engineering.
Ar.E. 362L, Design of Structural Systems in Timber.
Typical Supporting Electives:
Ar.E. 358, Building Contracts. C.E. 360K, Foundation Engineering.
E.M. 360.3 , Studies in Engineering Mechanics: Advanced Strength of Materials.
M. 427 K , Advanced Calculus for Applications I, or
M. 427L, Advanced Calculus for Applications II.

[^4]Typical Supporting Electives:
Arc. 369K, Planning I.
B.L. 323, Business Law, First

Course.
M. 427L., Advanced Calculus for Applications II (or M. 418E). M.E. 366 , Engineering Statistics.

Block Courses IX, Ocean Engineering
C.E. 334, Engineering Materials. C.E. 260 K , Foundation Engineering.
C.E. 369 M , Industrial Waste Treatment.
C.E. 377K.21, Studies in Civil Engineering: Introductory Ocean Engineering.
Ch.E. 350 , Chemical Engineering Materials.
E.E. 379K.14, Topics in Electrical Engineering: Introduction to Engineering Acoustics.
Met. 376, Physical Oceanography.

## Area Courses:

C. E. 323, Site Layout and Photogrammetry.
C.E. 340, Engineering Geodesy.
C.E. 361 K , Boundary Surveying.
C.E. 367T, Traffic Engineering.
C.E. 368, Analytical Photogrammetry.
Typical Supporting Electives:
C.E. 367, Highway Engineering.
C.E. 375, Earth Structures and Soil Stabilization.
Arc. 369 K , Planning I.
B.L. 323, Business Law, First Course.
C.E. 377 K .12 , Introduction to Systems Engineering.
C.E. 377K.91, Advanced Computational Methods for Civil Engineering.

## Block IX, Ocean Engineering

Ocean engineering combines knowledge of the ocean and engineering to enhance man's utilization of the ocean's resources and boundaries and to minimize his impact. Areas of interest in ocean engineering include: waves and tides, coastal and estuarine processes, waste disposal, water quality, and structures in harbor, coastal and offshore environments. Area Courses:
C.E. 377K.21, Studies in Civil Engineering: Introductory Ocean Engineering.
Met. 376, Physical Oceanography.
Typical Supporting Electives:
C.E. 334, Engineering Materials.
C.E. 360K, Foundation Engineering.
C.E. 342, Water Pollution Control.
M.E. 379 M , Problems in Ocean Engineering.
Ch.E. 350, Chemical Engineering Materials.
E.E. 379 K .14 , Introduction to Acoustics.


| 364 | Electrical Engineering Laboratory III | 264 | Electrical Engineering Laboratory III |
| :---: | :---: | :---: | :---: |
| 325 | Electromagnetic Theory I | 338K | Electronic Circuits II |
| 334 | Electrical Engineering Materials |  |  |
| *Electrical Engineering |  |  |  |
| 323K Network Theory III |  |  |  |
| 325 K Electromagnetic Theory II |  |  |  |
| 338K Electronics II |  |  |  |
| 339 Electron Device Theory |  |  |  |
| 341 Electromechanical Systems I |  |  |  |
| 362 K Introduction to Automatic |  |  |  |
| 371K Stochastic Processes: <br> Fundamentals |  |  |  |
| *Five out of seven of these courses are required. |  | Approved Technical Electives: 9 semester hours |  |
| Chemistry |  | Chemistry |  |
| 301 | Introductory Chemistry | 3 semester hours of Natural |  |
| 302 | Principles of Chemistry | Science may be substituted for 3 hours of chemistry. |  |
| Engineering Mechanics |  | Engineering Mechanics |  |
| 305 | Mechanics I | 314 | Mechanics |
| 310 | Mechanics II |  |  |
| English |  | English |  |
| 3-hour Elective (literature) |  | *3-hour Elective (literature) |  |
|  |  | *Three h architec music m the liter | ours of aesthetics, ture, art, drama, or ay be substituted for ature requirement. |
| Mathematics |  | Mathematics |  |
| $427 \mathrm{~L}$ | Advanced Calculus for Applications II | Block substit Algebr tions. | Option I students may tute M. 311 , Linear a and Matrix Calcula- |
| Mechanical Engineering |  | Mechanical Engineering |  |
| 333 | Statistical Thermodynamics | Omit | M.E. 333 |
| Physics |  | Physics |  |
| 415 | Heat, Wave-Motion, and Optics | 403K | Mechanics, Heat and Sound |
| 416 | Electricity and Magnetism | 403 L | Electricity and Magne tism, Light, Atomic and Nuclear Physics |
| Block Electives |  | Block Option Courses 24 semester hours |  |
| 18 semester hours |  |  |  |

Approved Humanistic and Social
Science Electives
6 semester hours
*Approved Electives
9 semester hours
*Three hours of approved electives must be chosen in conformance with the General Education Requirement.

Total number of hours changed from 130 to 128 .

Option Programs
ELECTRICAL ENGINEERING

1970-1972 Catalogue
Block Courses I - NONE

1972-1974 Catalogue
Block I, Computer Engineering
Computer Engineering is concerned with organization, design, and utilization of digital processing systems as general purpose computers or as components of larger systems. Both hardware and programming of digital computers are studied. Students completing this option will be prepared technically and conceptually to solve problems relating to design and application of modern computing systems.
C.S. 310, Computer Organization and Programming.
C.S. 340 , Information Structures.
*C.S. 345 , programming Languages.
C.S. 372 , Computer and Programming Systems.
E.E. 360M, Digital Systems Engineering II.
E.E. 360 N, Computer Organization.
E.E. 362 K , Introduction to Automatic Control.
E.E. 351 K , Probability Theory and Applications.
*An approved Computer Science course may be substituted for C.S. 345 .

Block II, Bio-medical Engineering\# This block of electives provides a means for a student to obtain an introduction to this rapidly expanding area of engineering. An interdisciplinary group of courses can be taken to prepare a student

Block Courses II, Biomedical
Electronics
*E.E. 323K, Network Theory III.
*E.E. 325K, Electromagnetic
Theory II.
*E.E. 338 K , Electronics II.
*E.E. 339, Electron Device Theory.
*E.E. 362 K , Introduction to Automatic Control.
$* * E, E .464$, Electrical Engineering Laboratory III (l additional hour).
**E.E. 374 K , Biomedical Electronics.
**Ch。810, Organic Chemistry.
**Ch. 369, Biochemistry: Intermediary Metabolism.
**Zoo. 311, Cellular and Developmental Biology.
*These courses are required of students in this block to complement the eighteen hours of block electives.
**These courses must be taken as block electives.

Block Courses III, Modern Wave
Phenomena \#
*F.E. 323 K , Network Theory III.
*E.E. 325 K , Electromagnetic Theory II.
*E.E. 338 K , Electronics II.
*E.E. 339, Electron Device Theory.
*E.E. 371K, Stochastic Processes: Fundamentals.
E.E. 363K, Electromagnetic Theory III.
E.E. 363L, Traveling-Wave Engineering。
E.E. 363 M , Introduction to Micro-waves.
E.E. 379 K , Topics in Electrical Engineering.
Section 6, Quantum electronics. Section 14, Introduction to engineering acoustics. Section 17, Classical and modern optics.
Mi. 361, Theory of Functions of a Complex Variable.
Phys. 373, Modern Physics I: Introductory Quantum Mechanics. Approved mathematics electives. Approved electrical engineering elective.
for graduate work in Bio-Medical Engineering. The judicious use of the block electives and other electives provides a means for the student to meet requirements to enter dental school or medical school.
E.E. 325, Electromagnetic Theory I.
E.E. 362 K , Introduction to Automatic Control.
E.E. 351 K , Probability Theory and Applications.
E.E. 374K, Biomedical Electronics.
Zoo. 311, Cellular and Development Biology.
Zoo. 325, Genetics.
Ch. 204, Introduction to Chemical Practice.
Ch. 810a, Organic Chemistry.
\#Pre-Medical students should see the Pre-Med Advisor regarding recommended electives. For additional information regarding Pre-Medical programs, refer to page xx of this catalog.

Block III, Electromagnetic Systems
Modern electromagnetic systems utilize frequencies extending beyond microwave through infared to optical bands. This block emphasizes basic electromagnetic and other physical phenomena relating to generation, transmission, propagation and reception of signals throughout this extended spectrum. The basic principles of information theory relevant to applications to practical communications systems are included.
E.E. 314 , Electrical Engineering Materials.
E.E. 325, Electromagnetic Theory I.
E.E. 325 K , Electromagnetic Theory II.
E.E. 339, Electron Device Theory.
E.E. 363 M , Introduction to Micro-waves.
E.E. 351 K , Probability Theory and Applications.
E.E. 371 M , Transmission of Information.
*These courses are required of students in this block to complement the eighteen hours of block electives.
\#Eight of the electrical engineering courses listed in this block must be taken.

Block Courses IV, Computer, Inforformation and Control Engineering *E.E. 323K, Network Theory III. *E.E. 338 K , Electronics II.
*E.E. 362 K , Introduction to Automatic Control.
*E.E. 371K, Stochastic Processes: Fundamentals.
E.E. 360K, Pulse and Digital Techniques.
E.E. 360 M , Digital Systems Engineering II.
E.E. 370, Automatic Control II.
E.E. 371L, Information Theory.
E.E. 375 P, Network Analysis and Synthesis.
E.E. 375 R , Introduction to Nonlinear Analysis.
E.E. 375 S, Solid-State Circuit Design.
E.E. 379 K, Topics in Electrical Engineering.
Section 13, Transmission of information.
Section 17, Computer organization.
C.S. 310, Computer Organization and Programming.
C.S. 340, Information Structures.
C.S. 345 , Programming Languages.
*These courses are required of students in this block to complement the eighteen hours of block electives.
\#Six of the electrical engineering courses listed in this block must be taken.

Block Courses IV, Computer, Information and Control Engineering (continued)
C.S. 368 K , Introduction to Numerical Analysis.
C.S. 372, Computer and Programming Systems.

Block IV, Communication and Control Engineering

Communications and automation are expanding fields today. This block of courses stresses analysis and design techniques of both a single system and large scale systems whose primary mission may include information transmission, control, and signal processing. Engineering applications include industrial process control, radar, communication systems, navigation and guidance, and information coding. Key requirements arise in both private industry and government.
E.E. 325, Electromagnetic Theory I.
E.E. 362 K , Introduction to Automatic Control.
E.E. 370, Automatic Control II.
E.E. 351K, Probability Theory and Applications .
E.E. 351L, Signals and Systems.
E.E. 371 M , Transmission of Information.
*C.S. 348, Survey of Numerical Techniques.
*M. 311, Linear Algebra and Matrix Calculations .
*Approved Computer Science or Mathematics courses may be substituted for C.S. 348 or Math 311.
C.S. 375, Algorithmic Languages and Compilers.
$\% *$ M. 311, Linear Algebra and Matrix Calculations.
M. 343K, Introduction to Algebraic Structures.
M. 361, Theory of Functions of a Complex Variable.
M. 665, Intermediate Analysis.
M. 370K, Differential Equations I.
M. 370L, Differential Equations II.
M. 373K, Algebraic Structures I.
M. 373L, Algebraic Structures II.
M.E. 366I. Introduction to Operations Research.
Approved upper-division elective.
**M. 311 may be substituted for M.E. 333 in the electrical engineering core.

## Block Courses V, Management and

## Production

*E.E. 366, Engineering Economy.
E.E. 379 K , Topics in Electrical

Engineering.
(When topic is appropriate for this block.)
**M.E. 353, Engineering Economic Analysis.
Acc. 365 , Fundamentals of Management Information Systems.
B.I. 323, Business Law, First Course.
B.L. 324, Business Law, Second Course.
Fin. 354, Money, Banking and
Economic Conditions.
Man. 335, Operations Management.
Man. 336, Organizational
Behavior and Administration.
Man. 372, Interpersonal Dynamics and Administrative Practices. Mkt. 337, Principles of Marketing. Sta. 332, Elementary Business Statistics.
*These courses must be taken as block electives.
**Must be taken as block elective if Eco. 303 not included as approved humanistic and social science elective.

Block Courses VI, Electronic<br>Systems<br>*E.E. 323 K , Network Theory III.

Block V, Physical Electronics
This block provides students with an introduction to electronic devices and systems and the physical principles underlying their operation. The student selecting this option should emerge with an understanding of how practical electronic devices work, and be able to use this understanding in their design and imaginative use in systems.
E.E. 314 , Electrical Engineering Materials.
E.E. 325, Electromagnetic Theory $I$.
E.E. 334 K , Theory of Engineering Materials.
E.E. 339, Electron Device Theory.
E.E. 360 K , Pulse and Digital Techniques.
E.E. 351K, Probability Theory and Applications.
E.E. 348, Quantum Electronics.
M.E. 333, Statistical Thermodynamics.

## Block VI, Power Systems and Energy Conversion

Engineering involved with control and conversion of
*E.E. 325K, Electromagnetic Theory II.
*E.E. 338 K , Electronics II.
*E.E. 339, Electron Device Theory.
*E.E. 341, Electromechanical Systems I.
*E.E. 362 K , Introduction to Automatic Control; and/or E.E. 371 K , Stochastic Processes: Fundamentals.
*These courses are required of students in this block to complement the fifteen hours of block electives.

Block Courses VI, Electronic
Systems (continued)
**E.E. 360 K , Pulse and Digital Techniques.
E.E. 360M, Digital Systems

Engineering II.
E.E. 363 K , Electromagnetic

Theory III.
E.E. 363L, Traveling-Wave

Engineering.
E.E. 363 M , Introduction to Microwaves.
E.E. 366. Engineering Economy.
E.E. 371L, Information Theory
**E.E. 375 S, Solid-State Circuit Design.
**E.E. 378 K , Electron Device Design.
E.E. 379 K , Topics in Electrical

Engineering.
Ch.E. 369, Physical Properties of Solids. M.E. 360K, Physical Metallurgy. Phy. 362 K, Modern Physics II: Atomic Physics. Phy. 373, Modern Physics I: Introductory Quantum Mechanics. Phy. 375S, Introductory Solid State Physics.
**These courses must be taken as block electives.

Block Course VII, Power Systems
and Energy Conversion
*E.E. 323 K , Network Theory III.
*E.E. 325 K , Electromagnetic
Theory II.
*E.E. 341, Electromechanical
Systems I.
*and 6 hours from E.E. 338 K , Electronics II, E.E. 339, Electron
energy is required in a wide range of industrial applications. Studies in materials, fields, thermodynamics, mechanics, and circuits are integrated in analysis and design of systems in which economic and reliable operation is the objective.

Block VI, Power Systems and Energy Conversion (continued)
E.E. 314 , Electrical Engineering Materials.
E.E. 325, Electromagnetic Theory I.
E.E. 341, Electromechanical Systems I.
E.E. 362 K , Introduction to Automatic Control.
E.E. 368, Electrical Power Transmission and Distribution.
E.E. 369, Power Systems Engineering.
M.E. 333, Statistical Thermodynamics or
M.E. 320, Applied Thermodynamics.
M.E. 337, Nuclear Engineering: Introduction to Nuclear Power Systems.

## Block VII, Management and Production

This block option provides the student an opportunity to broaden his program by including topics from other branches of engineering and business. Students with an aim towards manufacturing activities, project management,

Device Theory, E.E. 362K, Introm duction to Automatic Control.
E.E. 362, Electromechanical Energy Conversion II.
E.E. 366 , Engineering Economy. E.E. 368, Electrical Power Transmission and Distribution.
E.E. 379 K , Topics in Electrical Engineering (Power System and Energy Conversion Topics).
C.S. 368 K , Introduction to Numerical Analysis.
E.M. 319, Mechanics of Solids
**M.E. 320, Applied Thermodynamics.
M.E. 328, Thermodynamics II.
M.E. 339, Heat Transfer and Rate Processes.
M.E. 345, Fluid Mechanics.
M.E., Nuclear engineering electives.
other non-technical aspects of a technically-based vocation or a graduate program in Business Administration will find this a suitable block selection.
E.E. 314 , Electrical Engineering Materials.
E.E. 325, Electromagnetic Theory I.
E.E. 362 K , Introduction to Automatic Control.
E.E. 351 K , Probability Theory and Applications.
M.E. 353, Engineering Economic Analysis.
Man. and Mkt. (9 hours upperdivision).
\#Eight of the electrical engineering courses listed in this block must be taken.
*These courses are required of students in this block to complement the eighteen hours of block electives.
**M.E. 320 may be substituted for M.E. 333 in the electrical engineering core-

## Changes in PLAN 6 - (LEADING TO THE DEGREE OF BACHELOR OF ENGINEERING SCIENCE)

For the Courses in the 1970-1972 Catalogue: (pages 49-53)

Curriculum for Four Years
Semester Hours
*Aerospace Engineering 211

2
Chemistry 301, 302, 204, 353

11
**Electrical Engineering 335K, 435L 7
Engineering Mechanics 305, 310, 319, 361, 363 15
English 305, 317 (or Speech 319)
General Engineering 202 6

Government 810
American History 6

Substitute in the
1972-1974 Catalogue:

Curriculum for Four Years
Semester
Hours
Chemistry 301, 302,* 204\# 8
Engineering Mechanics 306 , $311^{1}$ 6
English 301,305 6
General Engineering 2022
**American Government 6
**American History 6
$* * *$ Approved nontech nical electives
Mathematics 808, 427K, 427L 16
Computer Programming 3

| Mathematics $808,427 \mathrm{~K}$ 427 L , and 3 hours of upper-division mathem |
| :---: |
| Mechanical Engineering $333,334,368 \mathrm{~K}$ |
| Physics 415, 416 |
| Upper-division science elective |
| Upper-division design elective |
| ***Approved humanistic and social science electives |
| Block courses |
| Total |

*With committee approval any other course treating fundamentals of numerical computation and digital computer programming may be substituted for A.S.E. 211. **With committee approval, E.E. 411 and E.E. 325 may be substituted for $E . E .335 K$ and $E . E$. 435L for students whose option program contains other electrical engineering courses.
***In order to meet the minimum general education requirements for undergraduate degrees, three hours of the humanistic and social science electives must be chosen from the area of arts and literature.

Physics 403K, 403L
8 Courses required for specific programs and electives

60-63

Total 127-129
*An approved natural science elective may be substituted for Ch. 302 in some programs. \#Not required in all programs. A single mechanics course, E.M. 314, may be sufficient in some programs.
**Must satisfy Legislative requirements. ***Must satisfy the General Education and ECPD requirement.

NOTE: Individual programs developed under Plan 6 must satisfy the general requirements stated below.

## For 1972-1974 Catalogue

The Engineering Science Program is designed to serve the needs of students who have a high aptitude in mathematics and science, but cannot fit their educational requirements into other existing degree programs in either engineering or science. While degree requirements under this Program are stated in general terms, it is expected that all approved interdisciplinary programs will assure the student of: (1) an adequate foundation in science, mathematics; and the humanities and social sciences; (2) an introduction to engineering science and methodology; and (3) experience in engineering analysis, design, and synthesis as they are practiced in his particular area of interest.

Two groups of students will find the Engineering Science Program attractive. The first consists of those students who are interested in following one of the established interdisciplinary curricula offered under this program. Recommended plans of study have been developed for the following options: atmospheric science, bio-medical engineering, engineering science, environmental engineering, materials science, and nuclear science. Faculty advisers are available to discuss these
programs with interested students and to counsel with students after they enroll.

The second group consists of students who desire to develop completely new and individualized programs. It is possible to do this within the general guidelines established for the Engineering Science Program, but the student must work closely with a faculty sponsor who is competent to advise him about his program of study. All special programs must be reviewed and approved in advance by the Engineering Science Committee.

General Requirements for All Programs.--An acceptable program will normally be characterized by:
(a) Approximately two and one-half years devoted to mathematics, the basic sciences, the engineering sciences, and integration of these into a meaningful educational experience directed toward development of the ability to apply pertinent knowledge to the identification and solution of practical engineering problems.
(1) Required work shall include a minimum of 15 hours of mathematics including the equivalent of at least 2 semester hours of differential equations. Facility in computer programming is also required of all students.
(2) Required work in the basic sciences will provide fundamental knowledge about natural phenomena, preferably including quantitative expression. A minimum of 14 hours is required including 3 hours of chemistry, 8 hours of physics, and 3 additional hours in chemistry, physics, life sciences, or the earth sciences.
(3) A minimum of 30 hours will be selected from engineering science courses which provide breadth of coverage, and should include extensions of several fields from mathematics and basic sciences. These courses should not be limited to those having specific relevance to the major fields. The curriculum should be designed to provide a sequential development in the scientific and engineering area, including both analytic and experimental studies.
(b) All programs shall contain at least 24 hours of courses chosen from the humanities and social sciences, including:
(1) 6 hours of English composition,
(2) 6 hours of American government,
(3) 6 hours of American history, and
(4) 6 hours of arts and literature courses, which satisfy the General Education requirement.
(c) The above specifications total less than the minimum of 127 hours required for a degree. Additional time is available for full implementation of the student's educational objectives in the areas listed above.

Recommended plans of study for the following options are to be printed in the 1972-1974 catalogue: atmospheric science, bio-medical engineering, engineering science, environmental engineering, materials science, and nuclear science. Since these are only recommendations, they are not submitted for approval.

## Changes in PLAN 7 - (LEADING TO THE DEGREE OF BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING)

| For the Courses in the 1970-1972 Catalogue: |  |
| :---: | :---: |
| (pages 53-56) |  |
| Mechanical Engineering |  |
| 219 | Engineering Computation |
| 426 | Thermodynamics I |
| 442 | Engineering Measurements and Statistics |
| 246 | Fluid Mechanics and Heat |
|  | Transfer Laboratory |
| 3641 | Dynamic Systems: Synthesis |

Chemistry
302

Electrical Engineering
335L Engineering Electronics
Engineering Mechanics
305 Mechanics I
310 Mechanics II
English

Approved Humanistic and Social
Science Elective
12 semester hours
Mathematics
427 L Advanced Calculus for
Applications II

| Physics |  |
| :---: | :--- |
| 415 | Heat, Wave-Motion, and |
| 416 | Optics |
| Electricity and Magnetism |  |

Substitute in the 1972-1974 Catalogue:

Mechanical Engineering
319 Engineering Computation
326 Thermodynamics I
328 Thermodynamics II
335 Probability and Statistics for Engineers
3AA Measurements and Instrumentation Element Design

Approved Natural Science
Elective
3 semester hours

Electrical Engineering
435L Engineering Electronics
Engineering Mechanics
306 Statics
311 Dynamics
English
301 English Composition
Approved Non-technical
Electives
6 semester hours

Mathematics
Omit M. 427L

Physics
403K Mechanics, Heat and Sound
403L Electricity and Magnetism, Light, Atomic and Nuclear Physics

Total number of hours changed from 130 to 127.

## Option Programs MECHANICAL ENGINEERING

1970-1972 Catalogue
Block Courses I, General
Mechanical Engineering (Includes special programs such as biomedical engineering, ocean engineering, and environmental engineering.)
M.E. 328, Thermodynamics II.
M.E. 363L, Mechanical Engineering Laboratory.
M.E. 365K, Analytical Basis of Design I.
*Six semester hours of approved technical electives.

1972-1974 Catalogue
Block I, Professional Mechanical Engineering Practice

This option program is recommended for those who wish to gain the broadest possible education in mechanical engineering applications and who expect to enter professional practice immediately upon graduation. Courses may be selected from the following list which covers many aspects of Mechanical Engineering .

## General.

** M.E. 325L, Co-operative Engineering Program.
** M.E. 362 K , Readings in Engineering.
** M.E. 377 K , Projects in Mechanical Engineering.

Materials Engineering。
M.E. 378 K , Mechanical Metallurgy.
M.E. 379 M .3 , Mechanical Processing of Materials.

Mechanical and Energy Systems.

* M.E. 3ee, Analysis and Design of Machine Elements. M.E.363L, Energy Systems Laboratory.
M.E. 364 M , Control of Industrial Systems and Processes.
*M.E. 374I. Design of Thermal Systems.
M.E. 379 K , Combustion Engine Processes.
M.E. 379 M .13 , Industrial Design for Production.
M.E. 379 N , Noise and Vibration Control. Up to six credit hours selected from Block III Courses.

Nuclear Engineering. M.E. 337, Nuclear Engineering: Introduction to Nuclear Power Systems.
*A technical elective is usually an upper-division course in engineering, mathematics, chemistry, physics, or geology. A list of recommended electives for each block is available in the Mechanical Engineering Office. All other technical electives must be approved in advance by the Mechanical Engineering Departmental Chairman.

## Block Courses II, Materials

## Engineering

M.E. 360K, Physical Metallurgy. M.E. 361 M , Thermodynamics of Materials.
M.E. 378 K , Mechanical Metallurgy. Six semester hours selected from:
M.E. 362 K , Readings in Engineering.
M.E. 370 K , Structure and Properties of Materials.
M.E. 377 K , Projects in Mechanical Engineering.
Upper-division materials courses in chemical engineering or engineering mechanics.
*Approved technical electives.
M.E. 361E, Nuclear Engineering: Nuclear Reactor Engineering.

Operations Research.
M.E. 366 L , Introduction to Operations Research.
M.E. 375 K , Production Engineering Management.
*Both of these courses are required.
**Only one of these courses may be selected.

Block IT, Materials Engineering The design, production, and reliability of many devices depend upon careful selection of evaluation of materials for specific requirements. This option program allows the student to obtain additional depth in the materials area. It is recommended especially for those who expect to pursue graduate study in this field.
*M.E. 360 K , Physical Metallurgy.
*M.E. 361 M , Thermodynamics of Materials.
*M.E. 370 K , Properties of Materials.
*M.E. 378 K , Mechanical Metallurgy.
*M.E. 379M.3, Mechanical Processing of Materials.
$* * M . E .362$, Readings in
Engineering.
**M.E. 377 K , Projects in Mechanical Engineering.
**M.E. 325L, Co-operative Engineering.
M.E. 337, Nuclear Engineering: Introduction to Nuclear Power Systems.
M.E. 366L, Introduction to Operations Research.
E.E. 334 : Electrical Engineering Materials.

Block Courses III, Mechanical
Systems
M.E. 365 K , Analytical Basis of Design I.
Nine semester hours selected from:
M.E. 364 M , Analysis and Design of Feedback Control Systems.
M.E. 365L, Analytical Basis of Design II.
M.E. 366 N , Advanced Design Concepts.
M.E. 379 M .9 , Studies in $\mathrm{Me}-$ Chanical Engineering: Noise and Vibration Control.
Three semester hours of approved mathematics.
*Three semester hours selected from courses above or approved technical elective.

Ch. 353, Physical Chemistry. Ch.E. 355, Introduction to Polymer Engineering。
Phy. 375S, Introductory Solid State Physics. M. 427I, Advanced Calculus for Applications II. Up to six credit hours from Block III.
*At least nine credit hours must be selected from this group of courses.
**Only one of these courses may be counted toward the degree.

## Block III, Mechanical and Energy Systems

This option program allows the student to obtain additional depth in the traditional areas of mechanical engineering which encompass the analysis and creative design of mechanical systems and power devices. It is recommended especially for those who wish to pursue graduate study in this field.
*M.E. 365K, Analytical Basis of Design I.
*M.E. 360 N , Intermediate Heat Transfer. M.E. 360L, Intermediate Fluid Mechanics. M.E. 360 M , Compressible Fluid Flow. M.E. 361E, Nuclear Engineering: Nuclear Reactor Engineering.
M.E. 364 L, Dynamic Systems: Synthesis. M.E. 365L, Analytical Basis of Design II. M.E.366L, Introduction to Operations Research. M.E. 366 N , Advanced Design Concepts.
*Both of these courses are required.

[^5]Block Courses IV, Nuclear
Engineering
M.E. 361E, Nuclear Engineering: Radiation and Reactor Fundamentals I.
M.E. 361F, Nuclear Engineering: Radiation and Reactor Fundamentals II.
Nine semester hours selected from:
M.E. 328, Thermodynamics II.
M.E. 337, Nuclear Engineering: Introduction to Nuclear Power Systems.
M.E. 362 K , Readings in Engineering.
M.E. 374 L , Design of Thermal Systems.
M. 368 K , Introduction to Numerical Analysis.
M. 372, Fourier Series and Boundary Value Problems.
Phy. 326, Introduction to Nuclear Physics.
Phy. 373, Modern Physics I: Introductory Quantum Mechanics.
*Approved technical electives.
M.E. 379M.11, Fluid Power Systems.
**M.E. 377 K , Projects in Engineering.
$* *$ M.E. 362 K , Readings in Engineering.
$* * M . E .325 \mathrm{~L}$, Co-operative Engineering.
***M. 427L, Advanced Calculus for Applications II.
$* * *$ M. 372, Fourier Series and Boundary Value Problems.
Ch.E. 354, Unit Operations I: Fluid Flow, Heat Transfer and Mass Transfer.
Ch.E. 363, Unit Operations II: Separation Processes.
Up to six credit hours of
Block I Courses listed under
Mechanical and Energy
Systems.
** Only one of these courses
may be selected.
***Only one of these courses may be counted toward the degree.

Block IV, Nuclear Engineering
This option program allows the student to obtain additional depth in the field of nuclearmechanical engineering, which encompasses the release, control, and utilization of radiation and heat from nuclear sources: radioactivity. fission, and fusion. This option is recommended especially for those who wish to pursue graduate study in this field.
*M.E. 337, Nuclear Engineering: Introduction to Nuclear Power Systems.
*M.E. 361E, Nuclear Engineering: Nuclear Reactor Engineering.
*M.E. 361F, Nuclear Engineering: Introductory Laboratory.
**M.E. 362 K , Readings in Engineering.
**M.E. 377 K , Projects in Mechanical Engineering.
$* *$ M.E. 325 L , Co-operative Engineering.

Block Courses V, Operations
Research and Management
M.E. 366L, Introduction to Operations Research.
M.E. 375K, Production Engineering Management.
Nine semester hours selected from:
M. 348, Survey of Numerical Techniques.
M. 372, Fourier Series and Boundary Value Problems.
M.E. 362K, Readings in Engineering.
M.E. 371 K , Engineering Contracts and Specifications.
M.E. 373 K , Basic Industrial Engineering.
*Approved technical or business administration electives.
M.E. 366L, Introduction to Operations Research.
M.E. 369L, Engineering Computational Methods.
M.E. 374L, Design of Thermal Systems.
M. 427L, Advanced Calculus for Applications II. M. 372, Fourier Series and Boundary Value Problems.
Phy. 326, Introduction to Nuclear Physics.
Phy. 373, Modern Physics I: Introductory Quantum Mechanics.
Any three credit hours from Block III.
*All three of these courses are required.
**Only one of these courses may be counted toward the degree.

## Block V, Operations Research

This option program allows the student to obtain additional depth in the area of modern industrial engineering and management which emphasize methods and techniques associated with quantitative decision making and optimization. It is recommended especially for those who wish to pursue graduate study in this field.
*M.E. 366 L , Introduction to Operations Research.
${ }^{*} \mathrm{M}$.E. 375 K , Production Engineering Management.
**M.E. 325L, Co-operative Engineering.
**MI.E. 377 K , Projects in Mechanical Engineering.
M.E. 366 S, Statistical Process Analysis.
M.E. 373K, Basic Industrial Engineering.
M.E. 379 M .1 , Hospital Methods Analysis and Improvement.
M.E. 379 M .12 , Intermediate Operations Research.
***Man. 336, Organizational Behavior and Adminis tration.

Block Courses VI, Energy Systems
M.E. 328, Thermodynamics II. M.E. 363L, Mechanical Engineering Laboratory.
Nine semester hours selected from: M.E. 337, Nuclear Engineering: Introduction to Nuclear Power Systems.
M.E.360M, Fundamentals of Compressible Fluid Flow.
M.E. 362 K , Readings in Engineering.
M.E. 364K, Air Conditioning and Refrigeration.
M.E. 371 K , Engineering Contracts and Specifications.
M.E. 374 L , Design of Thermal Systems.
M.E. 379 K , Combustion Engine Processes.
*Approved technical electives.
***Man. 372, Interpersonal Dynamics and Administrative Practices.
*Both of these courses are required.
**Only one of these courses may be counted toward the degree.
***Only one of these courses may be counted toward the degree.

Block VI, Special Programs Special block programs may be arranged to emphasize interdisciplinary areas such as bio-medical engineering, ocean engineering, environmental engineering and transportation engineering. This option program can also be utilized as preparation for further professional training in medicine, dentistry, business, or law. Further details are given in the catalogue. The student should consult the Department Undergraduate adviser for details and program approval.

Changes in PLAN 8 - (LEADING TO THE DEGREE OF BACHELOR OF SCIENCE IN PETROLEUM ENGINEERING)

| For the Courses in the | Substitute in the |
| :---: | :---: |
| 1970-1972 Catalogue: | 1972-1974 Catalogue: |
| (pages 56-58) |  |
| Petroleum Engineering | Petroleum Engineering |
| 001 Petroleum Engineering | 368 Well-logging and |
| Orientation | Correlation |
| Chemistry | Chemistry |
| 204 Introduction to Chemical | Omit Ch. 204 |
| Practice |  |
| Civil Engineering | Civil Engineering |
| 354 Elementary Mechanics of | 354 Elementary Mechanics |
| Fluids | of Fluids, or |
|  | Mechanical Engineering |
|  | 345 Fluid Mechanics |


P.En. 661b, Petroleum Reservoir Engineering.
P.En. 363, Land-Leasing, Royalty, and Conservation Practices.
P.En. 368, Well-Logging and Correlation.
Technical elective ( 2 semester hours).

Block Courses II, Production Engineering
M.E. 334, Engineering Materials.
P.En. 363, Land-Leasing, Royalty, and Conservation Practices.
P.En. 464, Natural Gas Engineering .
P.En. 368, Well-Logging and Correlation.
Related technical elective (3 semester hours).

Block Courses III, Finance-
Economics-Management
Fin. 357, Business Finance; or
Fin. 374, Financial Planning and Policy.
Man. 365, Administration and Organization; or
Man. 372 ,Interpersonal Dynamics and Administrative Practices.
P.En. 363, Land-Leasing, Royalty, and Conservation Practices.
Related technical electives (7 semester hours).
economic recovery of oil and/or from petroleum reservoirs. They determine the number and location of wells to be drilled, estimate the amount of oil and/or gas which can be recovered, and continually study the performance of the reservoir to determine methods of increasing recovery. In the course work, emphasis is placed upon applied mathematics, reservoir mechanics, economics, statistics, conservation practices, and computer modeling.

## Oil and Natural Gas Production Engineering

Production engineers design and supervise projects for the drilling completion, stimulation and workover of wells, and are responsible for all technical aspects of oil and/or gas production. Their primary efforts are directed toward keeping production continuous in the most profitable and efficient manner. Their activities also include selection and installation of surface and subsurface equipment, oil and gas treatment and processing, all phases of well testing programs and corrosion control. Courses emphasize drilling and production technology, economics, equipment design, rock mechanics, computer technology and conservation practices.

## Petroleum Finance and Mangement

Petroleum finance and management engineers estimate the economic value of oil and gas properties and are generally part of the management team. They are responsible for the value determination of recoverable reserves, the economics of field and company wide operations, and are generally the policy and decision makers. Courses emphasized in the areas of economics, finance, management, business, law, geology, petroleum evaluation, conservation practices and computer science.

## Block Courses IV, Analytics of

Reservoir Engineering
M.E. 219, Engineering Computation.
P.En. 661b, Petroleum Reservoir Engineering.
P.En. 464, Natural Gas Engineering.
Related electives in mathematics (7 semester hours).

## Block Courses V, Design and

Technology
M.E. 324 . Kinematics and Dynamics of Mechanical Systems.
M.E. 334, Engineering Materials. M.E. 365 K , Analytic Basis of Design I.
M.E. 366 K , Engineering Design.

Related technical electives (4 semester hours).

Block Courses VI, Drilling and
Rock Mechanics
C.E. 124L, Materials Laboratory,
M.E. 334, Engineering Materials.
P.En. 368, Well-Logging and Correlation.
Related technical electives ( 9 semester hours).

## Block Courses VII, Natural Gas

## Engineering

M.E. 328, Thermodynamics II.
P.En. 464, Natural Gas Engineering.
P.En. 368, Well-Logging and Correlation.
Related technical electives (6 semester hours).

Resource Engineering
Resource Engineers primarily utilize and apply petroleum engin eering techniques in those areas not associated with the production of oil and gas. Their specific areas include rock mechanics, geothermal energy production, in-situ combustion of oil shales, solution minining, earthquake research, fluid waste and salt water disposal, environmental proration and conservation practices. Course emphasize drilling technology, rock mechanics, reservoir engineering, computer technology, applied mathematics, economics and conservation practices.
3. On February 24, 1972, the University Council by the circularization procedure, adopted the following proposed
revision of the requirements for the degree of Bachelor of Science in Chemistry (D\&P 5016-17).

Item 3, under "A. Prescribed Work," presently reads: "German 406, 407 , and 314 K (or such portion thereof as may be required by the score on the language classification test). If a second language is desired, French or Russian is recommended."

The new item 3 is to read: "German 406, 407, plus three hours of German that requires 407 as a prerequisite (or such portion thereof
as may be required by the score on the language classification test). If a second language is desired, French or Russian is recommended."

Item 4, under "A. Prescribed Work," presently reads: "Either Physics 401, 416 and 415 ; or Physics 810a, 416, and 415, with the former preferred. ${ }^{1}$

The new item 4 is to read: "Physios 401, 416 and 415."
4. At its meeting on February 28, 1972, the General Faculty adopted the recommendation of the University Council
on the Membership of the University Council, which constitutes a revision of the first three paragraphs in Section 1.A of the Rules and Regulations Governing the University Council (page 10416). The revision is as follows.
(1) Members ex-officio with vote. The University Council shall include 25 ex-officio members with vote as follows: President of The University of Texas at Austin, Vice-President, VicePresident for Academic Affairs, Vice-President for Business Affairs, Vice-President for Student Affairs, Provost for Arts and Sciences, University Librarian ${ }^{L}$, Dean of the School of Architecture, Dean of the College of Business Administration, Dean of the School of Communication, Dean of the College of Education, Dean of the College of Engineering, Dean of the College of Fine Arts, Dean of the Graduate School, Dean of the College of Humanities, Dean of Interdisciplinary Programs, Dean of the School of Law, Dean of the Graduate School of Library Science, Dean of the College of Natural Sciences, Dean of the College of Pharmacy, Dean of the Lyndon B. Johnson School of Public Affairs, Dean of the College of Social and Behavioral Sciences, Dean of the Graduate School of Social Work, Dean of Extension, and Dean of Students.
(2) Members ex-officio without vote. The Council shall include one ex-officio member without vote as follows: the Registrar and Director of Admissions.
(3) Members elected with vote. The Council shall include the following members with vote elected from the following areas:
(a) General Faculty: 21 members of the General Faculty, 20 of whom are elected at large, plus the Secretary of the General Faculty (to serve as ex-officio Secretary of the University Council), who is annually elected at the regular spring meeting of the General Faculty.
(b) Colleges and Schools: 24 or more, with 24 to be apportioned among the independent schools and colleges, ${ }^{2}$
1
The University Librarian and the Dean of Students become members ex-officio with vote as of September 1, 1972.

2
${ }^{2}$ The number of members to be apportioned among schools and colleges increases from 22 to 24 as of September 1, 1972.
plus such additional members as are provided for in paragraph 2.B.
(c) Student Body: \& students, including the President and Vice-President of the Students' Association and two students to be elected by the Student Senate.

Explanation: This proposed revision with respect to Membership of the University Council involves the following changes.

1. Includes the Vice-President, the Provost for Arts and Sciences, the Deans of the Colleges of Humanities, Natural Sciences, and Social and Behavioral Sciences, and the Dean of Interdisciplinary Programs as members ex-officio with vote (as approved by the University Council on May 17 and October 18, 1971 and by the General Faculty on October 26, 1971; see $D \& P 4850,4893-94,4929,4957-58, ~ D \& M 10379)$.
2. Shifts the University Librarian to the category of members exofficio with vote, effective September l, 1972.
3. Places the Dean of Students in the category of members exofficio with vote, effective September l, 1972.
4. Removes the Director of Physical Plant and the Director of Housing and Food Service from the category of members exofficio without vote.
5. Lists the Secretary of the General Faculty under the General Faculty heading in paragraph (3).
6. Shifts one representative of the Student Body from the House of Delegates, which has been abolished, to the Student Senate (formerly known as the Student Assembly), which will now have two representatives rather than one.
7. Adds two more faculty members to be apportioned among the independent schools and colleges, effective September 1 , 1972 。

These changes are such that the members ex-officio with vote do not exceed one-half the number of faculty members elected with vote, which is the ratio accepted by the University Council as its guideline. The membership of the Council will be as follows at this time and in September 1972:

February 1972 September 1972
Members ex-officio with
vote $23 \quad 25$

Members elected with vote Faculty 47 $47 \quad 50$ Students 4 4

Total members with vote Members ex-officio without vote Total Members

| $\overline{74}$ |
| ---: | ---: |
| 3 |
| 77 |$\quad$| 79 |
| ---: |
| 1 |
| 80 |

Note: Another faculty member will automatically be added on September 1, 1972 when the Lyndon B. Johnson School of Public Affairs becomes entitled to an elected representatives.
5. On March 14, 1972 the University Council approved by circularization the proposal to change the requirements for a major in Ethnic Studies under the degree of Bachelor of Arts, Plan I (D\&P 5034-35).

It is recommended that the statement of requirements for a major in Ethnic Studies appearing in Arts and Sciences Catalogues (Humanities, pages 115-116; Natural Sciences, pages 114-115, Social and Behavioral Sciences, pages 102-03) be changed as follows:

From: The major in Ethnic Studies shall consist of twenty-four semester hours selected as follows: (a) Twelve semester hours, including six upper-division hours, of courses in one discipline; (b) twelve semester hours of upperdivision courses, the content of which is directly related to ethnic studies.

The courses under requirements (a) and (b) shall be chosen subject to principles established by the Committee on Ethnic Studies and must be approved by the Chairman of the Committee or his representative. Individual programs should be a concentration in the study of one ethnic group or be of such a nature as to reflect a perspective of one discipline upon the general issue of ethnic studies.

To: Majors in Ethnic Studies must choose one of three areas of concentration and meet the requirements of that concentration as outlined below.

## Afro-American Studies

(a) ETS 301.
(b) Eighteen semester hours in a single discipline, of which at least twelve hours must be upper-division, and including six hours of Afro-American content courses.
(c) Nine semester hours of Afro-American content courses in disciplines other than (b), including at least six upper-division hours.

## Mexican-American Studies

(a) ETS 310, 318, 371, 372.
(b) Spanish 346 or an approved equivalent.
(c) Eighteen semester hours in a single discipline, of which at least nine hours must be upper-division, and including six hours of Mexican-American content courses and a three-hour Mexican content course. Students using English to meet requirement (c) may substitute an approved three-hour Mexican content course in another discipline.

## Comparative Ethnic Studies

(a) ETS 301, 310, or 318.
(b) Eighteen semester hours in a single discipline, of which at least twelve must be upper-division, and including six hours of ethnic studies content courses.
(c) Six semester hours of upper-division ethnic studies content courses in disciplines other than (b).
(d) No more than two ethnic studies content courses dealing with the same ethnic group may be counted.

The Ethnic Studies program, and the Afro-American and Mexican-American concentrations, are directed by faculty committees appointed by the Dean of Interdisciplinary Programs. Members of these committees advise students, prescribe groups of courses that satisfy the content requirements, and authorize course substitutions when appropriate.

Reason: To strengthen the requirements for the degree, to indicate more specifically the required distribution of courses, and to permit students to choose between the study of one or more ethnic groups. The three areas of concentration have been developed and approved by representatives of the Afro-American and Mexican-American Studies faculty.

GIFTS TO THE UNIVERSITY OF TEXAS AT AUSTIN


The following gifts have been received at The University of Texas at Austin. I recommend acceptance and that the 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 ascertained that the donor is a charitable or public institution and that the donation does not constitute an evasion of taxes.

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. Gifts for endowment purposes are indicated by an "E" following the dollar amount.

DONOR
PURPOSE AND CONDITIONS
AMOUNT

|  | Amoco Production Company <br> Dr. Sam Martner <br> P. O. Box 591 <br> Tulsa, Oklahoma 74102 | ```College of Engineering $15,000.00 Contribution to Department of Petroleum Engineering for the Rock Mechanics Research Program``` |
| :---: | :---: | :---: |
| 2 | Atlantic Richfield Company <br> Louis F. Davis <br> Executive Vice President <br> North American Producing <br> Division <br> P. O. Box 2819 <br> Dallas, Texas 75221 | College of Engineering Contribution for the unrestricted use of the Engineering Foundation |
| 3 | * Dwight D. Book Estate c/o Trust Department, San Antonio Loan and Trust Company <br> P. O. Box 1228 <br> San Antonio, Texas 78206 | ```U.T.Austin 11,951.96 Regular distribution of income from the Book Estate, to be used for scholarships``` |
| 4 | * Champlin Petroleum Co. <br> Roger S. Plummer, Jr. <br> President <br> P. O. Box 9365 <br> Fort Worth, Texas 76107 | Dept. of Geological Sciences 5,000.00 E Contribution to the endowment fund to establish a Professorship of Energy Resources |
| 5 | Cities Service Oil Company <br> J. O. Scott, Manager, Production Research <br> P. O. Box 50408 <br> Tulsa, Oklahoma 74105 | College of Engineering Contribution to Department of Petroleum Engineering for the Rock Mechanics Research Program |

DONOR

|  | * Clayton Foundation for <br> Research <br> 1621 Bank of the Southwest Building <br> Houston, Texas 77002 | U. T.Austin <br> Quarterly contribution toward coordinating the curriculum of the Department of Chemistry with the Biochemical Institute research program | 8,750.00 |
| :---: | :---: | :---: | :---: |
| 7 | Continental Oil Company Conoco Production Research Division <br> F. R. Conley, Manager <br> P. O. Box 1267 <br> Ponca City, Oklahoma 7460 | College of Engineering Contribution to the Department of Petroleum Engineering for the Rock Mechanics Research Program | 15,000.00 |
| 8 | * Corporation for Public Broadcasting Don Trapp Radio Projects Manager 888 16th Street, N.W. Washington, D.C. 20006 | Center for Communication Research <br> Continuation of support for U. T. Austin radio station KUT-FM | 7,500.00 |
| 9 | C. J. Davidson <br> 1004 Continental Life Building <br> Fort Worth, Texas 76102 | U.T. Austin Contribution to the Department of Home Economics, to be added to the Davidson Family Scholarship Fund | 10,000.00 E |
|  | *Mrs. Genevieve Tarlton Dougherty <br> P. O. Box 640 <br> Beeville, Texas 78102 | College of Engineering Contribution of two checks for $\$ 3,000$ each in memory of Robert M. Dunham and Charles John Nibbi | 6,000.00 |
|  | * Dowell Division of Dow Chemical Company <br> R. E. Hurst <br> P. O. Box 21 <br> Tulsa, Oklahoma 74102 | College of Engineering Contribution to the Department of Petroleum Engineering for the Rock Mechanics Research Program | 15,000.00 |
| 12 | E. I. du Pont de Nemours \& Company, Inc. <br> C. B. McCoy, President Wilmington, Delaware 19898 | Department of Chemistry Contribution to provide a Du Pont Science and Engineering Grant for the Department of Chemistry | 15,000.00 |
| 13 | E. I. du Pont de Nemours \& Company, Inc. <br> C. B. McCoy, President Wilmington, Delaware 19898 | College of Engineering Contribution to provide a Du Pont Science and Engineering Grant for the Department of Chemical Engineering | 10,000.00 |


|  | DONOR | PURPOSE AND CONDITIONS | AMOUNT |
| :---: | :---: | :---: | :---: |
|  | * Engineering-Science Inc. 150 East Foothill Boulevard Arcadia, California 91006 c/o Davis L. Ford 3109 North Interregional Austin, Texas 78722 | College of Engineering Contribution to the Bureau of Engineering Research for a research program in petrochemical waste treatment | \$7,500.00 |
|  | * Getty Oil Company John Mintz P. O. Box 36367 Houston, Texas 77001 | College of Engineering Contribution to the Department of Petroleum Engineering for the Rock Mechanics Research Program | 15,000.00 |
|  | * Gulf Oil Foundation <br> Gulf Oil Company <br> W. B. Hopkins <br> P. O. Box 1150 <br> Midland, Texas 79701 | Dept. of Geological Sciences Unrestricted contribution to this department | 5,000.00 |
| 17 | Halliburton Services <br> Chemical Research and <br> Development <br> W. T. Malone, Assistant <br> Manager <br> Drawer 1431 <br> Duncan, Oklahoma 73533 | College of Engineering Contribution to the Department of Petroleum Engineering for the Rock Mechanics Research Program | 7,500.00 |
| 18 | Hughes Tool Company <br> R. A. Cunningham <br> P。O. Box 2539 <br> Houston, Texas 77001 | College of Engineering Contribution to the Department of Petroleum Engineering for the Rock Mechanics Research Program | 15,000.00 |
| 19 | Humble Companies <br> Foundation <br> Charles F. Jones <br> Vice Chairman of the Board <br> Humble Oil \& Refining Co. <br> P。O. Box 2180 <br> Houston, Texas 77001 | U. T. Austin <br> Contributions as follows: College of Business <br> Administration <br> Dept. of Accounting <br> College of Engineering Chemical Engineering <br> Civil Engineering <br> Electrical Engineering <br> Engineering Mechanics <br> Mechanical Engineering <br> Petroleum Engineering <br> Engineering Foundation <br> Chemical Engineering <br> Petroleum Engineering <br> Program to Aid Disadvantaged <br> Students in Engineering <br> School of Law <br> Department of Geological <br> Sciences <br> Department of Physics | $35,000.00$ 1,500 3,000 1,500 1,000 1,500 , 000 1,500 6,000 2,000 , 000 3,000 2,500 5,000 1,000 |


| 20 | Industrial Generating <br> Company <br> Big Brown Division Dick White, Director of Environmental Research Fairield, Texas 75840 | U. T. Austin <br> Grant to the Department of Zoology to cover the costs of a research program to be conducted at Fairfield Lake | \$7,997.00 |
| :---: | :---: | :---: | :---: |
|  | *Johns-Manville Service Corporation <br> P. O. Box 159 <br> Manville, New Jersey 08835 | College of Engineering Contribution to the Bureau of Engineering Research for continuation of a research program on virus filtration | 7,500.00 |
| 22 | Kinney Services Foundation Morton Rosenthal 10 Rockefeller Plaza New York, New York 10020 | U. T.Austin Contribution to the Lyndon Baines Johnson School of Public Affairs, to be used to reimburse Edward Rosenthal for funds which he advanced for student scholarships | 15,000.00 |
|  | * Latin American Scholarship <br> Program of American <br> Universities, Inc. <br> 25 Mt . Auburn Street <br> Cambridge, Massachusetts | International Office Continuation of regular support to provide scholarships for foreign students | 29,972.00 |
| 24 | Marathon Oil Company <br> L. C. Gibbons <br> Associate Research Director <br> Denver Research Center <br> Littleton, Colorado 80120 | College of Engineering Contribution to the Department of Petroleum Engineering for the Rock Mechanics Research Program | 15,000.00 |
| 25 | Merck Sharp \& Dohme <br> Research Laboratories <br> H. J. Robinson, Vice <br> President for Scientific <br> Affairs <br> Merck \& Co., Inc. <br> Rahway, New Jersey 07065 | U. T. Austin <br> Contribution to the Institute for Biomedical Research, to be used by Dr. Karl Folkers | 5,000.00 |
|  | * Mobil Research and Development Corporation <br> Nathan Stein <br> P. O. Box 900 <br> Dallas, Texas 75221 | College of Engineering Contribution to the Department of Petroleum Engineering for the Rock Mechanics Research Program | 15,000.00 |
|  | * Moody Foundation <br> Edward L. Protz <br> Grant Coordinator 704 Moody National Bank Building <br> Galveston, Texas 77550 | U.T.Austin <br> Final installment on $\$ 100,000$ grant to the Arts and Sciences Foundation | 7,100.00 |

DONOR

| 28 | C. B. Smith, Sr. |
| :--- | :--- |
| P.O. Drawer 579 |  |
|  | Austin, Texas 78767 |

29 C. B. Smith, Sr. P. O. Drawer 579 Austin, Texas 78767

30 Texas Interscholastic League Foundation R. J. Kidd, Secretary P. O. Box 8028 Austin, Texas 78712

PURPOSE AND CONDITIONS
U.T.Austin $\$ 12,000.00 * * E$

Gift to the Arts and Sciences Foundation of 400 shares of American First Corporation stock to assist with expenses of the Walter Prescott Webb Symposium
U. T. Austin

Additional gift to the Arts and Sciences Foundation of 400 shares of American First Corporation stock to assist with expenses of the Walter Prescott Webb Symposium
U. T. Austin

Contribution to provide scholarship funds for numerous designated students

The following nonmonetary gifts have also been received:

31 * George G. Arnakis
1010 West 22 nd Street
Austin, Texas 78705

32 Thomas M. Cranfill 1901 Cliff Street Austin, Texas 78705

33 Gulf Publishing Company Clayton A. Umbach, Jr. Director, Book Publishing P. O. Box 2608 Houston, Texas 77001

34 * Alfred A. Knopf
201 East 50 th Street New York, New York 10022

35 Col. Alexis B. McMullen 6103 Woodmont Road Alexandria, Virginia 22307

Humanities Research Center 1,250.00**
Gift of papers and other research materials relating to the history of Rumania
U.T.Austin 9,210.00**

Gift of 13 Latin American works of art to be added to previous gifts

College of Engineering
248.40**

Gift of selected books for the D. V. Carter Memorial Library

Humanities Research Center 1,325.00**
Gift of approximately 73 books from his personal library, to be added to the Alfred A. and Blanche W. Knopf Library

Humanities Research Center 600.00** Gift of booklets, photographic materials, and personal papers relating to aviation, for the History of Aviation Collection

DONOR PURPOSE AND CONDITIONS AMOUNT

| 36 | Mrs.J.R. Nicholas Ross Cobblestones Kilkhampton, Bude Cornwall, England | Humanities Research Center Gift of the Adelaide and J. R. Nicholas Ross books, papers, manuscripts, and photographs for the Ross and Phillpott Collections of the Library | \$5,000.00** |
| :---: | :---: | :---: | :---: |
|  | * John Symonds 66 Lyncroft Mansions London, England | Humanities Research Center Gift of a collection of papers, books, magazines, photographs, and manuscripts relating to Gerald Hamilton, for the Library | 2,500.00** |
| 38 | Wayland D. Towner 306 East San Antonio Street Fredericksburg, Texas 78624 | Humanities Research Center Gift of a stamp collection, "Many Mexicos," in four volumes, and three volumes of personal papers relating to the War Chest Fund in Texas during World War II | 2,300.00** |

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．

|  |  |  |
| :--- | :--- | :--- |
| Item，Department，Title，Name |  |  | | Period of |
| :---: |
| Appointment |$\quad$| Full－time Salary |
| :---: |
| Time |$\quad$| Nos． |
| :--- |

GENERAI ADMINISTRATION
AND STUDENT SERVICES

Office of the President

```
Appointment
    Assistant to the President
```



```
            (RBC# 1877)
Transfer of Funds
    2. Amount of Transfer - $18,000
            To: Office of the President - Administrative and Professional Salaries
            From: Unallocated Special Library
                    To fund the appointment of David Clay, Assistant to the President, and
                    an assistant.
                    (RBC非 1835)
```

University Personnel Office
Transfer of Funds
3. Amount of Transfer - \$1,440
To: University Personnel Office - Wages
From: Unallocated Classified Personnel
Funds were used for clerical assistants needed in conjunction with
insurance, Unemployment Compensation Insurance and other records
maintained in this office.
(RBC非1794)
Office of the Dean of Students
Salary Increase
Assistant Dean of Students
4. Margaret J. Barr

| To： | $9 / 1-2 / 29$ | 100 | 12 | 13,500 |
| :---: | :---: | :---: | :---: | :---: |
|  | $3 / 1-8 / 31$ | 100 | 12 | 14,000 |
| From： | $9 / 1-8 / 31$ | 100 | 12 | $\underline{13,500}$ |
| Rate Increase |  |  | 12 | $\underline{500}$ |
| （RBC非 1970 ） |  |  |  |  |

Interdepartmental Transfer
5. Amount of Transfer - $\$ 500$
To: Office of the Dean of Students - Maintenance and Operation
From: Office of the President - Development of Student Services
Funds were used to acquire additional materials for the Drug Abuse Library
in the Office of the Dean of Students.
(RBC非1878)

```
                                    Ful1-time Salary
Item, Department, Title, Name
\begin{tabular}{cclc} 
Period of & \(\%\) & No． & \\
Appointment & Time & Mos． & Rate \\
\hline
\end{tabular}
```


## GENERAL ADMINISTRATION

```
AND STUDENT SERVICES（Continued）
Counseling－Psychological
Services Center
Interdepartmental Transfer
6．Amount of Transfer－\(\$ 9,000\)
To：Counseling－Psychological Services Center－Wages
From：Office of the Dean of Students－Administrative and Professional Salaries
Funds available in the Dean＇s office due to an unfilled position were needed to provide additional summer staffing in the Center．
（RBC非1974）
```

Measurement and Evaluation Centex
Interdepartmental Transfer
7．Amount of Transfer－$\$ 230$
To：Measurement and Evaluation Center－Wages
From：Office of the Vice President for Student Affairs－Classified Salaries
To reimburse the Center＇s wages account for funds paid for keypunching in connection with a housing survey being conducted by the office of the Vice President for Student Affairs．
（RBC非1973）

## Student Financial Aids

Interdepartmental Transfer
8．Amount of Transfer－$\$ 2,106$
To：Student Financial Aids－Classified Salaries（ $\$ 1,008$ ）
－Wages（\＄1，098）
From：Vice President for Student Affairs－Classified Salaries

Salary funds available in the Vice President for Student Affairs＇Office were needed to establish a new $1 / 2 \mathrm{~T}$ ．clerical position and to provide for the reclassification of a member of classified staff in the Student Financial Aids＇Office．
（RBC非1972）

## International office

Transfer of Funds
9．Amount of Transfer－$\$ 3,808$

```
To: Intermational Office - Wages ($2,308)
                            - Maintenance and Operation ($1,500)
From: Unallocated Maintenance and Operation
```

To return to the International Office $85 \%$ of the tuition and fees paid in by 22 participants in the International Teacher Development Program held during the Fall Semester．A $15 \%$ overhead charge has been retained． These funds were deposited to General Budget Income but are needed now to defray expenses incurred for this program by the International Office． （RBC非1936）

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

## GENERAL INSTITUTTONAL EXPENSE

University News and Information Service
Transfer of Funds
10．Amount of Transfer－$\$ 180$
To：University News and Information Service－Classified Salaries
From：Unallocated Classified Salaries
Additional funds were needed for the salary of the replacement for an Informational Writer III． （RBC非1920）

## University Film Program

Transfer of Funds
11．Amount of Transfer－$\$ 200$
To：University Film Program－Maintenance and Operation
From：Unallocated Maintenance and Operation
To return to the University Film Program an amount equal to the receipts from a pay show which were deposited to General Budget Income，but are needed now to defray expenses incurred in the presentation of the show． （RBC非1796）

SCHOOL OF ARCHITECTURE

| Appointment |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Instructor |  |  |  |  |  |
| 12．Jon H．Thompson（Non－tenure） （RBC非1839） | 1／16－5／31 | 100 | 9 | \＄ | 9，000 |
| Change of Status and Salary Increase 13．Michael J．Jordan（Non－tenure） |  |  |  |  |  |
|  |  |  |  |  |  |
| To：Instructor | 1／16－5／31 | 100 | 9 |  | 9，000 |
| From：Assistant Instructor | 1／16－5／31 | 67 | 9 |  | 8，000 |
| Rate Increase |  |  | $\underline{9}$ |  | 1，000 |
| Source of Funds：Transfer from （RBC非1790，1795） | located Facu | Salar |  |  |  |
| Leave of Absence |  |  |  |  |  |
| Associate Professor |  |  |  |  |  |
| 14．Claudio Arenas（Tenure） | 9／1－5／31 | 100 | 9 |  | 13，000 |
| Tem of Leave <br> （RBC护1869） | 1／16－5／31 |  |  |  |  |



## COLLEGE OF HUMANITIES

Office of the Dean
Transfer of Funds
15．Amount of Transfer－\＄9，426
Transfexs were made from the Dean＇s Special Equipment and Teaching Equipment Account to the various departmental Special Equipment and Teaching Equipment Accounts as follows：

| （1） | Classics <br> （RBC呚 1802） | \＄ 746 | （6） | Philosophy <br> （RBC非1809） | \＄ 450 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| （2） | English <br> （RBC非1798） | 1，770 | （7） | Slavic Languages （RBC非 1824） | 600 |
| （3） | French and Ttalian （RBC护1927） | 640 | （8） | Spanish and Portuguese （RBC非 1808） | 380 |
| （4） | Germanic Languages （RBC決 1799） | 530 | （9） | Language Laboratories （RBC非1825） | 3，230 |
| （5） | Oriental and African Languages and Literatures <br> （RBC非1．810） | 1，080 |  |  |  |

## Classics

Resignation
Assistant Professor
16．Frederick M．Ah1（Non－tenure） $9 / 1-5 / 31 \quad$ LWOP $9 \quad$（\＄13，500）
Date of Resignation 8／31／71
（RBC非 1782）

Classics，Germanic Languages and
Oriental and African Languages
and Literatures
Interdepartmental Transfer
17．Amount of Transfer－$\$ 6,885$

```
To：Classics－Wages（ \(\$ 3,300\) ） Germanic Languages－Wages \((\$ 2,067)\) Oriental and African Languages and Literatures－Wages（\＄1，518）
From：English－Teaching Assistants
Reallocation of funds within this college to provide graders and clerical assistants，as needed． （RBC\＃1792）
```


## English

[^6]| Item，Department，Title，Name | Period of Appointment | $\begin{gathered} \% \\ \text { Time } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Ful1 } \\ & \text { No. } \\ & \text { Mos. } \end{aligned}$ | Salary <br> Rate |
| :---: | :---: | :---: | :---: | :---: |
| COLLEGE OE HUMANITIES |  |  |  |  |
| English（Continued） |  |  |  |  |
| Resignation <br> Assistant Professor <br> 19．John S．Lambert（Non－tenure） <br> Date of Resignation <br> （RBC壮1964） | $\begin{aligned} & 9 / 1-5 / 31 \\ & 5 / 31 / 72 \end{aligned}$ | LWOP | 9 | $(\$ 11,000)$ |
| Resignation <br> Assistant Professor <br> 20．Patricia J．Crunden（Non－tenure） <br> Date of Resignation <br> Dr．Crunden was on leave during the Fall Semester． <br> （RBC非 1906） | $\begin{aligned} & 1 / 16-5 / 31 \\ & 1 / 15 / 72 \end{aligned}$ | 100 | 9 | 10，000 |
| Resignation <br> Assistant Instructor <br> 21．Anne P．Freeman（Non－tenure） <br> Date of Resignation （RBC非1783） | $\begin{aligned} & 9 / 1-5 / 31 \\ & 1 / 15 / 72 \end{aligned}$ | 50 | 9 | 8，000 |
| ```Resignation Assistant Instructor 22. James F. Stewart (Non-tenure) Date of Resignation (RBC济 1833)``` | $\begin{aligned} & 9 / 1-11 / 13 \\ & 11 / 14-5 / 31 \\ & 1 / 15 / 72 \end{aligned}$ | $\begin{aligned} & 50 \\ & 50 \end{aligned}$ | $\begin{aligned} & 9 \\ & 9 \end{aligned}$ | $\begin{aligned} & 8,000 \\ & 8,400 \end{aligned}$ |
| French and Italian |  |  |  |  |
| Appointment <br> Instructor <br> 23．Monique M．B．Mindak（Non－tenure） <br> （RBC非1966） | 1／16－5／31 | 33 | 9 | 9，000 |
| Assistant Instructor <br> 24．Janine M．Torigian（Non－tenure） <br> （RBC非1855） | 1／16－5／31 | 33 | 9 | 8，000 |

## Philosophy

Interdepartmental Transfer
25．Amount of Transfer－\＄500
To：Philosophy－Teaching Assistants
From：English－Teaching Assistants
Reallocation of Teaching Assistants funds within the College of Humanities to provide support where needed． （RBC非1937）

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

COLIEGE OF SOCIAL AND
BEHAVIORAI SCTENCES

Office of the Dean

Transfer of Funds<br>26．Amount of Transfer－$\$ 692$

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

| （1） | Government <br> （RBC誛1950） | \＄292 |
| :---: | :---: | :---: |
| （2） | Sociology <br> （RBC钅1892） | 400 |

Anthropology
Transfer of Funds
27．Amount of Transfer－$\$ 2,892$
To：Anthropology－Wages
From：Unallocated Classified Salaries
Funds were used for student graders for large classes during the Spring Semester． （RBC非1876）

Geography

| Appointment |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Visiting Professor |  |  |  |  |
| 28．Metod Vojvode（Non－tenure） | 1／16－5／31 | 100 | 9 | \＄16，000 |
| Source of Funds： |  |  |  |  |
| Transfer from Unallocated |  |  |  |  |
| Faculty Salaries |  |  |  |  |
| （RBC排1776，1795） |  |  |  |  |
| Government |  |  |  |  |
| Reappointment |  |  |  |  |
| Assistant Instructor |  |  |  |  |
| 29．Walter L．Weisberg（Non－tenure） | 1／16－5／31 | 50 | 9 | 8，000 |
| Previous appointment was at the same rate． <br> （RBC非1901） |  |  |  |  |
| History |  |  |  |  |
| Change of Status and Salary Increase |  |  |  |  |
| To：Associate Professor | 9／1－2／15 | 100 | 9 | 14，000 |
| Associate Professor and Acting Chaixman | 2／16－5／31 | 100 | 9 | 15，500 |
| From：Associate Professor | 9／1－5／31 | 100 | 9 | 14，000 |
| Rate Increase |  |  | 9 | 1，500 |
| Source of Funds： <br> Transfer from the Dean＇s Re （RBC非1962，1928） |  |  |  |  |


|  | Period of <br> Item，Department，Title，Name | Full－time Salary | Fointment |
| :---: | :---: | :---: | :---: |

COLTEGE OF SOCIAL AND
BEHAVIORAL SCIENCES（Continued）

Psychology

| Appointment |  |  |
| :--- | :--- | :--- |
| Visiting Professor |  |  |
| $31 . ~ P h i l i p ~ G . ~ Z i m b a r d o ~(N o n-t e n u r e) ~$ | $2 / 1-2 / 15$ | 100 | | Academic |
| :---: |
| Rate |
| $\$ 21,000$ |$\frac{\text { Stipend }}{\$ 1,000}$

## COLLEGE OF NATURAL SCIENCES

Office of the Dean

## Transfer of Funds

32．Amount of Transfer－$\$ 20,000$
Transfers were made from the Dean＇s Special Equipment and Teaching Equipment account to the various departmental Special Equipment and Teaching Equipment accounts as follows：

| （1） | Astronomy （RBC非1868） | \＄1，500 | （6） | Geological Sciences <br> （RBC非1816） | \＄3，500 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| （2） | Biological Sciences <br> （RBC非 1819） | 1，000 | （7） | Home Economics （RBC非1804） | 1，000 |
| （3） | Botany <br> （RBC非1807） | 2，000 | （8） | Mathematics <br> （RBC非1805） | 2，000 |
| （4） | Chemistry <br> （RBC非1818） | 3，000 | （9） | Microbiology <br> （RBC非 1887） | 1，000 |
| （5） | Computer Sciences <br> （RBC媻 1817） | 1，000 | （10） | Physics <br> （RBC非 1866） | 4，000 |

## Astronomy

Transfer of Funds
33．Amount of Transfer－\＄1，425
To：Astronomy－Teaching Assistants
From：Dean＇s Reserve for Faculty Salaries
Funds were needed for additional Teaching Assistants to staff
Spring course offerings． （RBC非 1797）

## Botany

```
Transfer of Funds
    34. Amount of Transfer - $200
```

            To: Botany - Visiting Lecturers and Consultants
            From: Office of the Dean - Visiting Lecturers and Consultants
                    To provide the stipend for a visiting lecturer.
                    (RBC非1955)
    
## Chemistry

Transfer between Dissimilar Appropriations
35．Amount of Transfer－$\$ 1,200$
To：Wages
From：Maintenance and Operation
To transfer to an appropriate account funds budgeted in the Maintenance and Operation account for Work－Study personnel．
（RBC非 1933）

| Item，Department，Title，Name | Period of Appointment | \％ <br> Time | $\begin{aligned} & \frac{\text { Full-t. }}{\text { No. }} \\ & \text { Mos. } \end{aligned}$ | Salary <br> Rate |
| :---: | :---: | :---: | :---: | :---: |
| COLLEGE OT NATURAL SCIENCES（Continued） |  |  |  |  |
| Chemistry and Clayton Foundation |  |  |  |  |
| Appointment，Change of Status， and Salary Increase <br> 36．Joanne M．Ravel（Tenure） |  |  |  |  |
| Appointment： Ghemistry Associate Professor | 1／16－5／31 | 50 | 9 | \＄14，000 |
| Change of Status： Clayton Foundation Biochemical Institute Assistant Director |  |  |  |  |
| To： | $\begin{aligned} & 9 / 1-1 / 15 \\ & 1 / 16-5 / 31 \end{aligned}$ | $\begin{array}{r} 100 \\ 50 \end{array}$ | $\begin{array}{r} 12 \\ 9 \end{array}$ | $\begin{aligned} & 17,000 \\ & 14,000 \end{aligned}$ |
| From： | 9／1－8／31 | 100 | 12 | 17，000 |
|  |  |  | $\begin{gathered} 9 \\ \text { (equiv) } \end{gathered}$ | 12，750 |
| Rate Increase <br> （RBC非 1679，1635） |  |  | $\underline{9}$ | $\underline{1,250}$ |

## Home Economics

Transfer between Dissimilar
Appropriations
37．Anount of Transfer－$\$ 2,700$
To：Wages
From：Faculty Salaries（ $\$ 1,140$ ）
Teaching Assistants $(\$ 1,560)$
Reallocation of departmental funds to provide for two academic assistants needed due to reassignment of duties of members of the Home Economics faculcy．
（RBC\＃1924）

Mathematics

| Appointment |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Instructor（Spring Semester，Only） |  |  |  |  |
| 38．David Kincaid（Non－tenure） | 1／16－5／31 | 25 | 9 | 9，000 |
| ```Concurrent Employment: Center for Numerical Analysis Research Scientist Associate IV (RBC##1943)``` | 1／16－5／31 | 75 | 12 | 12，000 |
| Change of Status |  |  |  |  |
| Assistant Instructor |  |  |  |  |
| 39．Giles E．Bradford，III（Non－tenure） |  |  |  |  |
| To： | 1／16－5／31 | 75 | 9 | 8，000 |
| From： <br> （RBC非 1873） | 1／16－5／31 | 50 | 9 | 8，000 |
| Assistant Instructor |  |  |  |  |
| 40．John M．Camden（Non－tenure） | $\therefore$ |  |  |  |
| To： | 1／16－5／31 | 75 | 9 | 8，000 |
| From： <br> （RBC非 1858） | 1／16－5／31 | 50 | 9 | 8，000 |



Transfer of Funds
48．Amount of Transfer－$\$ 2,099$

To：Microbiology－Wages
From：Unallocated Classified Salaries
Funds were needed for graders and a storeroom assistant for the Spring Semester． （RBC拃1935）

Physics
Reappointment
Instructor（1971－72 Only）
49．Narayanan S．Menon（Non－tenure）
Previous appointment was at
the same rate．
（RBC誛 1941）

Zoology
Appointment
Assistant Professor（Spring Semester， Only）

50．Gervasia M．Schreckenberg（Non－tenure） $1 / 16-5 / 31 \quad 100 \quad 9 . \quad \$ 12,000$ （RBC非1861）

Appointment and Salary Increase
Instructor（Spring Semester，Only）
51．Margaret $W$ ．Shen（Non－tenure） $1 / 16-5 / 31 \quad 100 \quad 9,000$

Previous appointment：

## Zoology

| Research Scientist Associate II | 12 | 10,020 |
| :--- | :---: | ---: |
|  | 9 | 7,515 |
| Rate Increase | （equiv） |  |
|  | $\underline{9}$ | $\underline{1,485}$ |


| Item，Department，Title，Name | Period of Appointment | $\begin{gathered} \% \\ \text { Time } \\ \hline \end{gathered}$ | $\frac{\text { Fuli-time Salary }}{\text { No. }}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DIVISION OF GENERAL <br> AND COMPARATIVE STUDIES |  |  |  |  |  |
| Comparative Studies |  |  |  |  |  |
| Resignation |  |  |  |  |  |
| Visiting Professor <br> 52．Tosco R．Fyvel（Non－tenure） | 1／16－5／31 | 100 | 9 | \＄ | 24，000 |
| Date of Resignation （ RBC 非 1851） | 1／31／72 |  |  |  |  |

## Ethnic Studies

```
Interdepartmental Transfer
    53. Amount of Transfer - $238
```

To: Ethnic Studies - Classified Salaries
From: Office of the Provost - Classified Salaries
To provide funds for a salary increase for a member of Ethnic Studies
classified stafy.
(RBC非1929)

## COLLEGE OF BUSINESS ADMINLSTRATION

Office of the Dean
Transfer between Dissimilar
Appropriations
54．Amount of Transfer－\＄5，000
To：Classified Salaries
From：Administrative and Professional Salaries

The needs of the Dean＇s office require the employment of additional classified personnel． （RBC非 1982）

Interdepartmental Transfer
55．Amount of Transfer－$\$ 15,600$
To：Office of the Dean－Computer Rental and Purchased Services
From：Management－Computer Rental and Purchased Services（ $\$ 4,000$ ） Marketing Administration－Computer Rental and Purchased Services（ $\$ 11,600$ ）

The Dean＇s office is responsible for all computer funds allocated to the College of Business Administration．This transfer is to facilitate control of these funds．
（RBC非1954，1953）

## General Business

[^7]|  |  |  | Full－time Salary |
| :--- | :--- | :--- | :--- |
| Item，Department，Title，Name | Period of <br> Appointment | Time | Mos． |

## COLLEGE OF EDUCATION

Curriculum and Instruction

| Appointment |  |  | Academic |  |
| :---: | :---: | :---: | :---: | :---: |
| Instructor |  |  | Rate | Stipend |
| 57．Sheila R．B．Carson（Non－tenure） （RBC非1899） | 1／16－5／31 | 50 | \＄9，000 | \＄1，200 |
|  |  |  | Academic |  |
| Instructor |  |  | Rate | Stipend |
| 58．Shirley E．M．Hord（Non－tenure） | 1／16－5／31 | 50 | \＄9，000 | \＄2，000 |
| Concurrent Employment： |  |  |  |  |
| Research and Development Center |  |  |  |  |
| Training Specialist II $9 / 1-8 / 31$ <br> （RBC非 1996） |  | 50 | 12 | \＄11，400 |
|  |  |  | Academic |  |
| Instructor |  |  | Rate | Stipend |
| 59．Susan W．Weaver（Non－tenure） <br> （RBC新1888） | 1／16－5／31 | 100 | \＄9，000 | \＄3，000 |
| Appointment and Salary Increase |  |  | Academic |  |
| Instructor |  |  | Rate Stipend |  |
| 60．Cecil N．Marshall（Non－tenure） | 1／16－5／31 | 50 | \＄9，000 | \＄1，800 |
| Previous appointment： |  |  |  |  |
| Curriculum and Instruction |  |  |  |  |
| Teaching Assistant |  |  | 7，200 |  |
| Rate Increase－ 9 mos． <br> （RBC非1903） |  |  | $\underline{1,800}$ |  |
| Change of Status |  |  |  |  |
| Professor（M．S．） |  |  |  |  |
| 61．James G．Umstattd |  |  |  |  |
| To： | 9／1－1／15 | 50 | 9 | \＄13，100 |
|  | 1／16－5／31 | 33 |  |  |
| From： | 9／1－5／31 | 50 | 9 | 13，100 |
| Professor Umstattd retired |  |  |  |  |
| 1／15／72 but will teach 1／3 T． |  |  |  |  |
| permitted by Regents Rules and |  |  |  |  |
| Regulations regarding employment |  |  |  |  |
| ```of retired faculty.``` (RBC非1898) |  |  |  |  |

Transfer between Dissimilar
Appropriations
62．Amount of Transfer－\＄21
To：Classified Salaries
From：Maintenance and Operation
To provide the additional funds needed for a merit increase for a member of the department＇s classified staff．
（RBC作1914）


## COLLEGE OF EDUCATTON

```
Curriculum and Instruction (Continued)
Transfer between Dissimilar
Appropriations
    63. Amount of Transfer - $100
            To: Computer Rental and Purchased Services
            From: Maintenance and Operation
            Reallocation of departmental funds to provide for computer services.
                    (RBC##1983)
```

Curciculum and Instruction and Office of the Dean
Interdepartmental Transfer
64. Amount of Transfer - $\$ 4,207$
To: Curriculum and Instruction - Wages ( $\$ 2,418$ )
From: Office of the Dean - Visiting Lecturers ( $\$ 2,418$ )
To: Office of the Dean - Reserve for Faculty Salaries ( $\$ 1,789$ )
From: Curriculum and Instruction - Teaching Assistants (\$1,789)
Reallocation of funds within the College of Education to permit the
employment of Training Specialists needed to assistinstructors of
large classes in elementary education methods courses.
(RBC非1815, 1842)

## Educational Psychology

Change of Status

```
    Assistant Instructor
        65. Joe B. Hansen (Non-tenure)
```

| To： | $9 / 1-5 / 31$ | 33 | 9 | $\$ 9,000$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| From： | $9 / 1-1 / 15$ | 33 | 9 | 9,000 |

Interdepartmental Transfer
66. Amount of Transfer - \$160
To: Educational Psychology - Wages
From: Office of the Dean - Wages
Funds were used for payment of part-time personnel involved in the
preparation and presentation of technical reports for classrom use by
the Department of Educational Psychology.
(RBC非1915)

## COLLEGE OF ENGINEERING

Aerospace Engineering and Engineering
Mechanics－Engineering Mechanics Division
Transfer of Funds
67．Amount of Transfer－$\$ 573$

[^8]\begin{tabular}{|c|c|c|c|c|}
\hline Item，Department，Title，Name \& Period of Appointment \& \[
\begin{gathered}
\% \\
\text { Time } \\
\hline
\end{gathered}
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\& \text { Mos. }
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\hline \multicolumn{5}{|l|}{COLLEGE OF ENGINEERING（Continued）} \\
\hline \multicolumn{5}{|l|}{Aerospace Engineexing and Engineering Mechanics} \\
\hline \begin{tabular}{l}
Interdepartmental Transfer \\
68．Amount of Transfer－\(\$ 1,450\) \\
To：Aerospace Engineering \\
From：Dean＇s Reserve for Teac \\
Funds were needed to su who has changed from 2／3 （RBC非1644）
\end{tabular} \& gineering Me Salaries the salary to F．T．teac \& rofes duri \& \begin{tabular}{l}
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\hline \multicolumn{5}{|l|}{Civil Engineering} \\
\hline \begin{tabular}{l}
Interdepartmental Transfer \\
69．Amount of Transfer－\(\$ 600\) \\
To：Civil Engineering－Wag \\
From：Civil Engineering－Archich \\
To provide student grad （RBC非 1801）
\end{tabular} \& tural Engine needed by the \& \begin{tabular}{l}
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\hline \begin{tabular}{l}
Interdepartmental Transfer \\
70．Amount of Transfer－\(\$ 1,750\) \\
To：Civil Engineering－Tea \\
From：Civil Engineering－Met \\
Civil Engineering－Archico \\
Teaching Assistants（\＄ \\
Reallocation of Teachin needed． \\
（RBC非1884，1994）
\end{tabular} \& \begin{tabular}{l}
Assistants \\
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\end{tabular} \& where \\
\hline \multicolumn{5}{|l|}{Civil Engineering and Center} \\
\hline \begin{tabular}{l}
Reappointment \\
71．Mohammad R．S．Abdelraouf（Non－ \\
Civil Engineering \\
Instructor \\
Center for Highway Research－ \\
Government Contract－Payroll \\
Clearing Account Funds \\
Research Engineer（Faculty） \\
Previous appointments were at the same rate． \\
（RBC非1777，1774）
\end{tabular} \& \[
\begin{aligned}
\& \text { e) } \\
\& 1 / 16-5 / 31 \\
\& 1 / 1-5 / 31
\end{aligned}
\] \& 50

33 \& 9
9 \& \＄ 10,000 <br>
\hline
\end{tabular}

## Electrical Engineering

Transfer between Dissimilar
Appropriations
72．Amount of Transfer－$\$ 1,100$
To：Wages
From：Maintenance and Operation
Reallocation of departmental funds to provide for student graders needed for the Spring Semester．
（RBC非 1814）

Mos．Rate

COLLEGE OF ENGINEERING（Continued）

Mechanical Engineering
Reappointment
Assistant Instructor
73．Carl F。Boehm，Jr．（Non－tenure） $1 / 16-5 / 31$
Previous appointment was at
the same rate．
（RBC非 1785 ）

Salary Increase
Instructor
74．Eldon $\overline{3}$ ．Reynolds（Non－tenure）

| To： | $9 / 1-1 / 15$ | 75 | 9 | 9,000 |
| :--- | :---: | :---: | :---: | ---: |
|  | $1 / 16-5 / 31$ | 62.5 | 9 | 10,800 |
| From： | $9 / 1-5 / 31$ | 75 | 9 | $\underline{9,000}$ |
| Race Increase <br> （RBC非 1771） |  |  | $\underline{9}$ | $\underline{1,800}$ |

Change of Status
Instructor
75．Kenneth M．Ragsde11（Non－tenure）

| To： | $9 / 1-1 / 15$ | 75 | 9 | 9,000 |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 16-5 / 31$ | 87.5 |  |  |  |
| From： |  |  |  |  |
| （RBC 非 1770） | $9 / 1-5 / 31$ | 75 | 9 | 9,000 |

COLEEGE OF FINE ARTS

Art
Appointment
Instructor
76．Audrey A．McClinchie（Non－tenure） $1 / 16-5 / 31 \quad 33 \quad 9,000$
（RBC誛1995）

Change of Status
77．Hunter Ingalls（Non－tenure） $9 / 1-5 / 31 \quad 100 \quad 9 \quad 13,750$ Change Ticle，Only：

To：Visiting Associate Professor
From：Assistant Professor （RBC莯1965）

Transfer of Funds
78．Amount of Transfer－\＄1，000
To：Art－Wages
From：Dean＇s Reserve for Faculty Salaries
To provide part－time non－teaching personnel needed by this department for the Spring Semester．
（RBC非1925）

|  |  |  |
| :---: | :---: | :---: |
| Item，Department，Tirle，Name | Full－time Salary <br> No． | Appointment |

SCHOOL OT LAN

## Appointment

Lecturer
79．Duncan E．Osborne（Non－tenure）
$2 / 18-5 / 31$
50
9
$\$ 16,000$


Reappointment
Lecturer

Previous appointment was at the same rate．
（RBCF1907）

Remove from Budget
Professor

81．William F。Fritz（Tenure）
Deceased
（RBC非1872，1871）
$9 / 1-5 / 31$
100
2／9／72

Full－time Salary

Rate

|  | Period of | $\%$ | Fuli－time Salary <br> No． |
| :---: | :---: | :---: | :---: |

## LBJ SCROOL OF PUBLIC AFFAIRS

Appointment
Visiting Professor
85．Harvey C．Mansfield（Non－tenure）
$\quad($ RBC\＃ 1768,1850$)$

## UNALLOCATED FACUETY SALARIES

Transfer of Funds
86．Amount of Transfer－$\$ 17,636$
Transfers were made from the Unallocated Faculty Salaries account to the following departments to support Spring Semester appointments：

| （1）Government－Faculty Salaries | $\$ 2,000$ |  |
| :---: | ---: | ---: |
| （2）Psychology－Faculty Salaries | 1,000 |  |
| （3）Microbiology－Faculty Salaries | 556 |  |
| －Teaching Assistants | 1,250 |  |
| （4）Physics－Faculty Salaries | 2,000 |  |
| （5）Zoology－Faculty Salaries | 8,500 |  |
| （6）Speech－Faculty Salaries | 1,630 |  |
| （7）Special Education－Teaching |  |  |
|  | Assistants |  |
|  | （RBC舛 $1863,1926,1993)$ | 700 |

## LIBRARY

```
Transfer of Funds
    87. Amount of Transfer - $15,062
            To: Administrative and Professional Salaries ($4,080)
            Classified Personnel ($10,982)
            From: Unallocated Special Library
            To establish the position of Reference Librarian for the Business
            Adminiscration and Economics Library and four classified positions
            in the Main Library.
                (RBC揘 1977, 1976)
```


## ORGANLZED RESEARCH

## Bureau of Business Research

Transfer between Dissimilar
Appropriations
88．Amount of Transfer－$\$ 1,000$
To：Maintenance and Operation
From：Computer Rental and Purchased Services
To reimburse the Bureau＇s Maintenance and Operation account for payments made for Taurus line time at the University Computation Center．Funds were budgeted for the service in the Bureau＇s Computer Rental and Purchased Services account．
（RBC非1864）


## ORGANIZED RESEARCH

Bureau of Business Research（Continued）
Transfer between Dissimilar
Appropriations
89．Amount of Transfer－\＄140
To：Special Equipment
From：Maintenance and Operation
To transfer to the appropriate account the additional funds needed for this fiscal year for the rental of MT／MS composing system． （RBC排1803）

```
Bureau of Engineering Research
Transfer between Dissimilar
Appropriations
    90. Amount of Transfer - $13,025
To: Administrative and Professional Salaries
        From: Maintenance and Operation
                            Reallocation of the Bureau's funds for better utilization.
                            (RBC# 1951)
```

Center for Nucleax Studies
Transfer between Dissimilar
Appropriations
91. Amount of Transfer - $\$ 3,000$
To: Maintenance and Operation
From: Administrative and Professional Salaries
Funds available due to personnel changes in the Center's staff are
needed for current operating expenses.
(RBC非1890)
Center for Relativity Theory
Appointment
Research Scientist (Faculty)
92. Bryce S. Dewitt (Tenure) $1 / 1-1 / 15 \quad 100 \quad 9 \quad \$ 25,000$
Academic Status:
Professor (Physics)
Source of Funds:
Transfer from the Center's
Classified Salaries account.
(RBC非1909, 1952)
Center for Statistical Mechanics
and Thermodynamics
Transfer between Dissimilar Appropriations
93. Amount of Transfer - $\$ 4,000$
To: Administrative and Professional Salaries
From: Classified Salaries
Reallocation of the Center's salary funds.
(RBC非1984)
Item, Department, Title, Name

## Learning Disabilities Center

Interdepartmental Transfer
97. Amount of Transfer - $\$ 87$
To: Learning Disabilities Center - Maintenance and Operation
From: Reading-Study Center (Revolving Funds)
Transfer funds to permit the Learning Disabilities Center to meet current operating expenses.
(RBC非1956)

## EXTENSION TEACHING AND

FIELD SERVICE BUREAU

```
Transfer between Dissimflar Appropriations
    98. Amount of Transfer - $22,750
            To: Maintenance and Operation
            From: Administrative and Professional Salaries
                    Reallocation of funds to provide for actual and anticipated expenses
                    for the remainder of the fiscal year.
                    (RBC非 1911)
```

|  |  |  | Period of |
| :---: | :---: | :---: | :---: | | Full－time Salary |
| :---: |
| Item， |$\quad$| Department，Title，Name |
| :---: |

PHYSICAL PLANT

Buildings and Grounds
Interdepartmental Transfer
99．Amount of Transfer－\＄105
To：Fire Prevention－Classified Personnel
From：Office of the Superintendent－Classified Personnel

Transfer classified salaries funds within the budget of the Department of Buildings and Grounds to provide a merit increase to a staff member． （RBC非1845）

## Balcones Research Center

```
Interdepartmental Transfer
    100. Amount of Transfer - $521
```

                    To: Administration - Salaries
    From: General Services - Salaries

Reallocation of salary funds within this area to provide merit increases for two members of the classified staff． （RBC非 1820）

## SPONSORED PROJECTS

## Botany

Appointment
Director（Faculty）
101．Tom J．Mabry（Tenure）
$\begin{array}{llll}6 / 1-8 / 31 & 100 & 9 & \$ 7,500\end{array}$
Sources of Funds： USPHS Contract 6／1－7／31
NSF Grant $\quad 8 / 1-8 / 31$
Academic Status： Professor（Botany） （RBC非 1862，1860）

20010gy

| Appointment |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Director（Faculty） |  |  |  |  |
| 102．E．L．Powers（Tenure） | $6 / 1-8 / 31$ | 100 | 9 | 26，500 |
| Source of Funds： |  |  |  |  |
| Academic Status： <br> Professor（Zoology） <br> （RBC非1612） |  |  |  |  |
| Project Direcior（Faculty） |  |  |  |  |
| 103．Crodowaldo Pavan（Tenure） | $2 / 28-3 / 11$ | 100 | 9 | 30，500 |
| Source of Funds： |  |  |  |  |
| USPHS Contract |  |  |  |  |
| Academic Status： Professor（Zoology）－On （RBC非 1968） | ring Semest |  |  |  |



| Item，Deparcment，Title，Name | Period of Appointment | $\begin{gathered} \% \\ \text { Time } \\ \hline \end{gathered}$ | Ful． No． Mos． |  | Salary Rate |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SPONSORED PROJECTS |  |  |  |  |  |
| Laboratory for Computer－Assisted |  |  |  |  |  |
| Reappointment Assistant Director 108．M．Rex Arnett | 2／16－5／31 | 100 | 12 | \＄ | 18，600 |
| Source of Funds： <br> MITRE Contract <br> Previous appointment was at the same rate． （ RBC 非 1879） |  |  |  |  |  |
| Research Scientist（Faculty） |  |  |  |  |  |
| Source of Funds： <br> MITRE Contract <br> Previous appointment was at the same rate． <br> （RBC非1880） |  |  |  |  |  |
| Research Scientist（Faculty） |  |  |  |  |  |
| Source of Funds： <br> MiTRE Contract |  |  |  |  |  |
| Previous appointment was at the same rate． |  |  |  |  |  |
| ```Concurrent Employment: Educational Psychology Associate Professor (RBC柱 1904)``` | 9／1－5／31 | 50 | 9 |  | 15，000 |
| Research Scientist（Faculty） |  |  |  |  |  |
| Source of Funds： <br> NSF Grant |  |  |  |  |  |
| Previous appointments were at the same rate． |  |  |  |  |  |
| Concurrent Employment： <br> Rducational Psychology <br> Assistant Professor <br> （RBC非1940） | 9／1－5／31 | 50 | 9 |  | 13，500 |
| Extension Teaching and Field |  |  |  |  |  |
| Service Bureau |  |  |  |  |  |
| Resignation ${ }^{\text {Assistant }}$ Director |  |  |  | Resignation |  |
| 112．J．Peter Williams，Jr． Date of Resignation （RBC非1946） | $\begin{aligned} & 9 / 1-6 / 30 \\ & 1 / 31 / 72 \end{aligned}$ | 100 | 12 |  | 15，500 |


| Item，De | parcment，Titele，Name | Period of Appointment | $\begin{gathered} \% \\ \text { Time } \\ \hline \end{gathered}$ | $\begin{aligned} & \frac{\text { Full-time }}{\text { No. }} \\ & \text { Mos. } \end{aligned}$ | $\begin{aligned} & \text { Rate Salar } \\ & \text { Rate } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| REVOLVING FUNDS |  |  |  |  |  |
| Bureau－Office of the Dean |  |  |  |  |  |
| ```Reappointment Director of Management Development Programs``` |  |  |  |  |  |
| Source of Funds： <br> Management Development Programs Revolving Fund |  |  |  |  |  |
| ACADEMIC DEVELOPMENT TUAD |  |  |  |  |  |
| Academic Development Fund |  |  |  |  |  |
| Transfer of Funds <br> 114．Amount of Transfer $-\$ 9,000$ |  |  |  |  |  |
| Transfers were made from the Academic Development Fund Allotment Account as collows： |  |  |  |  |  |
| （1） | Microbiology－Depart （RBC算1．793） | Program Devel |  | $\$$ | \＄5，000 |
| （2） | College of Eine Arts （RBCH 1992） | gewwide Devel | nt Fu |  | 1，500 |
| $(3)$ | Office of the Dean of Development Fund （RBC\＃1885） | te School－A |  |  | 2，500 |
| Office of the Provost for |  |  |  |  |  |
| Transfer of Funds <br> 115．Amount of Transfer－$\$ 5,250$ |  |  |  |  |  |
| Transfers were made from the Provost＇s Academic Development Fund to the various College and Department Academic Development Funds as follows： |  |  |  |  |  |
| （1） | College of Tumanities （RBCH 1821） | $00$ <br> （4） Ce | $\begin{aligned} & \text { for } \\ & 1932 \end{aligned}$ | an Studies 957) | $\text { s } \$ 1,7$ |
|  | English <br> （RBCH 1823） | （5） Ra | $\begin{aligned} & \text { Telev } \\ & 1931) \end{aligned}$ | $\mathrm{on} / \mathrm{Film}$ |  |
| (3) | Microbiology <br> （RBC非1812） |  |  |  |  |
| College of Humanities－Office |  |  |  |  |  |
| Transfer of Funds <br> 116．Amount of Transfer－$\$ 1,500$ |  |  |  |  |  |
| Tran <br> （1） | fers were made from $t$ <br> Gemanic Languages－ <br> （RBCF 1806） | ＇s Academic D ental Develop | opment Prog | and as fol \＄ | $\begin{aligned} & \text { 1lows: } \\ & \$ 500 \end{aligned}$ |
| （2） | Office of the Dean of Development Fund （ RBC 部 1958） | ce School－A |  |  | 1，000 |

Item, Department, Title, Name
ACADEMIC DEVELOPMENT FUND

## CURRENT RESTRICTED MUND

Engineering Foundation
Transfer between Dissimilat
Appropriations
119. Amount of Transfex -- \$22,000

To: Industrial Associates ( $\$ 10,000$ )
Maintenance and Operation ( $\$ 8,000$ )
Official Entertainment ( $\$ 4,000$ )
From: Faculty Awards ( $\$ 14,000$ )
Salaxies (\$8,000)
Reallocation of the Foundation ${ }^{\text { }}$ s funds to provide for current and anticipated needs.
(RBC翟1991, 1990, 1988)

Fine Arts Foundation -
Office of the Dean
Interdepartmental Transfer
120. Amount of Transfer - $\$ 1,000$

To: Opera Theatre Fund - Various Donors
From: Drama Laboratory Theatre - Revolving Fund
To transfer to an appropriate account Opera's share of Drama Season Ticket sales.
(RBC筷1886)

```
                                    Full-time Salary
Item, Department, Title, Name
Period of
%
No.
Appointment Time
Mos. Rate
CURRENT RESTRICTED EUNDS (Continued)
Fine Arts Foundation - Music
Transfer between Dissimilar
Appropriations
    121. Amount of Transfer - $300
To: Official Entertainment
From: Camps and Contests
Reallocation of the Foundation's funds to provide for expenses of
entertaining guest professors, artists and prospective faculty
members visiting the U. T. Austin campus.
(RBC产 1800)
```


## AUXILIARY ENTERPRISES

| Intercollegiate Athletics |  |
| :--- | :--- |
| Appointment |  |
| Assistant Football Goach |  |
| I22．Alvin L．Matthews |  |

Sources of Funds：
Intercollegiate Achletics
Salaries and Transfer from
Intercollegiate Athletics－
Allocation for Budget
Adjustments
（RBC非1910，1916）

Transfer of Funds
123．Amount of Transfer－－\＄5，200
To：Operating Expenses
From：Allocation for Budget Adjustments
To provide for anemployment compensation charges for departmental employees．
（RBC非1894）

Transfer between Dissimilar
Appropriations
124．Amount of Transfer－$\$ 45,000$

```
To: Dining Service - Salaxies
From: Dining Service - Wages ($25,000)
                            - Other Expenses ($20,000)
```

                    Operational changes effected since the original Dining Service Budget
                    was written have eliminated the need for Wages and Other Expenses
                    accounts and increased the amount needed for salaries.
                    (RBC腹1987)
    | Item，Department，Title，Name | Period of Appointment | $\begin{gathered} \% \\ \text { Time } \\ \hline \end{gathered}$ | Full－time Salary |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CURRENT RESTRICTED FUNDS（Continued） |  |  |  |  |  |
| Special Concessions |  |  |  |  |  |
| Transfer of Funds <br> 125．Amount of Transfer－$\$ 3,081$ |  |  |  |  |  |
| Transfers were made from Special as follows： | Concessions |  |  |  |  |
| （1）University Chess Team （RBC非1923） | \＄1，250 |  |  |  |  |
| （2）Campus to Counselor （RBC非 1922） | 1，831 |  |  |  |  |
| Student Health Center |  |  |  |  |  |
| Resignation |  |  |  |  |  |
| Physician，Specialist，Psychiatry |  |  |  |  |  |
| Date of Resignation （RBC非1971） | $1 / 31 / 72$ |  |  |  |  |

1971－72 BUDGET
SALARY RATE INCREASES OF $\$ 2,000$ OR MORE INVOLVING APPOINTMENTS TO A DIFFERENT POSITION AND NEW AND DIFFERENT DUTIES

Source of Funds：Departmental Salaries unless otherwise specified．

| Item No． | Explanation | Present Status | Proposed Status | Effective Dates |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Helen－Jo J．Hewitt Linguistics Research Center | Humanities Research Associate II（1／2 T） | Humanities Research Associate IV（F．T．） |  |
|  | Salary Rate | \＄7，440 | \＄9，600 | 1／16－5／31 |
|  | Source of Funds： <br> Government Contract <br> Payroll Clearing <br> Account <br> （RBC非 1830） |  |  |  |
| 2. | Lea Ann Huie Applied Research Laboratories | Research Scientist Assistant I | Research Scientist Associate I |  |
|  | Salary Rate | \＄ 6,168 | \＄9，600 | 1／1／72 |
|  | Source of Funds： <br> Government Contract <br> Payroll Clearing <br> Account <br> （ RBC 非1828） |  |  |  |
|  | Syed I．Husain（Non－ten Civil Engineering |  | Instructor（1／4 T） |  |
|  | Academic Rate |  | \＄9，000 | 1／16／72 |
|  | Center for Highway Research | Research Engineer <br> Associate I（F．T．） | Research Engineer <br> Associate I（3／4 T） |  |
|  | ```Salary Rate - }12\mathrm{ mos. - }9\mathrm{ mos. (RBC非 1979)``` | $\begin{array}{r} \$ 9,240 \\ \text { equiv. } 6,930 \end{array}$ | $\begin{array}{r} \$ 9,240 \\ 6,930 \end{array}$ |  |
| 4. | William D．Inman Computation Center | Computer Programmer Assistant | Computer Programmer I |  |
|  | Salary Rate | \＄6，168 | \＄9，600 | 3／1／72 |
|  | Source of Funds： <br> Computation Center <br> Revolving Fund <br> （RBC非 1961） |  |  |  |


| $\begin{aligned} & \text { Item } \\ & \text { No. } \end{aligned}$ | Explanation | Present Status | Proposed Status | Effective $\qquad$ Dates |
| :---: | :---: | :---: | :---: | :---: |
|  | Margaret H．Knox Electrical Engineering | Computer Programmer Assistant |  |  |
|  | Dean of Engineering Salary Rate | $\$ 6,168$ | Computer Programmer I $\$ 9,600$ | 1／1－5／31 |
|  | Source of Funds： <br> Academic Development <br> Program Funds <br> （RBC非1905） |  |  |  |
| $6$ | ```Grace S. Lo (Non-cenure) Home Economics``` | $\begin{aligned} & \text { Teaching Assistant } \\ & (1 / 2 \mathrm{~T}) \end{aligned}$ | Instructor（1／2 T） |  |
|  | Academic Rate （RBC非1827） | \＄6，000 | \＄9，000 | 1／16／72 |
|  | Russell J．Miget Marine Science Institute at Port Aransas | Research Scientist Associate IV | Research Scientist Associate V |  |
|  | Salary Rate | \＄12，000 | \＄14，400 | 3／1／72 |
|  | Source of Funds： <br> Environmental <br> Protection Agency Grant <br> （RBC钅1870） |  |  |  |
| $8$ | Percy A．Morehouse Extension Teaching and Field Service Bureau | Training Specialist II | Assistant Director |  |
|  | Salary Rate | \＄11，400 | \＄14，000 | $2 / 1-6 / 30$ |
|  | Source of Funds： <br> Office of Education <br> Contract <br> （RBC非1882） |  |  |  |
| 9. | ```Narasri Padunchewit (Non- General Business``` | ```-tenure) Teaching Assistant (1/2 T)``` | Assistant Instructor $(1 / 2 \mathrm{~T})$ |  |
|  | Academic Rate （RBC非1840） | \＄5，500 | \＄8，000 | 1／16／72 |
| 10. | David M．Phillips Computation Center | Computer Programmer Assistant | Computer Programmer I |  |
|  | Salary Rate | \＄6，168 | \＄9，600 | 3／1／72 |
|  | Source of Funds： <br> Computation Center <br> Revolving Fund <br> （RBC非1960） |  |  |  |


| Item No． | Explanation | Present Status | Proposed Status | Effective Dates |
| :---: | :---: | :---: | :---: | :---: |
| 11. | Jack L．Reynolds LBJ School of Public Affairs | Special Assistant for Operations | Principal Research Associate |  |
|  | Salary Rate <br> Source of Funds： <br> Ford Foundation Grant for LBJ School of Public Affairs （RBC非 1908） | $\$ 13,200$ | \＄18，000 | 2／15／72 |
| 12. | ```Karen S. Ryker (Non-te Drama``` | ```ure) Teaching Assistant (1/2 T)``` | Instructor（3／4 T） |  |
|  | Academic Rate <br> （RBC非1918） | \＄5，000 | \＄9，000 | 1／16／72 |
| 13. | James G．Sherrill <br> Research and Development Center for Teacher Education | Technical Staff Assistant II | Computer Programmer I |  |
|  | Salary Rate <br> Source of Funds： <br> Office of Education <br> Contract <br> （RBC非 1919） | $\$ 4,200$ | \＄9，240 | 3／1／72 |
| 14. | Robert D．Tollen（Non－t Economics | ```enure) Teaching Assistant (1/2 T)``` | $\begin{aligned} & \text { Assistant Instructor } \\ & (1 / 2 \mathrm{~T}) \end{aligned}$ |  |
|  | Academic Rate <br> （RBC非1900） | \＄5，800 | \＄8，000 | 1／16／72 |

The following Summer Session Budget is allocated within funds set aside in the original operating budget previously approved by the Board for this purpose．The Summer Session includes generally two terms－－the First Texm running June 1 through July 15，and the Second Term from July 16 through August 31．Certain courses are scheduled on an overlapping nine weeks basis（June 1 through July 31），and others on a full twelve weeks basis（June 1 through August 31）．Salary calculations are pro rata based on the nine－month academic rate with a cut－off for this purpose at a ceiling of $\$ 18,000$ ，the same as used in previous years．No merit salary rate increases are permitted in the Summer Session Budget．

## THE UNIVERSITY OF TEXAS

AT AUSTIN

ALLOCATION FOR 1972 SUMMER SESSION

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## THE UNIVERSITY OF TEXAS AT AUSTIN <br> EDUCATIONAL AND GENERAI <br> 1972 SUMMER SESSION ALLOCATION

Appropriation for 1972 Summer Session(See Budget adopted by the Board ofRegents, page 461)\$3,040,00011,785College of EngineeringLyndon B. Johnson School of Public Affairs$\frac{12,549}{\$ 3,064,334}$Allocations for 1972 Summer Session3. Resident Instruction3a Faculty Salaries $\$ 2,895,322$3b Departmental Operating Costs112,026$3 \mathrm{C} \quad$ Departmental Operating Costs $\quad 23,933$23,933\$3,031,281
Unallocated Summer Session Balance ..... \$ 33,053

THE UNIVERSITY OF TEXAS AT AUSTIN
1972 SUMMER SESSION ALLOCATION
(Elements of Institutional Cost)
3. RESIDENT INSTRUCTION

## SCHOOL OF ARCHITECTURE PROVOST OF ARTS AND SCIENCES

## COLLEGE OF HUMANITIES <br> Classics <br> English <br> French and Italian <br> Germanic Languages <br> Oriental and African Languages <br> Philosophy

Slavic Languages
Spanish and Portuguese
Sub-Total
COLLEGE OF NATURAL SCIENCES
Astronomy
Division of Biological Sciences
Botany
Chemistry
Computer Sciences
Geological Sciences
Home Economics
Mathematics
Microbiology
Physical Instruction
Physics
Zoology
Office of the Dean
Sub-Total

| TOTAL |
| :---: |
| RESIDENT |
| INSTRUCTION |
| $\$ \quad 52,247$ |

FACULTY
SALARIES


| 34,995 |
| ---: |
| 160,800 |
| 43,801 |
| 46,109 |
| 14,473 |
| 29,414 |
| 15,170 |
| 70,237 |
| 414,999 |


| 34,995 |
| ---: |
| 160,800 |
| 43,801 |
| 46,109 |
| 14,473 |
| 29,414 |
| 15,170 |
| 70,237 |
| 414,999 |


| 12,366 |
| ---: |
| 17,247 |
| 13,517 |
| 60,330 |
| 25,016 |
| 42,083 |
| 22,015 |
| 163,000 |
| 26,646 |
| 10,206 |
| 34,300 |
| 46,000 |
| 2,274 |
| 475,000 |

3. RESIDENT INSTRUCTION (Continued)

| TOTAL |  | DEPARTMENTAL |  |
| :---: | :---: | :---: | :---: |
| RESIDENT | FACULTY | OPERATING | INSTRUCTIONAL |
| INSTRUCTION | SALARIES | COSTS | ADMINISTRATION |

COLLEGE OF SOCIAL AND BEHAVIORAL SCIENCES
Anthropology
Economics
Geography
Government
History
Linguistics
Psychology
Sociology
Office of the Dean
$\quad$ Sub-Total

| 31,876 | 31,876 |  |
| ---: | ---: | ---: |
| 43,200 | 43,000 | 200 |
| 24,315 | 24,115 | 200 |
| 77,744 | 75,244 | 2,500 |
| 76,313 | 71,290 | 5,023 |
| 15,432 | 14,432 | 1,000 |
| 46,344 | 45,844 | 500 |
| 34,780 | 34,480 | 300 |
| 3,063 | 3,063 |  |
| 353,067 | 343,344 | 9,723 |

DIVISION OF GENERAL AND
COMPARATIVE STUDIES
American Studies
Asian Studies - Summer Program
in South Asian Studies
Ethnic Studies
Middle Eastern Studies
Office of the Dean
Sub-Total
COLLEGE OF BUSINESS ADMINISTRATION

## Accounting

Finance
General Business
Management
Marketing
Office of the Dean
Sub-Total

| 5,699 | 5,499 | 200 |
| :---: | :---: | :---: |
| 18,000 | 18,000 |  |
| 11,370 | 11,370 |  |
| 3,000 | 3,000 |  |
| 9,931 | 9,931 |  |
| 48,000 | 47,800 | 200 |
| 70,758 | 64,428 | 6,330 |
| 43,304 | 42,204 | 1,100 |
| 59,984 | 58,611 | 1,373 |
| 47,761 | 45,764 | 1,997 |
| 37,437 | 36,112 | 1,325 |
| 10,830 | 10,830 |  |
| 270,074 | 257,949 | 12,125 |

3. RESIDENT INSTRUCTION (Continued)

| TOTAL |  |
| :---: | ---: |
| RESIDENT | FACULTY |
| INSTRUCTION | SALARIES |


| DEPARTMENTAL |  |
| :---: | :---: |
| OPERATING |  |
| COSTS | INSTRUCTIONAL |

SCHOOI OF COMMUNICATION
journalism
Radio-Television-Film
Speech
Office of the Dean
Sub-Total
COLLEGE OF EDUCATION Cultural Foundations of Education
Curriculum and Instruction
Educational Administration
Educational Psychology
Physical and Health Education
Special Education
Office of the Dean Sub-Total

COLLEGE OF ENGINEERING
Aerospace Engineering \& Engineering
Mechanics
Engineering Mechanics Division

Chemical Engineering
Civil Engineering
Architectural Division
Meteorological Division
Electrical Engineering
Mechanical Engineering
Engineering Graphics Division
Petroleum Engineering
Office of the Dean
Sub-Total

27,604
29,774
46,349
14,947
2,373
68,313
68,080
4.550

11,732
8,186
319,157 319,157

26,830
16,789
41,204

| 6,000 |
| ---: |
| $-90,823$ |


| 22,980 |
| ---: |
| 148,291 |
| 31,698 |
| 73,255 |
| 27,192 |
| 49,000 |
| 6,000 |
| 358,416 |

200
200

## 3. RESIDENT INSTRUCTION (Continued)

|  | TOTAL <br> RESIDENT <br> INSTRUCTION | FACULTY SALARIES | $\qquad$ | INSTRUCTIONAL ADMINISTRATION |
| :---: | :---: | :---: | :---: | :---: |
| COLLEGE OF FINE ARTS |  |  |  |  |
| Art | 63,894 | 62,077 | 1,817 |  |
| Drama | 47,062 | 47,062 |  |  |
| Music | 179,982 | 158,982 | 21,000 |  |
| Office of the Dean | 12,565 | 12,565 |  |  |
| Sub-Total | 303,503 | 280,686 | 22,817 |  |
| SCHOOL OF LAW | 123,000 | 113,800 | 5,000 | 4,200 |
| GRADUATE SCHOOL OF LIBRARY SCIENCE | 42,999 | 40,999 | 2,000 |  |
| Office of The graduate dean | 12,000 |  |  | 12,000 |
| COLLEGE OF PHARMACY | 78,000 | 78,000 | - |  |
| GRADUATE SCHOOL OF SOCIAL WORK | 29,665 | 29,665 |  |  |
| LYNDON B. JOHNSON SCHOOL OF PUBLIC AFFAIRS | 12,549 | 12,549 |  |  |
| TOTAL RESIDENT INSTRUCTION | \$3,031,281 | \$2,895,322 | \$ 112,026 | \$ 23,933 |

## Pages 2035-2167 are intentionally left blank <br> (Noted: May 12, 2009)

Dr. Charles A. LeMaistre, Chancellor
The University of Texas System
Austin, Texas
Dear Dr. LeMaistre:
The following docket is submitted for your approval and presentation to the Board of Regents at the meeting in Austin on April 29, 1972:

USE OF TEXTBOOKS WRITTEN BY FACULTY MEMBERS
I recomend approval for the use beginning with the 2972 Spring Semester the following textbooks written by faculty members:

1. New Approaches to Behavioral Objectives by Richard W. Burns, Professor of Curriculum and Instruction, sold in the Bookstore for $\$ 2.25$ per copy with a royalty of ten percent to the author.
2. Vasconcelos of Mexico, Philosopher and Prophet by John H. Haddox, Professor of Philosophy, sold in the Bookstore for $\$ 3.50$ per copy with a royalty of ten percent to the author.
3. Antonio Caso, Philosopher of Mexico by John H. Haddox, Professor of Philosophy, sold in the Bookstore for $\$ 5.50$ per copy with a royalty of ten percent to the author.

## TRAVEL

The following trip has been made by a staff member with my approval with travel expense reimbursement to be made from the account, not containing the word "travel," indicated:

Mary S. Colley, Counselor, for travel to Chicago, Illinois, July 26-30, 1972, to attend the Americal Personnel and Guidance Association Conference. Travel expense reimbursement will be made from the Counseling Service Maintenance and Operation account.

## GIFTS

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.

## Donor

1.     * El Paso Natural Gas Company
P. O. Box 1492

El Paso, Texas 79948
Mr. John McFall
2. *The Spencer Foundation John Hancock Center 875 North Michigan Avenue Chicago, Illinois 60611 Mr. H. Thomas James, President

$$
\begin{aligned}
& \text { For research conducted by } \\
& \text { the Cross Cultural South- } \\
& \text { west Ethnic Study Center }
\end{aligned}
$$

Purpose and Condition
The Excellence Fund - $\$ 6,750.00$ Unrestricted

Amount

15,925.25
*Ho letter of trensmittal received from donor.

Interagency Contract Nc. IAC(72-73)-397, beginning February 1 and ending August 31, 1972, between The University of Texas Nursing School (System-Wide) and The University of Texas at El Paso whereby the University will furnish general stores supplies, telephone and postage, photographic services, art work, duplication, and such other needed supplies and services as The University of Texas Nursing School (System-Wide) may consider necessary to its operation. Receiving Agent will not require performing Agent to furnish any supplies or services not presently available. Receiving Agent will pay Performing Agent at the same rates Performing Agent charges its own internal operating departments. The contract was approved by the Board of Control on February 1, 1972.

## GOVERNMENT CONTRACTS AND GRANTS

The following contracts, grants, and amendments have been negotiated and have been signed by me upon the recommenation of the directors of the projects. I recommend your approval and ratification of the signatures.

1. Order No. DABE32-72-D-3691, dated March 2, 1972, to Basic Agreement No. DABDOT-71-A-0001, whereby the Contracting Officer, Procurement Division, DIO, P. O. Box 6078 , Fort Bliss, Texas 79906, authorizes the enrollment of 394 students and 1, 444 credit hours during the Spring semester 1972 for a total obligation of $\$ 16,245$.
2. Modification No. A018, dated March 15, 1972, to Contract No. DAAD07-67-C-0245, whereby the Contracting Officer, Procurement Division, STEWS-LG-PA, Building 1830, White Sands Missile Range, New Mexico 88002, adds certain government furnished property to the contract and which is to be returned to the Missile Electronic Warfare Technical Area when requested by the government or upon completion of the contract whichever occurs first. The original of this modification has been forwarded to the System Security Supervisor.
3. Contract NO. DAADO7-72-C-0016, dated August 2, 1971, whereby the Contracting Officer, Procurement Division, LG-PC, Building 1830, White Sands Missile Range, New Mexico 88002, awards $\$ 8,167$ for a Study of "The Theoretical Investigation of Wind Gradient Effects on Atmospheric Shadow Zones" during the period from August 2, 1971 through July 31, 1972.
4. Contract No. OEC-6-72-0723-(509), dated March 7, 1972, whereby the Contracting Officer, U. S. Office of Education, Washington, D. C. 20202, awards \$9,961 as the federal share in support of an Investigation into Linguistic Cues Involved in English Noun Pluralization of Six Year Old Mexican-American Children during the period from the effective date of the contract through August 31, 1973.
5. Contract No. V349V-2143, dated January 26, 1972, whereby the Adjudication Officer, VA Regional Office, 1400 Horth Valley Mills Drive, Waco, Texas 76710 , awards a contract for tutoring to veteran students pursuing a course of instruction under Chapter 31, Title 38, U. S. Code, when authorized by the Veterans Administration in writing. The rate of payment for private individual tutoring will not exceed $\$ 3.75$ per hour and the contract will be in effect during the period January 31, 1972 through January 30, 1973.
6. Contract No. F41609-72-C-0020, dated March 1, 1972, whereby the Contracting Officer, Aerospace Medical Divisjon (AFSC), Attn: FMP, P. O. Box 35448, Brooks Air Force Base, Texas 78235, awards $\$ 81,739$ for research on the Assessment of Visual Acuity in High-Risk Environments during the period March 1, 1972 through February 28, 1973.
7. Modification No. A026, dated February 24, 1972, to Contract No. DA-29-040-AMC-1507(X), whereby the Contracting Officer, Procurement Division, STEWS-LG-PA, Building 1830, White Sands Missile Range, New Mexico 88002, increases the cost of Task V by $\$ 392.80$ to cover the cost of the final negotiation agreement, 17 August 1971, changing the overhead rates between the Department of Health, Education, and Welfare and The University of Texas at El Paso.
8. Modification No. AOOI, dated February 22, 1972, to Contract DADO7-72-C0077, whereby the Contracting Officer, Procurement Division, STEWS-LG-PA, Building 1830, White Sands Missile Range, New Mexico 88002, extends the delivery schedule of the initial units to be supplied under this contract as an action deemed to be in the best interests of the government. Neither the contract price nor the final delivery date of all units is changed by this contract action.
9. Formal agreement, dated May 3, 1971, whereby the Executive Director, El Paso Council of Governments, Suite 1019 Southwest Center, El Paso, Texas 79901, awards $\$ 8,594$ for the collection of population and other statistical data for El Paso, Culberson, Hudspeth, Jeff Davis, Presidio, and Brewster counties and publication of a report with 200 copies provided to El Paso Council of Governments during the period May 3, 1971 through February 15, 1972.
10. Agreement, dated January 25, 1972, whereby the Executive Director, El Paso Council of Governments, Suite 1019 Southwest Center, El Paso, Texas 79901, awards $\$ 58,175$ for the performance and completion of a grant program known as Regional Law Enforcement Training Program durirg the period June I, 1971 through June 30, 1972. This agreement replaces an informal letter agreement dated May 28, 1971, and docketed as Item I on the September 1971 docket.

## NON-GOVERNNENT CONTRACTS AND GRAMTS

I recommend ratification of the following non-government contracts and grants:

1. Letter Agreement, dated January 17, 1972, whereby the Executive Director of the Robert A. Taft Institute of Government, 420 Lexington Avenue, New York, New York 10017, awards $\$ 10,482.84$ in new funding to conduct a second Robert A. Taft Institute of Government Seminar at The University of Texas at El Paso during the Summer of 1972.
2. Letter Agreement, dated December 23, 1971, whereby the Manager, Gas Supply, Southern Union Gas Company, Fidelity Union Tower, Dallas, Texas 75201, awards $\$ 1,600$ for a study and report on climatography and air pollution in the El PasoJuarez air shed during the period December 23, 1971 through January 5, 1972.
3. Letter Agreement, dated December I, 1971, whereby the Vice President, E1 Paso Natural Gas Company, El Paso, Texas 79999 awards $\$ 2,500$ to put into operation a hearing conservation program which will include a training program for El Paso Natural Gas Company employees, maintenance of various pieces of speech and hearing center equipment and counseling services for a period of one year beginning February 1, 1972 and ending January 31, 1973.

## RECOMMENDED AMENDMENTS TO 1971-72 BUDGET

The following amendments to the 1971-72 budget are written on the basis of "budget rates" rather than the "ireeze rates" resulting from the President's Executive Order. For the duration of the wage-price freeze, while reported amendments to the budget are based on budget rates, all payrolls are processed in compliance with the rules, regulations, and guidelines issued under authority of the Executive Order.

EDUCATIONAL AND GENERAL
GENERAL ADMIMISTRATION AND SMUDENT SERVICES

## Office of the Registrar

1. Apoint Guillermina Mascarenas as Clerk-Typist effective January 24 through August 31, 1972, at an annual rate of $\$ 3,348.00$ with the necessary funds in the amount of $\$ 2,025.00$ to come from Unallocated Salaries. (RBC 253)
2. Appoint Brenda K. Cancellare as Clerk-Typist effective January 10 through August 31, 1972, at an annual rate of $\$ 3,504.00$ with the necessary funds in the amount of $\$ 2,251.23$ to come from Unailocated Salaries. (RBC 265)
3. Appoint Barbara J. Harrid as Secretary effective January 18 through August 31, 1972, at an annual rate of $\$ 4,020.00$ with the necessary funds in the amount of $\$ 2,496.29$ to come from Unallocated Salaries. (RBC 268)

Student Financial Aid and Placement
5. Appoint Cheryl A. Sampson as Clerk-Typist effective February 8 through August 31 , 1972, at an annual rate of $\$ 3,504.00$ with the necessary funds in the amount of $\$ 1,973.52$ to come from Unallocated Salarjes. (RBC 274)
6. Appoint Marlene L. Wagoner as Clerk-Typist effective February 8 through August 31,1972 , at an annual rate of $\$ 3,504.00$ with the necessary funds in the amount of $\$ 1,973.52$ to come from Unallocated Salaries. (RBC 275)

## GENERAL INSTITUTIONAL EXPEASE

Development office
7. Increase the anmual rate of Bryan S. Jones, Assistant to the President, effective February 1, 1972 from $\$ 15,600.00$ to $\$ 16,500.00$ with the necessary funds in the amount of $\$ 525.00$ to come from Unallocated Salaries. (RBC 244)
8. Transfer of Funds:

From: Wages \$600.00
$\begin{array}{ll}T o: M a i n t e n a n c e ~ a n d ~ O p e r a t i o n ~ & 600.00\end{array}$
For: Transfer between dissimilar appropriations
to allow the department to service its needs
more effectively. (PBC 255)
Information Services
9. Increase the annual rate of Dale L. Walker, Director, effective February I, 1972 , from $\$ 12,168.00$ to $\$ 13,068.00$ with the necessary funds in the amount of $\$ 525.00$ to come from Unallocated Salaries. (RBC 245)

## RESIDENT INSTRUCTION

SCHOOL OF BUSINESS ADMTNISTRATION

## Business

10. Remove Jesse F. Pickrell (tenure), Professor, from the budget. Dr. Pickrell died January 15, 1972. Funds in the amount of $\$ 9,300.00$ budgeted for this position have been lapsea to Unallocated Salaries. (RBC 247)
11. Reappoint Martha B. Garrison (non-tenure) as Instructor (1/2 Time) effective January 16,1972 for the 1972 Spring Semester, at her full-time ninemonths rate of $\$ 4,800.00$ with the necessary funds in the amount of $\$ 1,200.00$ to come from the appropriation for Instructors, Part-time. (RBC 249)
12. Reappoint Carl Johnson (non-tenure) as Instructor (1/2 Time) effective January 16,1972 for the 1972 Spring Semester, at his full-time ninemonths rate of $\$ 4,800.00$ with the necessary funds in the amount of $\$ 1,200.00$ to come from the eppropriation for Instructors, Pert-time. (RBC 250)
13. Reappoint Ruth E. Kern (non-tenure) as Instructor (1/4 Time) effective January 16 , 1972 for the 1972 . Spring Semester, at her full-time nine-months rate of $\$ 5,600.00$ with the necessary funds in the amount of $\$ 700.00$ to come from the appropriation for Instructors, Part-time. (RBC 251)

SCHOOL OF EDUCATIOR
Curriculum and Instruction
14. Appoint Gloria Robinson (non-tenure) as Instructor effective January 16, 1972 for the 1972 Spring Semester, at a nine-months rate of $\$ 7,500.00$ with the necessary funds in the arount of $\$ 3,750.00$ to come from Instructors, Part-time in the amount of $\$ 850.00$ and in the amount of $\$ 2,900.00$ from Unallocated Salaries. (PBC 240)

## SCHOOL OF LIBERAL ARTS

Art
16. Appoint John W. Hogan (non-tenure) as Instructor (I/2 Time) effective January 16, 1972 for the 1972 Spring Semester, at a full-time nine-months rate of $\$ 6,400.00$ with the necessary funds in the amount of $\$ 1,600.00$ to come from the appropriation for Instructors, Part-time. (RBC 241)

English
17. Change the status of E. Haywood Antone (non-tenure) from Assistant Professor (Full-time) to Assistant Professor (1/2 Time) effective February 1, 1972 for the remainder of the 1972 Spring Semester, at his full-time nine-months rate of $\$ 10,100.00$ and lapse to Unallocated Salaries $\$ 2,244.00$ budgeted for this position. He will also serve as Director (1/2 Time) of Texas Western Press. (RBC 256)

## History

18. Reappoint Michael H. Holcomb (non-tenure) as Lecturer (Visiting) (1/4 Time) effective January 16, 1972 for the 1972 Spring Semester, at his full-time ninemonths rate of $\$ 13,100.00$ with the necessary funds in the amount of $\$ 1,638.00$ to come from the appropriation for Teaching Assistants. He will also serve as Housing Assistant (1/4 Time) in the Director of Housing Department and Housing Assistant (1/4 Time) in Barry Hall. (RBC 259)

Mass Communication
19. Transfer of Funds:

| From: Travel | $\$ 135.00$ |  |
| ---: | :--- | ---: |
| To: | Wages | 135.00 |
| For: | Transfer between dissimilar appropriations |  |
|  | to allow the department to service its needs |  |
|  | more effectively. (RBC 277) |  |

Political Science
20. Transfer of Funds:

From: Unallocated Maintenance and Operation \$1,000.00
To: Maintenance and Operation
1,000.00
For: Transfer between similar appropriations to provide funds for the department to cover the cost for moving expense and new furnishings for new departmental offices, plus charges for additional telephone service. (PRC 276)

SCHOOL OF SCIENCE

## Biological Science

21. Reappoint Guy W. Johnson (non-tenure) as Teaching Assistant (1/4 Time) effective January 16, 1972 for the 1972 Spring Semester, at his full-time ninemonths rate of $\$ 5,000.00$ with the necessary funds in the amount of $\$ 625.00$ to come by transfer of dissimilar appropriations from Wages. (PBC 242)

Chemistry
22. Appoint Barbara Prater (non-tenure) as Instructor (I/4 Time) effective January 16,1972 for the 1972 Spring Semster, at a full-time nine-months rate of $\$ 8,000.00$ with the necessary funds in the amount of $\$ 2,000.00$ to come from the appropriation for Teaching Assistants. (RBC 264)

## 1972 SUMER SESSTOH

23. I recommend aproval of the following proposed 1972 Surmer Session Budget in the amount of $\$ 914,507.00$, which is within the appropriation for the summer session of $\$ 921,290.00$.

## THE UNIVERSITY OF TEXAS AT EL PASO

## EL PASO, TEXAS

## 1972 SUMMER SESSION BUDGET

## First Term: June 7 - July 14 <br> Second Term: July 19 - August 25

RESIDENT INSTRUCTION
SCHOOL OF BUSINESS ADMINISTRATION
Accounting ..... \$ 21,884
Business ..... 40,678
Economics and Finance ..... 28,581
Total School of Business Administration ..... $\$ 91,143$
SCHOOL OF EDUCATION
Curriculum and Instruction ..... \$ 77,352
Educational Psychology and Guidance ..... 44,387
Educational Administration ..... 22,742
Health and Physical Education ..... 40,300
Total School of Education ..... $\$ 184,781$
SCHOOL OF ENGINEERING
Civil Engineering ..... \$ 20,135
Electrical Engineering ..... 33,650
Mechanical Engineering ..... 19,367
Metallurgical Engineering ..... 19,506
Total School of Engineering ..... $\$ 92,658$
SCHOOL OF LTBERAL ARTS
Art ................... ..... $\$ 20,568$
Drama and Speech ..... 27,001
English ..... 96,582
History ..... 39,503
Linguistics ..... 14,095
Mass Communication ..... 10,142
Modern Languages ..... 50, 177
Music ..... 16,242
Philosophy ..... 19,109
Political Science ..... 42,066
Psychology ..... 25,719
Sociology ..... 25,908
Total School of Liberal Arts ..... \$387,112
SCHOOL OF SCIENCE
Biological Sciences ..... $\$ 30,017$
Chemistry ..... 36,181
Geological Sciences ..... 8,768
Mathematics ..... 52, 125
Physics ..... 31,722
Total School of Science ..... $\$ 158,813$
TOTAL 1972 SUMAER SESSION PUDCET ..... $\$ 914,507$

## Summary of 1972 Surmer Session Budget (Elements of Institutional Costs)

RESIDENT INSTRUCTION
Faculty Salaries ..... \$914,507
Unallocated Faculty Salaries ..... 6,783
Summer Session Appropriation in 1971-72 Budget ..... $\$ 921,290$

THE UNIVERSITY OF TEXAS AT EL PASO

## EL PASO, TEXAS

## 1972 SUMMER SESSION BUDGET

| Supplemental Data |  |
| :---: | :---: |
| First | Second |
| Term | Term |

First
Term

Total

## RESTDENT INSTRUCTION

SCHOOL, OF BUSINESS ADMINISTRATION ACCOUNTING

Associate Professor
Gerald R. Bovard F. Brigg Flores

| $T \$$ | 2,133 | $\$$ | $\ldots$ | $\$$ |
| :---: | :---: | :---: | :---: | :---: |
|  | 2,600 | 2,600 | 5,133 |  |
| $T$ | 2,667 |  | $\ldots$ | 5,200 |
| $T$ | $\ldots$ | 2,667 | 2,667 |  |
| $T$ | 2,667 | $-\cdots$ | 2,667 | 2,667 |
| $T$ |  | 1,983 | 5,334 |  |
|  |  |  |  | 1,983 |

Assistant Professor
Florence B. Buckner $\qquad$ $\frac{1,900}{\$ 11,817}$

| 1,900 |
| ---: |
| 21,884 |

BUSINESS
Professor

| Allen O. Baylor | T | \$ | 2,500 | \$ | -- | \$ | 2,500 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lola B. Dawkins | T |  | 2,483 |  | -- |  | 2,483 |
| Everett G. Dillman | T |  | 2,767 |  | -- |  | 2,767 |
| Edward Y. George | T |  | -- |  | 3,017 |  | 3,017 |
| Wade J. Hartrick | T |  | 2,350 |  | 2,350 |  | 4,700 |
| George Joyce | T |  | 2,933 |  | -- |  | 2,933 |
| Sherwood F . Peres | T |  | 2,917 |  | -- |  | 2,917 |
| sociate Professor |  |  |  |  |  |  |  |
| Lawrence P. Blanchard | T |  | 2,417 |  | 2,417 |  | 4,834 |
| Charles E. Stenicka |  |  | 2,617 |  | -- |  | 2,617 |

Charles E. Stenicka
2,617
--
2,617

Assistant Professor
$\$ 1,042 \$ 1,042$
$\frac{1,041}{\$ 2,083} \quad \frac{1,042}{\$ 2,084}$
$\$ 1,083 \$ 1,083$
$\frac{1,083}{\$ 2,166} \quad \frac{1,084}{\$ 2,167}$
$\$ 1,531 \$ 1,531$
$\frac{1,531}{\$ 3,062} \quad 1,532$

| Donald K. Free1and | T | -- | 1,717 | 1,717 |
| :--- | :--- | :--- | :--- | :--- |
| Arthur S. Gifford | T | $1,042(1 / 2)$ | $1,042(1 / 2)$ | 2,084 |

                                Assistant Director, Bureau
                                of Business and Economic
                                Research ( \(1 / 2\) Time)
                                    Total Salary
                                    Grover \(V\). Johnson \(\quad 1,917 \quad 959(1 / 2) \quad 2,876\)
                                    Glenn L. Palmore 1,083(1/2) 1,083(1/2) 2,166
                                    Director, Bureau of
                                    Business and Economic
                    Research (1/2 Time)
                                    Total Salary
                                    George C. Tompkins T 1,750 1,750
                            Instructor
                                    Gertrude W. Dawson \(\frac{1,317}{\$ 28,093} \quad \frac{1,317}{\$ 12,585}\)
        ECONOMTCS AND FTNANCE
            Professor
                Paul E. Fenlon T \(\$ 3,017\) \$ \(\quad\) - \(\quad\) 3,017
                    John J. Hooker \(\quad\) I 2,617 2,
                    John M. Richards I \(\quad\) I,531(1/2) 1,531(1/2) 3,062
                            Dean, School of
                                Business Administration
                        (1/2 Time)
                    \(\begin{array}{lllll}\text { Total Salary } \\ 1 \text { D. Zook } & \text { T } 2,767 & 2,767 & 5,534\end{array}\)
    | Supplemental Data |
| :--- |
| First Second |
| Term $\quad$ Term |

$\$ \quad 942 \quad \$ \quad 942$

| 942 | 942 |
| :---: | :---: |
| \$ 1,884 | \$ 1, 888 |
| \$ 1,475 | \$ 1,475 |
| 1,475 | 1,475 |
| \$2,950 | \$ 2,950 |
| \$ 1,217 | \$ 1,217 |

$\frac{1,217}{\$ 2,434} \quad \frac{1,217}{\$ 2,434}$


|  |  | First Term | Second Term |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ECONOMICS AND FINANCE |  |  |  |  |  |
| (Continued) |  |  |  |  |  |
| Associate Professor |  |  |  |  |  |
| Michael Brand | T \$ | \$ 2,050 | \$ -- |  | 2,050 |
| Philip Duriez | T | -- | 2,417 |  | 2,417 |
| Diimus D. James | T | -- | 1,967 |  | 1,967 |
| Assistant Professor |  |  |  |  |  |
| Weldon C. Neill | T | 1,983 | -- |  | 1,983 |
| Timothy P. Roth |  | -- | 1,917 |  | 1,917 |
| Ben B. Tarwater |  | 1,867 | -- |  | 1,867 |
|  |  | -- | 2,150 |  | 2,150 |
|  |  | \$15,832 | S 12,749 |  | \$28,581 |
| Total School of Business |  |  |  |  |  |
| Administration |  | \$ 53,992 | \$ 37, 151 |  | \$ 91,143 |

SCHOOL OF EDUCATION

CURRICULUM AND INSTRUCTION

Professor

| Lou E. Burmeister | T $\$$ | 2,800 | \$ | - | \$ | 2,800 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Richard W. Burns | T | -- | $1,250(1 / 2)$ | 1,250 |  |  |
| Alonzo N. Foster | T | $942(1 / 2)$ | $942(1 / 2)$ | 1,884 |  |  |



Supplemental Data
First Second Term Term

First
Term

Second
Term

EDUCATIONAL ADMINISTRATION
(Continued)
Associate Professor

| Thomas A. Arciniega | \$ | 2,333 | \$ | 2,333 | \$ | 4,666 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Roger L. Hastell (Visiting) |  | -- |  | 2,500 |  | 2,500 |
|  |  | 1,833 |  | --- |  | 1,833 |
|  |  | 1,833 |  | -- |  | 1,833 |
|  |  | -- |  | 917(1/2) |  | 917 |

HEALTH AND PHYSICAL EDUCATION
Professor

Donald H. Hardin
William H. Harris James G. Mason

Associate Professor Benny W. Collins

Assistant Professor Kathleen P. Craigo Jerry Freischlag Florence L. Glardon Brian J. Kelly Mona H. Loper John R. Poteet

Lecturer Noeline L. Kelly

Total School of Education
SCHOOL OF ENGINEERING
CIVIL ENGINEERING
Professor
Howard G. Applegate Paul C. Hassler William G. Henderson

Associate Professor Robert Coltharp Hong S. Oey David B. Rozendal Phillip W. Young

Assistant Professor Anthony J. Tarquin

ELECTRICAL ENGINEERING
Professor
Julius O. Kopplin
Joseph S. Lambert.
Associate Professor Michael E. Austin Glenn A. Gibson Jack Smith

Assistant Professor Yu-Cheng Liu Carlos McDonald Gerald G. Maxweil Joseph H. Pierluissi Darrell C. Schroder Frederick J. Taylor

| T \$ | \$ 2,433 | \$ | 2,433 | 4,866 |
| :---: | :---: | :---: | :---: | :---: |
| T | 2,417 |  | 2,417 | 4,834 |
| T | 2,700 |  | 2,700 | 5,400 |
| T | 2,400 |  | 2,400 | 4,800 |
| T | 1,483 |  | -- | 1,483 |
|  | 1,917 |  | 1,917 | 3,834 |
| T | 1,883 |  | -- | 1,883 |
| T | 2,083 |  | 2,083 | 4,166 |
| T | 1,767 |  | 1,767 | 3,534 |
|  | 1,900 |  | 1.,900 | 3,800 |
|  | - -- |  | 1,700 | 1,700 |
|  | \$ 20, 983 |  | 19,317 | \$ 40,300 |
|  | \$ 96,655 |  | 88,126 | \$184,781 |


| First | Second |
| :--- | :---: |
| Term | Term |


|  |  | First <br> Term |  | $\begin{aligned} & \text { Second } \\ & \text { Ierm } \\ & \hline \end{aligned}$ |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MECHANICAL ENGINEERING |  |  |  |  |  |  |
| Professor |  |  |  |  |  |  |
| Ralph M. Coleman | T \$ | \$ 2,050 |  | \$ -- | \$ | 2,050 |
| Kenneth S. Edwards, Jr. | T | -- |  | 2,417 |  | 2,417 |
| John M. Levosky | T | 2,733 |  | 2,733 |  | 5,466 |
| John A. Whitacre | T | -- |  | 2,450 |  | 2,450 |
| Associate Professor |  |  |  |  |  |  |
| Sachindranarayan Bhaduri | T | - |  | 2,250 |  | 2,250 |
| Jack A. Dowdy | T | 2,567 |  | -- |  | 2,567 |
| Assistant Professor |  |  |  |  |  |  |
| William L. Craver, Jr. |  | 2,167 |  | - -- |  | 2,167 |
|  |  | \$ 9,517 |  | \$ 9,850 |  | 19,367 |
| METALLURGICAL ENGINEERING |  |  |  |  |  |  |
| Professor |  |  |  |  |  |  |
| Ray W. Guard | T \$ | \$ 1,719(1/2) |  | \$ 1,719(1/2) | \$ | 3,438 |
| Dean, School of |  |  |  |  |  |  |
| Engineering ( $1 / 2 \mathrm{Time}$ ) |  |  |  |  |  |  |
| Total Salary |  |  |  |  |  |  |
| Donala P. Kedzie | T | 2,917 |  | 2,917 |  | 5,834 |
| Joseph C. Rintelen | T | 2,317 |  | -- |  | 2,317 |
| Associate Professor |  |  |  |  |  |  |
| Henry P. Ehrlinger |  | 2,067 |  | -- |  | 2,067 |
| Frank E. Rizzo |  | 2,567 |  | -- |  | 2,567 |
| Walter R. Roser | I | 2,483 |  | -- |  | 2,483 |
| Teaching Assistant |  |  |  |  |  |  |
|  |  | 800 |  | - |  | 800 |
|  |  | \$ 14,870 |  | \$ 4, 636 |  | 19,506 |
| Total School of Engineering |  | \$ 54,196 |  | \$ 38,462 |  | 92,658 |
| SCHOOL OF LTBERAL ARTS |  |  |  |  |  |  |
| ART |  |  |  |  |  |  |
| Professor |  |  |  |  |  |  |
| Clarke H. Garnsey | T \$ | \$ 2,733 |  | \$ 2,733 | \$ | 5,466 |
| Wiltz A. Harrison | $T$ | -- |  | 2,450 |  | 2,450 |
| Robert J. Massey | T | -- |  | 2,450 |  | 2,450 |
| Associate Professor |  |  |  |  |  |  |
| Allen E. DePagter | T | 2,317 |  | -- |  | 2,317 |
| Assistant Professor |  |  |  |  |  |  |
| john C. Arnola |  | 1,667 |  | -- |  | 1,667 |
| Sally M. Bishop |  | 1,567 |  | --- |  | 1,567 |
| gilen W. Coogler | T | -- |  | 1,517 |  | 1,517 |
| Loren G. Janzen |  | 1,567 |  | -- |  | 1,567 |
| Instructor |  |  |  |  |  |  |
| David l. Deming |  | 1,567 |  | -- |  | 1,567 |
|  |  | \$11,418 |  | \$ 9, 150 |  | 20,568 |
| DRAMA AND SPEECH |  |  |  |  |  |  |
| Professor |  |  |  |  |  |  |
| Robert M. Leech | T \$ | \$ 3,750 |  | \$ -- | \$ | 3,750 |
| Harold N. Williams | T | 2,733 |  | 2,733 |  | 5,466 |
| Gifford W. Wingate | T | 2,567 |  | 2,567 |  | 5,134 |
| Associate Professor |  |  |  |  |  |  |
| Joseph A. Perozzi |  | 2,250 |  | 2,250 |  | 4,500 |
| Assistant Professor |  |  |  |  |  |  |
| Charles L. Etheridge | T | -- |  | 1,800 |  | 1,800 |
| Clarice M. Jones | T | 1,817 |  | -- |  | 1,817 |
| James H. Tucker | T | 1,817 |  | -- |  | 1,817 |



| Supplemental Data |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| First | Second |  |  | First. | Second |  |
|  | Term |  |  | Term | Term | Total |
| HISTORY |  |  |  |  |  |  |
| Professor |  |  |  |  |  |  |
|  |  | Wayne E. Fuller |  | \$ 2,800 | \$ 2,800 | \$ 5,600 |
|  |  | Oliver H. Knight | T | 2,700 | 2,700 | 5,400 |
|  |  | John H. McNeely | T | 2,167 | 2,167 | 4,334 |
|  |  | Kenneth B. Shover | T | -- | 2,483 | 2,483 |
| Associate Professor |  |  |  |  |  |  |
| Assistant Professor |  |  |  |  |  |  |
|  |  | John M. Broaddus | T | 1,700 | 1,700 | 3,400 |
|  |  | Eugene E. Kuzirian | T | 1,833 | -- | 1,833 |
|  |  | John Van Til (Visiting) |  | 1,750 | -- | 1,750 |
|  |  | Ralph H. Vigil |  | 2,167 | -- | 2,167 |
| Marina Wikramanayake |  |  |  |  |  |  |
| Instructor |  |  |  |  |  |  |
|  |  | Alexander B. Burke |  | --- | 1,533 | 1,533 |
|  |  | Philip E. Isett |  | 1,633 | 1,633 | 3,266 |
| Teaching Assistant |  |  |  |  |  |  |
|  |  | John Douglass |  | 434(1/2) | 434(1/2) | 868 |
|  |  | Charles Santaguida |  | -- | 434(1/2) | 434 |
|  |  | Charles Wilson |  | $434(1 / 2)$ |  | 434 |
|  |  |  |  | \$ 19, 785 | \$19,718 | \$39,503 |
| LINGUISTICS |  |  |  |  |  |  |
| Professor |  |  |  |  |  |  |
|  |  | Edward L. Blansitt | T \$ | \$ -- | \$ 2,333 | \$ 2,333 |
|  |  | Raymond E. Past | T | 2,750 | 2,750 | 5,500 |
| \$ | \$ 1,350 | John M. Sharp T --Professor, Modern |  |  |  |  |
| - -- |  | Languages ( $1 / 2$ Time) |  |  |  |  |
| S - | \$2,700 | Total Salary |  |  |  |  |
|  |  |  |  |  |  |  |
| \$ 917 | \$ -- | Diana S. Natalicio (Visiting) |  |  | -- | 917 |
|  |  |  |  | 917 (1/2) |  |  |
|  |  | Assistant Professor (Visiting), Modern |  |  |  |  |
| 917 | - -- | Languages ( $1 / 2 \mathrm{Time}$ ) |  |  |  |  |
| \$ 1,834 | S -- | Total Salary |  |  |  |  |
| Instructor |  |  |  |  |  |  |
| \$ 709 | \$ 709 | Charles G. Elerick <br> Instructor, English |  | 709(1/2) | 709(1/2) | 1,418 |
| 709 | 709 |  |  |  |  |  |
| \$ 1,418 | \$ 1,418 | Total Salary |  |  |  |  |
| \$ 584 | \$ 584 | Richard L. Hayden <br> Instructor, Modern |  | $584(1 / 2)$ | $584(1 / 2)$ | 1,168 |
|  |  |  |  |  |  |  |
| 584 | 584 |  |  |  |  |  |
| \$ 1.168 | \$ 1,168 | Total Salary |  |  |  |  |  |
| \$ 709 | \$ -- | Karen G. Ramirez <br> Instructor, Sociology (1/2 Time) |  | 709(1/2) | -- | 709 |
| 709 | -- |  |  |  |  |  |
| \$ 1,418 | S - | Total Salary |  |  |  |  |
| \$ -- | \$ 700 | Charles F. Springstead Instructor, Eng1ish ( $1 / 2$ Time) |  | -- | $700(1 / 2)$ | 700 |
| 700 |  |  |  |  |  |  |
| \$ 700 | \$1.400 | Total Salary |  |  |  |  |
|  |  |  |  | 5, 5,669 | \$ 8,426 | \$14,095 |





| Supplem First Term | tal Data Second Term |  |  | First <br> Term | Second <br> Term |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CHEMISTRY (Continued) |  |  |  |  |  |  |  |
| Assistant Professor |  |  |  |  |  |  |  |
|  |  | Michael P. Eastman | \$ | \$ 458(1/4) | \$ -- | \$ | 458 |
|  |  | Marion L. Ellzey |  | -- | 513(1/4) |  | 513 |
|  |  | Keith H. Pannell |  | 1,967 | 1,967 |  | 3,934 |
|  |  | Keith B. Prater |  | 479(1/4) | -- |  | 479 |
| Teaching Assistant |  |  |  |  |  |  |  |
|  |  |  |  | 417 (1/2) | 417 (1/2) |  | 834 |
|  |  |  |  | $417(1 / 2)$ | 417 (1/2) |  | 834 |
|  |  |  |  | 417 (1/2) | $417(1 / 2)$ |  | 834 |
|  |  |  |  | $417(1 / 2)$ | $417(1 / 2)$ |  | 834 |
|  |  |  |  | $417(1 / 2)$ | 417 (1/2) |  | 834 |
|  |  |  |  | 417 (1/2) | $417(1 / 2)$ |  | 834 |
|  |  |  |  | \$ 19,486 | \$16,695 | \$ | 36,181 |
| GEOLOGICAL SCIENCES |  |  |  |  |  |  |  |
| Associate Professor |  |  |  |  |  |  |  |
|  |  | David V. LeMone | T \$ | 2,067 | \$ -- | \$ | 2,067 |
|  |  | Earl M. Lovejoy |  | 2,183 | -- |  | 2,183 |
| Assistant Professor |  |  |  |  |  |  |  |
|  |  | Gerald E. Mueller |  | -- | 1,767 |  | 1,767 |
|  |  | Robert H. Schmidt | T | 1,917 | -- |  | 1,917 |
| Teaching Assistant $417(1 / 2) \quad 417(1 / 2) \quad 834$ |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  | \$ 6,584 | \$ 2,184 |  | 8,768 |
| MATHEMATICS |  |  |  |  |  |  |  |
| Professor |  |  |  |  |  |  |  |
|  |  | Delmar L. Boyer | T \$ | \$ 2,483 | \$ 1,242(1/2) | \$ | 3,725 |
|  |  | William J. Leahey | T | 2,967 |  |  | 2,967 |
| Associate Professor |  |  |  |  |  |  |  |
|  |  | Charles H. Gladman | T | -- | 2,217 |  | 2,217 |
|  |  | Carl E. Hall | T | 2,583 | 2,583 |  | 5,166 |
|  |  | James E. Nymann | T | 2,383 |  |  | 2,383 |
|  |  | Frederick B. Strauss | T | 2,450 | 2,450 |  | 4,900 |
| Assistant Professor |  |  |  |  |  |  |  |
|  |  | Frederick H. Bailey | T | 1,883 | 942 (1/2) |  | 2,825 |
|  |  | William J. Dodge |  | 1,817 | --- |  | 1,817 |
|  |  | Joe W. Fitzpatrick | T | -- | 1,833 |  | 1,833 |
|  |  | Rex E. Fox | T | -- | 1,800 |  | 1,800 |
|  |  | James M. Gray |  | 1,750 | -- |  | 1,750 |
|  |  | Lawrence Huntley | T | -- | 1,717 |  | 1,717 |
|  |  | Clinton E. Kennel |  | 1,833 | -- |  | 1,833 |
|  |  | Orville C. Kruschwitz | T | -- | 1,667 |  | 1,667 |
|  |  | Kennith W. Lopp |  | 2,050 | -- |  | 2,050 |
|  |  | Bernard Martin-Williams | T | 1,667 | -- |  | 1,667 |
|  |  | Vladik A. Miculka | T | -- | 1,800 |  | 1,800 |
|  |  | John A. Narvarte |  | 1,750 | -- |  | 1,750 |
|  |  | Charles W. Neville |  | 1,833 | -- |  | 1,833 |
| \$ | \$ 900 | Jesus R. Provencio |  | -- | 900(1/2) |  | 900 |
|  |  | Assistant Professor, |  |  |  |  |  |
| --- | 900 | Physics (1/2 Time) |  |  |  |  |  |
| S - | \$1,800 | Total Salary |  |  |  |  |  |
|  |  | Eugene F. Schuster |  | 2,350 | 1,175(1/2) |  | 3,525 |
|  |  | Vilappakkam K. Srinivasan |  | -- | 2,000 |  | 2,000 |
|  |  |  |  | \$29,799 | \$22,326 |  | 52,125 |
| PHYSICS |  |  |  |  |  |  |  |
| Professor |  |  |  |  |  |  |  |
|  |  | Thomas G. Barnes |  | \$ 2,633 | \$ -- | \$ | 2,633 |
|  |  | Robert G. McIntyre | T | 2,500 | -- |  | 2,500 |
|  |  | Oscar H. McMahan | T | -- | 2,467 |  | 2,467 |


| Supplemental Data |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| First <br> Term | second Term |  |  |  | First |  | econd |  |  |
|  |  |  |  |  | Term |  | Term |  | Total |
| PHYSICS (Continued) |  |  |  |  |  |  |  |  |  |
| Associate Professor |  |  |  |  |  |  |  |  |  |
| Michael H. Blue $T$ \$ $1,059(1 / 2) \$ 1,059(1 / 2) \$ 2,118$ |  |  |  |  |  |  |  |  |  |
| Donald E. Bowen T 2,400 2,400 4,800 |  |  |  |  |  |  |  |  |  |
| Samuel J. Brient, Jr. T 2,317 2,317 4,634 |  |  |  |  |  |  |  |  |  |
| Rufus E. Bruce T 2,367 2,367 4,734 |  |  |  |  |  |  |  |  |  |
| Eugene A. Dean $T$ T 2,217 4,434 |  |  |  |  |  |  |  |  |  |
| Assistant Professor |  |  |  |  |  |  |  |  |  |
| Assistant Professor, |  |  |  |  |  |  |  |  |  |
| 900 Mathematics (1/2 Time) |  |  |  |  |  |  |  |  |  |
| \$ $\quad-$ |  | 1,800 | Total Salary |  |  |  |  |  |  |
| Teaching Assistant |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | $417(1 / 2)$ |  | $417(1 / 2)$ |  | 834 |
|  |  |  |  |  | $417(1 / 2)$ |  | $417(1 / 2)$ |  | 834 |
|  |  |  |  |  | 417 (1/2) |  | $417(1 / 2)$ |  | 834 |
|  |  |  |  |  | \$ 16,744 | \$ | 14,978 |  | 31,722 |
| Total School of Science |  |  |  |  | \$ 89, 267 |  | 69,546 |  | 58,813 |
| Total 1972 Summer Session Budget |  |  |  |  | \$501,852 |  | 12,655 |  | 14.507 |

## ORGANIZED RESEARCH

Bureau of Business and Economic Research
24. Accept the resignation of Everett G. Dilman, Director, effective January 15, 1972 and lapse to Unallocated Salaries $\$ 2,767.00$ budgeted for this position. He will return to full-time teaching. (RBC 262)
25. Appoint Glenn L. Palmore as Director (1/2 Time) effective January 16 , 1972 through August 31, 1972. He is paid through May 31, 1972 at his fulltime nine-months rate of $\$ 13,000.00$ as Assistant Professor from the Department of Business. Funds in the amount of $\$ 2,167.00$ for the period June 1 through August 31, 1972 will come from Unallocated Salaries. (RBC 263)

## OPERATION AND MAINTENANCE OF PHYSICAL PLANT

General Services
26. Reclassify William K. Neely from Clerk to Senior Clerk effective January $I$, 1972 and adjust his annual rate from $\$ 3,828.00$ to $\$ 4,200.00$ with the necessary funds in the amount of $\$ 248.00$ to come by transfer between departments from Building Maintenance salaries in the amount of $\$ 30.36$ and $\$ 217.64$ from Unallocated Salaries. (RBC 243)

## CONTRACT RESEARCH AND SERVICES

OEO Grant CG 8669 E/O - High School Equivalency Program - 5th Year
27. Increase the annual rate of Salvador P. Acosta, Head Resident Counselor, from $\$ 5,700.00$ to $\$ 6,780.00$ effective March 1 , 1972 with the necessary funds in the amount of $\$ 540.00$ to come from budgeted salaries for this grant. (RBC 278)

HEW Grant 20-P-3007/6-03 - Undergraduate Social Work
28. Reappoint Dorothy $v$. Lee as Assistant Professor (1/4 Time) effective January 16 through May 31, 1972, at her full-time annual rate of $\$ 14,667.00$ with the necessary funds in the amount of $\$ 1,379.95$ to come from budgeted salaries for this grant. (RBC 269)

HEW Grant OEG-0-714339 - UTEP/Special Services Program for Student Assistance 29. Appoint David Morales as Tutorial Coordinator effective December 17, 1971 through June 30 , 1972, at an annual rate of $\$ 9,000.00$ with the necessary funds in the amount of $\$ 4,862.90$ to come from budgeted salaries for this grant. (RBC 228)

E1 Paso Council of Governments - Regionax Law Enforcement Training
30. Appoint Edward A. Farris as Assistant Project Director ( $1 / 2$ Time) effective January 16 through May 31, 1972, at a full-time ninemonths rate of $\$ 16,000.00$ as Professor (Visiting) in the Department of Political Science, with the necessary funds in the amount of $\$ 4,000.00$ to come from budgeted salaries for this grant. (PBC 273)

Air Force Contract F29601-71-C-0028 - Assessment of Visual Acuity
31. Reappoint Paul V. Garcia as Research Scientist effective January 1 through February 29 , 1972, at his annual rate of $\$ 10,800.00$ with the necessary funds in the amount of $\$ 1,800.00$ to come from budgeted salaries for this contract. (RBC 279)
32. Reappoint Zane M. Fractor as Research Assistant effective January 1 through February 29, 2972, at his annual rate of $\$ 8,400.00$ with the necessary funds in the amount of $\$ 1,400.00$ to come from budgeted salaries for this contract. (RBC 280)
33. Reappoint Guy M. Crook, II as Assistant Research Scientist effective January 1 through February 29, 1972, at his annual rate of $\$ 9,840.00$ with the necessary funds in the amount of $\$ 1,640.00$ to come from budgeted salaries for this contract. (RBC 281)
34. Reappoint Paul R. Krausmar as Research Assistant (1/2 Time) effective January 1 through February 29, 1972, at his full-time annual rate of $\$ 6,000.00$ with the necessary funds in the amount of $\$ 500.00$ to come from budgeted salaries for this contract. (RBC 282)
February 29, 1972, at his annual rate of $\$ 6,600.00$ with the necessary funds in
the amount of $\$ 1,100.00$ to come from budgeted salaries for this contract.
(RBC 283)
36. Reappoint Dolores R. Salas as Research Assistant effective January 1 through February 29, 1972, at her annual rate of $\$ 7,560.00$ with the necessary fund in the amount of $\$ 1,260.00$ to come from budgeted salaries for this contract. (RBC 284)
37. Appoint Douglas J. McMillan as Research Assistant effective January 3 through February 29, 1972, at an annual rate of $\$ 5,400.00$ with the necessary funds in the amount of $\$ 870.97$ to come from budgeted salaries for this contract. (RBC 285)

OTHER RESTRICTED CURRENT FUNDS
Corporation for Public Broadcasting Grant - Mass Communications
38. Increase the annual rate of Louis H. Valles, Operations Manager, Radio Station KTEP, effective February 1, 1972 from $\$ 4,800.00$ to $\$ 5,880.00$ with the necessary funds in the amount of $\$ 630.00$ to come from the Corporation for Public Broadcasting Grant - Mass Communication account. (PEC 246)

## AUXILIARY ENTERPRISES

Intercollegiate Athletics
39. Appoint James F. Eddy as Assistant Foctball Coach effective February 1 through August 31, 1972, at an annual rate of $\$ 14,000.00$ with the necessary funds in the amount of $\$ 8,166.62$ to come from budgeted salaries for this department. (RBC 258)
40. Appoint Tommy J. Hudspeth as Assistant Football Coach effective February I through August 31, 1972, at an annual rate of $\$ 15,000.00$ with the necessary funds in the amount of $\$ 8,750.00$ to come from budgeted selaries for this department. (RBC 272)

Housing System - Barry Hall
41. Reappoint Michael H. Holcomb as Housing Assistant ( $1 / 4$ Tine) effective January 16 through August 31, 1972, at his full-time annual rate of $\$ 7,270.00$ with the necessary funds in the amount of $\$ 1,138.42$ to come from budgeted salaries for this department. He will receive room and board valued at $\$ 110.00$ per month. He will also serve as Lecturer (Visiting) (2/4 Time) in the Department of History and Housing Assistant ( $1 / 4$ Time) in the Office of the Director of Housing. (RBC 261)

Housing System - Director of Housir.
42. Reappoint Michael H. Holcomb as Housing Assistant (I/4 Time) effective January 16 through August 31, 1972, at his full-time arnual rate of $\$ 7,270.00$ with the necessary funds in the amount of $\$ 1,138.42$ to come from budgeted salaries for this deparment. He will also serve as Lecturer (Visitins) (1/4 Time) in the Department of History and Housing Assistant (I/L Iime) in Barry Hall. (REC 260)

Texas Western Press
43. Appoint Carl Fertzog as Advisor (1/3 Time) effective February 1 through August 31,1972 , at a full-time annual rate of $\$ 19,000.00$ with the recessary funds in the amount of $\$ 3,694.39$ to come from budgeted salaries for this department. (RBC 254)

## SERVICE DEPARTMETTS

Printing Divigion
44. Accept the resignation for retirement of James E. Davis, Jr., !anager, Printing Division, effective at noon February 2?, 1972. Budgeted funds for this position in the amount of $\$ 6,571.55$ are lapsed to Printing Division Balance. (PBC 270)

RECOMMENDED AMENDMENLS TO 1971-72 BUDCFT (CONTTNUED)
EDUCATLONAT AND GENERAL (CONTINUED)
SERVI CE DLPARTMENTS (CONTTNUED)
Printing Division (Continued)
45. Appoint Mayo Cleveland as Director, Printing Division, effective January 21 through August 31 , 1972 , at an annual rate of $\$ 10,000.00$ with the necessary
funds in the amount of $\$ 6,129.01$ to come from budgeted salaries for this
department. (RBC 271)
PLANT FUNDS - UNEXPENDED
Combined Fee Revenue Bonds - Interest on Time Deposits
46. Appropriate $\$ 1,485.00$ for Repairs to Swimming Pool. (RBC 252)

OTHER FISCAL ITEMS
Auxiliary Enterprises
47. Transfer of Funds:

From:

$$
\begin{array}{rr}
\text { No. 285-00-000-00 } & \$ 164,520 \\
\text { No. 286-00-000-00 } & 386,554
\end{array}
$$

To:

$$
\begin{array}{rr}
\text { No. } 250-90-950-00 & \$ 386,554 \\
\text { No. 281-90-950-00 } & 164,520
\end{array}
$$



THE UNIVERSITY OF TEXAS AT ARLINGTON

Arlington, Texas

March 24, 1972

Dr. Charles A. LeMaistre, Chancellor
The University of Texas System
Austin, Texas 78701
Dear Dr. LeMaistre:
The following docket is submitted for your approval and presentation to the Board of Regents at the meeting in Austin on April 29, 1972:

## MEMBERSHIP ON THE GRADUATE FACULTY

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

Dr. James V. Cornehls, Institute of Urban Studies
Dr. John L. Fry, Department of Physics
Dr. Paul N. Geisel, Institute of Urban Studies
Dr. Roy S. Rubins, Department of Physics

## BUSINESS CONTRACTS

I recommend ratification of a contract between Texas Student Services Corporation and The University of Texas at Arlington whereby T.S.S.C. agrees to furnish to The University of Texas at Arlington 5000 copies of the student directory at no cost to the University.

## CHANGE IN ADMISSION TESTING REQUIREMENTS

I recommend approval of a change in the Catalog of The University of Texas at Arlington reflecting the following modification of admission testing requirements:
A. Effective with the fall semester 1972, the Achievement Tests portion of the College Entrance Examination Board Tests shall no longer be required as a condition for admission; however, specific achievement tests may be required for placement in certain degree programs.
B. Effective with the fall semester of 1972, the Director of Admissions shall have authority to waive the test requirements for the admission of students who are 25 years of age or older.

We also recommend approval of the following change in the Catalog:
Effective with the fall semester 1972, The University of Texas at Arlington will adopt the four point system of determining grade point averages.

## 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 the se contracts and grants will be made in accordance with regular University operating procedures and contractual limitations. I recommend your approval and ratification of signatures.

## PROJECTS SUPPORTED BY NON-FEDERAL SPONSORS:

1. Sub-Grant Number 72060001 , between the Coordinating Board, Texas College and University System, and The University of Texas at Arlington whereby $\$ 20,000$ is granted for a project entitled "Local Government Advisory Service Program," submitted by Jay Stanford. The grant is for the period January 14, 1972, to June 30, 1973.
2. New Grant No. Y-484 by The Robert A. Welch Foundation to Dr. A. L. Ternay in the amount of $\$ 24,000$ for a project entitled "Magnetic and Spectral Studies of Alkylated Thioxanthenes and Their Oxides."
3. New Grant No. Y-488 by The Robert A. Welch Foundation to Dr. Edward Bellion in the amount of $\$ 45,000$ for a project entitled "Biosynthesis of Thiamine."
4. Renewal Grant No. Y-307 by The Robert A. Welch Foundation to Dr. Robert $F$. Francis in the amount of $\$ 10,000$ for a project entitled "Synthesis and Electrophilic Aromatic Substitution Reactions of Alkylpyridines."

## GOVERNMENT SUPPORTED PROJECTS

1. Grant GZ-2507 by the National Science Foundation under the 1972 National Science Foundation Graduate Traineeship Program. The grant in the amount of $\$ 5,875$ will be under the direction of Dr. W. A. Baker, Graduate Dean.

## RECOMMENDED AMENDMENTS TO THE 1971-72 BUDGET

GENERAL ADMINISTRATION
Personnel Office

1. Transfer of Funds:

| From: | Travel | $\$ 400$. |
| :--- | :--- | :--- |
| To: | Wages Hourly $\$ 400$. |  |
| For: | Needed to pay wages for three student workers for |  |
|  | the remainder of the fiscal year. |  |

LIBERALARTS

Department of Architecture
2. Transfer of Funds:

| From: | Travel $\$ 800$. |
| :--- | :--- | :--- |
| To: | Maintenance |
| For: | and Operation $\$ 800$. |
|  | Essential Maintenance and Operation expenses have <br> exceeded the budget. Travel anticipated for program <br> development can be postponed. |

(RBC \#242)
Department of Foreign Languages and Linguistics
3. Transfer of Funds:

From: Maintenance and Operation \$44.
To: Travel \$44.
For: Additional travel funds necessitated by payment of new per diem rates for out-of-state trips. Original travel budget did not anticipate this change.
(RBC \#234)

Department of Psychology
4. Grant Leave of Absence without pay to James D. Phillips (Tenure), Associate Professor with academic rate of \$11,800, effective January 16, 1972. (RBC \#240)

Department of Speech Drama
5. Re-appoint Myra Sue Livingston (rion-Tenure) as Lecturer, part-time (25\%) with stipend of $\$ 660$, academic rate of $\$ 5280$, 9 months, effective January 16 , 1972. Funds are available from Institutional Lecturers-Unallocated. (RBC \#241)

## ENGINEERING

Department of Electrical Engineering
6. Transfer of Funds:

| From: | Capital Outlay |
| :--- | :--- | :--- |
| To: | Wages Hourly $\quad \$ 800$. |
| For: | Funds needed in Wages Hourly for the remainder of the |
|  | year to supply necessary student graders to faculty in |
|  | the department. |

(RBC \#246)

Engineering Special Operations
7. Appoint Robert E. Lakey as Graduate Research Assistant, $50 \%$ with stipend of $\$ 900$, effective March 1, 1972. Funds available from Capital Outlay within the departmental account. (RBC \#249)

## AUXILIARY ENTERPRISES

## Student Congress

8. Transfer of Funds:

From: 40-120 Unallocated Student Activity Fees \$150.
To: 40-137 Student Congress Maintenance and Operation $\$ 150$.
For: To establish an emergency ambulance fund for the current fiscal year to be administered by Student Congress through its executive committee.
(RBC \#239)
Book Store
9. Transfer of Funds:

| From: | Unallocated | $\$ 2200$. |
| :--- | :--- | :--- |
| To: | Capital Outlay | $\$ 2200$. |
| For: | Needed to purchase one belt conveyor system over existing |  |
|  | stairway to transfer supplies from basement warehouse to |  |
|  | first floor supply store. |  |

(RBC \#236)
Housing System-Supervision
10. Transfer of Funds:

From: Unallocated Salaries \$2228. To: Maintenance and Operation $\$ 2228$.
For: This amount needed because of the inclusion of the Unemployment Compensation Insurance as of January 1, 1972.
(RBC \#243)
Student Activities - General
11. Transfer of Funds:

From: 40-120 Unallocated Student Activity Fees \$232.
To: 40-338 Student Activities-
General
Travel \$232.
For: Additional travel needed to help with cheerleader travel for the year.
(RBC \#237)
I.D. Card Account
12. Transfer of Funds:

From: 40-480 Special Concessions Maintenance and Operation $\$ 1020$.
To: 40-342 I. D. Card Account Maintenance and Operation $\$ 1020$.
For: Additional funds needed in this account to cover expense of Faculty/Staff I.D. Cards.
( $\mathrm{RBC} \# 244$ )

## SERVICE AND REVOLVING FUNDS

Library-Duplication Fund
13. Transfer of Funds:

From: Estimated Income \$7,380
Travel
Capital Outlay \$ 370 .
\$ 500 .

To: Wages Hourly \$ 250.
Maintenance and Operation $\$ 8,000$.
For: This is a local account that is relatively new. Revised income estimates based on duplication fees for the first six months of fiscal 1971-72 indicate that a more realistic amount for the year is $\$ 33,880$.
(RBC \#247)
Library Film Rental
14. Transfer of Funds:

| From: | Travel | $\$$ 557.60 |
| :--- | :--- | :--- |
|  | Estimated Income | $\$ 15,000.00$ |
| To: | Wages Hourly | $\$ 3,557.60$ |
|  | Capital Outlay | $\$ 1,630.00$ |
|  | Maintenance and Operation | $\$ 10,370.00$ |

For: This is a new local account. Revised income estimates based on recent experience and bookings received for fiscal 1971-72 indicate that a more realistic amount for the year is $\$ 25,000$.
(RBC \#245)

1972 SUMMER SESSION BUDGET
I recommend approval of the 1972 Summer Budget. The budget reflects an expenditure of $\$ 1,030,000$, the amount allocated for the Summer Session in the 1971-72 Operating Budget.

THE UNIVERSITY OF TEXAS AT ARLINGTON

# RECOMMENDATIONS FOR SALARY BUDGET <br> FOR <br> SUMMER SESSION 1972 

ARLINGTON, TEXAS
March 24, 1972

## 1972 SUMMER SESSION BUDGET

First Term: June 1 - July 15<br>July 16 - August 31

RESIDENT INSTRUCTION
SCHOOL OF LIBERAL ARTS
Architecture ..... \$ 10,863
English ..... 102,243
Art ..... 12,239
Music ..... 8,931
Foreign Languages ..... 51,025
Government ..... 54, 856
History and Philosophy ..... 91,426
Physical Education - Men ..... 16,362
Physical Education - Women ..... 1,525
Psychology ..... 25,276
Education ..... 20,719
Sociology ..... 21,274
Speech-Drama ..... 12,814
Total School of Liberal Arts ..... 429,553
SCHOOL OF SCIENCE
Biology ..... 36,074
Chemistry ..... 42,727
Geology ..... 13,964
Mathematics ..... 128,218
Physics ..... 34,349Total School of Science255,332
SCHOOL OF BUSINESS
Accounting ..... 42,070
Business Administration ..... 75,761
Economics ..... 50,605Total School of Business168,436
SCHOOL OF ENGINEERING
Civil Engineering32,780
Technical Institute ..... 8,532
Aerospace and Mechanical Engineering ..... 43,963
Electrical Engineering ..... 46,402
Industrial Engineering ..... 19,099
Total School of Engineering ..... 150,776
RESERVEReserve for Additional Positions25,903
TOTAL 1972 SUMMER SESSION BUDGET ..... $\$ 1,030,000$
RESIDENT INSTRUCTIONTeaching Salaries Only\$1,030,000
SOURCE OF FUNDS
Summer Session Appropriation in 1971-72 Budget ..... $\$ 1,030,000$
TOTAL 1972 SUMMER SESSION BUDGET ..... $\$ 1,030,000$


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ITEM - PAYROLL TITLE -
N: NAME
```

12-120 ENGLISH

ASSICIATE PRIFESSIR \& GHAIRMAN

1 12 A FMORY D FSTES

| T | 14,900 | 100 | 2,483 | 100 | 2,483 | 4.966 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T | 20.000 | 100 | 3.333 | 050 | 1.666 | 4.999 |
| T | 18,000 | 100 | 3.000 | 050 | 1,500 | 4,500 |
| T | 17.500 | 100 | 2.916 | 050 | 1,458 | 4,374 |
| T | 17,500 |  |  | 100 | 2.916 | 2.916 |
| T | 17,600 | 100 | 2,933 | 100 | 2.933 | 5,866 |
| T | 17.200 | 100 | 2,866 |  |  | 2,866 |
| T | 16,500 | 100 | 2,750 |  |  | 2.750 |
| T | 13,300 | 100 | 2.216 |  |  | 2,216 |
| T | 13.200 | 100 | 2,200 | 050 | 1.100 | 3.300 |
| T | 12,500 | 100 | 2,083 |  |  | 2.083 |


| T | 13,700 | 100 | 2,283 | 050 | 1,141 | 3,424 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| T | 13,200 | 100 | 2,200 | 050 | 1,100 | 3,300 |
| T | 13,200 | 100 | 2,200 |  |  | 2,200 |
| T | 13,200 | 100 | 2,200 |  |  | 2,200 |
| T | 13,200 | 100 | 2,200 | 050 | 1,100 | 3,300 |
| T | 12,900 | 100 | 2,150 |  |  | 2,150 |
| T | 12,600 | 050 | 1,050 | 100 | 2,100 | 3,150 |
| T | 11,300 | 100 | 1,883 |  |  | 1,883 |
| T | 10,900 | 050 | 908 | 100 | 1,816 | 2,724 |
| T | 10,900 | 100 | 1,816 | 050 | 908 | 2,724 |

PROFESSOR

OOIA STANTON GARNER
(1) 3 LYLE H KENDALL JK

004 CLAYTOV L EICHELBERGFR
OG CLARENCE S TURNFR
OOSA CITHBURN Y JVEAL
077 DUNCAN W ROBINSON
On8 AKLIE G GJYVE JR
तथg $\triangle$ NNF WHALIVS
OIn RJBEスT L LITLEFIELD
011 ALUERTA 5 HARZINGTON
ASS:JCIATE PROFESSOR
113 GEURGE E FORTFNBERZY
014 CJRINNE $\angle$ SAUFFMAN
Ol5 JUHN S BURNS
dif paul s blakvey

217 GEQTRUDF L GJLLADAY

019 FIORELLA S TURREVILLE

O? DON R SWMOLEY
?? $k$ [CHARI i ZACHA

022 JUHN S LEWIS

233 NLLLIAA M KICHAROSON
rate time salary time salary salary

PROFESSOR

| (1) 3 | LYLE H KENDALL JK |
| :---: | :---: |
| 004 | CLAYTOV L EICHELBERGFR |
| 005 | CLARENCE S FURNFR |
| 00ba | CITH3URN M JVEAL |
| 077 | DUNCAN W ROBINSON |
| $0 \cap 8$ | ARLIE V GJYVE JR |
| anc | AVNF WHALIVS |
| 010 | R3BEKT L LTTLEFIELD |
| 011 | AL GESTA E HARQINGTON |

$\begin{array}{lllllll}10.900 & 100 & 1,816 & 050 & 908 & 2.724\end{array}$

|  | FIRST TERM | SECUND TERM |  |
| :--- | :--- | :--- | :--- |
|  | G-1/7-15 | $7-16 / 8-31$ |  |
| 9HOS. | PERCENT OF | PERCENT OF | TUTAL |
| RATE | TIME SALARY | TIME SALARY SALARY |  |

SCHHDL TF LIBFRAL ARTS



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SCHUOL i)F LIBFRAL ARTS
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|  |  |  |  | $\begin{aligned} & \text { FIRST TERM } \\ & 6-1 / 7-15 \end{aligned}$ | $\begin{gathered} \text { SECO } \\ 7-1 \end{gathered}$ | NO TERM $6 / 8-31$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ITEM | - payktll | TITLE - | 9 MOS. | PERCENT OF | PER | NT OF | TOTAL |
| NO. | NAME |  | Rate | TIME SALARY | TIME | SALARY | SALARY |

12-140 FOREIGN LANGUAGE \& LINGUISTICS
ASSOCIATE PRDFESSOR \& CHAIRMAN
001 VIRGIL L PJULTER $\quad T \quad 140000 \quad 100 \quad 2,333 \quad 100 \quad 2.333 \quad 4.666$ PROFESSOR
004 UUANE A ADAYS T $15.200100 \quad 2.533 \quad 2.533$

ASSOCIATE PROFESSOR

| $0 \cap 8$ | AL AN | Q | STEIV | ECKE | T | 14,600 | 100 | 2,433 | 100 | 2,433 | 4,866 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 099 | ALVIV | D | JETT |  | T | 14,400 | 100 | 2.400 | 050 | 1,200 | 3,600 |
| 010 | CHARL |  | YCDJ | WELL | T | 14,000 | 100 | 2,333 | 100 | 2,333 | 4.666 |
| 011 | JOHN | A | STUAR |  | T | 13,700 | 050 | 1.142 | 050 | 1,141 | 2,283 |

ASS ISTANT PROFESSOR

| 014 | TED E FRANK | 10.800 |  |  |  | 100 | 1,800 | 1,800 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 015 | FREOERICK VIVA | T | 10,600 | 100 | 1.766 | 100 | 1,766 | 3,5.32 |
| 017 | CARLOS NOGUEIRA-MARTINS |  | 10.300 | 100 | 1.716 | 100 | 1.716 | 3.432 |
| 019 | BFRTIE W ACKER | T | 10.100 | 100 | 1.683 | 100 | 1.683 | 3.366 |
| 220 | DuANE $V$ keilstrup | T | 9,700 | 100 | 1,616 |  |  | 1.616 |
| 222 | NJRMAN A WHITLOCK | T | 9.300 | 100 | 1.550 | 100 | 1.550 | 3.100 | INSTRUCTOR



## SCHOCL JF LIBFRAL ARTS

|  |  |  | $\begin{aligned} & \text { FIRST TERM } \\ & 6-1 / 7-15 \end{aligned}$ |  | SECOND TERM$7-16 / 8-31$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ITEM | - payrdl title - | 9 MOS. | PERCE | ENT OF | PERC | ENT OF | toral |
| No. | NayE | RATE | time | SALARY | TIME | SALARY | SALARY |
| 12-140 FOREIGN LANGUAGE \& LINGUIStics |  |  |  |  |  |  |  |
| graduate teaching assistant |  |  |  |  |  |  |  |
| 103 |  | 5,400 | 050 | 450 | 050 | 450 | 900 |
| 104 | ................................... | 5,400 | 050 | 450 | 050 | 450 | 900 |
| 105 | .................... | 5,400 | 050 | 450 | 050 | 450 | 900 |
| 106 | ....................... | 5,400 | 050 | 450 |  |  | 450 |
| 107 | ..................... | 5,400 |  |  | 050 | 450 | 450 |
|  | SUB-TUTAL |  |  | 28,537 |  | 22,488 | 51,025 |


|  |  |  |  | $\begin{gathered} \text { FIRST TERM } \\ 6-1 / 7-15 \end{gathered}$ | $\begin{aligned} & \text { SECOND TERMM } \\ & 7-16 / 8-31 \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ITH: | - PAYR,ILL | TITLF- | 9 mus. | PERCENT UF | PERCFNT UF | TOTAL |
| v. | NAME |  | RATE | TIME SALARY | IIME SALARY | SALARY |
| $12 \cdots 145$ | GQVFRIMENT |  |  |  |  |  |

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\cap\capL SAMJEL B HAMLFTT
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    PRGFESSOR
    30? LUTHFK G HAGAFD JR
O:2 lVIVGO MANSON
On 4 FOWAKD R RICHAROS
ASSICIATE PRJFESSOR
onc LUTH[R w olom
007 JHANG S MOOV
ONG IVAV TAUTRSKY
Ol CHARLES VAN CLEVE
ASSISTANT PROFESSOR
? 11 GILSERT D SMITH
?12 ALLAN SAX:
?14 STEPHEN L DAIGLE
015 HJNTER SCHMEOT JK
DIG MAPIVNE LUNG

IASTPUCTOR
al7 SJZAVNE v KATSIKAS 3UB-TOTAL
I 16.300 100 2.716 100 2.716 5.432

| T | 16,400 | 100 | 2,733 | 100 | 2,733 | 5,460 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| T | 44,600 | 100 | 2,433 | 100 | 2,433 | 4,866 |
| T | 14,500 | 100 | 2,416 | 100 | 2,416 | 4.832 |


| T | 14,500 | 100 | 2,415 | 100 | 2,416 | 4,832 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| T | 14,000 | 100 | 2.333 | 100 | 2,333 | 4,666 |
| T | 12.800 | 100 | 2,133 | 100 | 2,133 | 4,260 |
| T | 11.400 | 100 | 1,900 | 100 | 1,900 | 3,800 |


| 11.800 | 100 | 1.960 | 100 | 1.966 | 3.932 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| T | 11.300 | 100 | 1.883 | 100 | 1.883 |
| 10.200 | 100 | 1.700 |  | 3.766 |  |
| 9.200 | 100 | 1.533 | 100 | 1.533 | 3.060 |
| 8.400 | 100 | 1.400 |  |  | 1.700 |
|  |  |  |  |  |  |

$8.500 \quad 100 \quad 10416$ 100 $1.416 \quad 2.832$
$25,878 \quad 54,856$


| 022 | $J \mathrm{~W}$ | SNOX |  | T | 12.160 | 100 | 2.016 | 100 | 2.016 | 4,032 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 021 | gus | AVE A | AVGUIZULA |  | 11.300 | 100 | 1,883 | 100 | 1,883 | 3.766 |
| $2 ? 4$ | PAUL | Y MA | GINNIS |  | 10,700 | 100 | 1.783 | 100 | 1.783 | 3.566 |

ITHM - PAYROLL TITLE -
NU.

12-150 HISTORY \& PHILOSOPHY

ASSISTANT PRUFESSOR

| 326 | DAVID DE BOE |  | 10,300 |  |  | 100 | 1.716 | 1.716 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0.27 | RIBERT F OAKS |  | 10.100 | 100 | 1.683 | 100 | 1,683 | 3.366 |
| 028 | B2UCE I AMBACHER |  | 10.100 | 100 | 1.683 | 100 | 1.683 | 3,366 |
| 02.9 | RICHAROG MILLER |  | 10,100 | 100 | 1,683 | 100 | 1,683 | 3.366 |
| 2.31 | ELLIOTT WEST |  | 9,500 |  |  | 100 | 1,583 | 1. 583 |
| 032 | AJDRA L PREWITT | $T$ | 9.500 | 100 | 1.583 | 100 | 1,583 | 3.166 |
| 345 | THOMAS W KING |  | 10.000 | 100 | 1.666 | 100 | 1.666 | 3.332 | INSTRUCTOR


| 3.34 A | LARPY D SALl | 9.500 | 100 | 1.583 | 100 | 1.583 | 3.166 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 035 | EDWARO SPAVSKI | 8.600 | 100 | 1.433 | 100 | 1.433 | 2,866 |
|  | SJEMTTTAL |  |  | 45,526 |  | 45.900 | 91:426 |




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ITEM - PAYRBLL TITLE -
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9 MOS.
RATE

| FIRST TERM | SECOND TERM |  |
| :--- | :--- | :--- |
| G-1/7-15 | $7-16 / 8-31$ |  |
| PERCENT OF | PERCENT OF | TOTAL |
| TIME SALARY | TIME SALARY SALARY |  |

12-181 PSYCHOLOGY
ASSISTANT PROFESSOR $\&$ CHAIRMAN
OOGA JAMES W 3AERWALDT $12,000 \quad 075 \quad 1,500 \quad 075 \quad 1,500 \quad 3,000$
PROFESSOR

| OOLA GARVIN M MCCAIN | T | 17,500 | 075 | 2,187 | 075 | 2.187 | 4,374 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| OO2 | IRA H BERNSTEIN | T | 14,800 | 050 | 1,233 | $05 C$ | 1.233 | 2.466 |

    ASSOCIATE PRDFESSOR
    | 004 | VERNE C COX |  | 15,500 | 050 | 1.291 | 050 | 1.291 | 2.582 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 005 | JAMES V BOWEV | T | 13,100 | 050 | 1.091 | 050 | 1.091 | 2.182 |
| 006 | OUANE R MARTIN | $T$ | 12,000 | 050 | 1,000 | 050 | 1,000 | 2.000 |
| 007 | JAMES D PHILLIPS JR | $T$ | 11,800 |  |  | 100 | 1.966 | 1.966 |


| 098 | JAMES KOPP | 13,100 | 025 | 546 | 025 | 546 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 010 | JJE L LENIS | 11,092 |  |  |  |  |
| 011 | PAUL E MALOVE | 500 | 050 | 958 | 050 | 958 |
| $013 A$ | 11,300 | 050 | 941 | 050 | 941 | 1,882 |
|  | PAUL B PAULUS | 10,900 | 050 | 908 | 050 | 908 |
|  | SUB-TOTAL |  | 11,816 |  |  |  |

SCHOML IF LIBERAL ARTS




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ITY - PAYF:JLL TITLE-
N!. NAME
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12- 23.$)$ CHFMISTKY

PR'FFSSOS \& (.HAIRMAN
O.I MONAL! $K$ YARTIN
PRAPESSOR

| $n \bigcirc 4$ | JiJHV | 1!U:くCHISUN |
| :---: | :---: | :---: |
| ?) 5 | Hingit 0 | $\triangle C A F E E$ |
| 060 | HAROTL | $G$ SUGMAN |

    ASSICIATEPRUFFSS:IR
    | nAR | GJRERT F FRAVCIS |
| :--- | :--- |
| OU3 | SARAH M WILLOUGHSY |

    ASSISTAIVT PKOFFSSOR
    O1? THI:AS J COGOELL
011 A 1 ARYSTROVG
$\cdots 2$ MROVFA L JIHNSUN
713 ') 3 NIEL M HLAKF
-14 LANNY I CASFY

A|G $\because$ AKY L JJMNSJN
O17 AMA 17 BENHAM

ASSISTANT INSTEUCTOF
$\because A F T H A L$ HAFDIN

CLEVIS HUTHLESIOA

GRNJUATE FEACHING ASSISTANT


SUE-TSTAL

|  | FIRST TERM | SECUNO TERM |
| :--- | :--- | :--- | :--- |
| G-1/7-15 | $7-16 / 8-31$ |  |
| 9 MUS. PERCHN OF | PERCENT OF | TOIAL |
| RATE | TIME SALARY | TIME SALARY SALARY |

T 22,000 $100 \quad 3,666 \quad 100 \quad 3,666 \quad 7,332$

| $T$ | 15,600 | 100 | 2,600 |  |  | 2,600 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $T$ | 14,300 | 100 | 2,383 | 100 | 2.383 | 4,766 |
| $T$ | 13,700 | 100 | 2,283 |  |  | 2,283 |

T 14,600 $1002,433 \quad 2,433$

| T 14,000 | $100 \quad 2.333 \quad 2.333$ |
| :--- | :--- | :--- | :--- |

$14.600 \quad 100 \quad 2.433 \quad 2.433$
T 11.6001001 .9331 .933

| 11,500 |  |  | 100 | 1,916 | 1,916 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 11,500 | 100 | 1,915 |  |  | 1,916 |
| 11,400 | 100 | 1,900 |  |  | 1,900 |
| 10.400 |  |  | 100 | 1,733 | 1,733 |
| 9,200 |  |  | 100 | 1,533 | 1,533 |


| 8,500 |  |  | 100 | 1,416 | 1,416 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 8,400 | 100 | 1,400 | 050 | 700 | 2,100 |


| 5,400 | 050 | 450 | 050 | 450 | 900 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 5,400 | 050 | 450 | 050 | 450 | 900 |
|  |  | 23,714 |  | 19,013 | 42,727 |

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SCHIML JF SCIFNCE
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ITFM - DAYRULL TITLE -
NO. NAME
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12-750 YATHEMATICS
PRIFFESSIR \& CHAIKMAN
001 GASIL M WALL
PRJFESSOR
OC3 HAPRISON A D UUNSWURTH
004 JAMES L SHAWV
005 LLOYD L LASSEN
ASSUCIATE PROFESSOR
007 R.JBERT L TENNISON
008 JOHN K PERRYMAN
nOg ALFREO R MITCHELL
DIO RUGER W MITCHELL
nll LARRY F HEATH
O12 SFNNIE B WILLIAMS
CI3A STILLMAN A SIMS
O14 MAKION E MOJRF
015 C w MARSHALL
016 JAMES C BOLEN
017 GERALD L MORRIS
nls wILLIAM W HAMILTON
019 OBERT L NOLEN
20 NILLIAM BEEMAN
0) WILLIAM LAWLEY
?.? THURMAN Y JASPER
074 LEDLIE K HOLLAND

|  | FIRST TFRM | SECOND TERM |  |
| :--- | :--- | :--- | :--- |
|  | $6-1 / 7-15$ | $7-16 / 8-31$ |  |
| GMOS. | PERCENT OF | PERCENT OF | TOTAL |
| RATE | TIME SALARY | TIME SALARY SALARY |  |

T $20,100 \quad 100 \quad 3.350 \quad 100 \quad 3.350 \quad 6,700$

| T | 16,000 | 100 | 2,666 |  |  | 2.666 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| T | 13.900 | 100 | 2.316 | 100 | 2.316 | 4.632 |
| T 13.100 |  |  | 100 | 2.183 | 2.183 |  |


| T | $16: 600$ | 100 | 2.766 | 100 | 2.766 | 5,532 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T | 16.400 | 100 | 2.733 |  |  | 2.733 |
| T | 15.700 | 075 | 1,962 | 075 | 1.962 | 3,924 |
| T | 15,700 | 100 | 2.616 |  |  | 2,616 |
| T | 15,000 | 100 | 2.500 | 050 | 1.250 | 3.750 |
| T | 15.000 | 100 | 2.500 | 100 | 2.5000 | 5.000 |
| T | 14,900 | 075 | 1.862 | 075 | 1.862 | 3,724 |
| T | 14,200 | 100 | 2.366 |  |  | 2.366 |
| T | 13.90n |  |  | 100 | 2,316 | 2,316 |
| T | 13.600 | 100 | 2.266 | 100 | 2.266 | 4,532 |
| T | 13.600 | 075 | 1.699 | 075 | 1.699 | 3,398 |
| T | 13.400 | 100 | 2.233 | 100 | 2.233 | 4.466 |
| T | 12.800 | 100 | 2.133 | 100 | 2.133 | 4.266 |
| T | 12,600 |  |  | 100 | 2.100 | 2.100 |
| T | 12,600 | 100 | 2,100 |  |  | 2.100 |
| T | 12,200 | 075 | 1.524 | 075 | 1.524 | 3,048 |
| T | 12,000 |  |  | 100 | 2,000 | 2.000 |


|  |  |  |  | $\begin{array}{r} \text { FIRS } \\ 6-1 \end{array}$ | $\begin{aligned} & \text { T TERM } \\ & / 7-15 \end{aligned}$ | $\begin{gathered} \text { SECO } \\ 7-1 \end{gathered}$ | ND TERM $6 / 8-31$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ITE: | - PAYROLL TitLe - |  | 9 MUS. | PERC | ENT OF | PERC | ENT OF | TOTAL |
| NJ. | NAME |  | RATE | TIME | SALARY | TIME | SALARY | SAL ARY |
| 12-? | 50 MATHEMATICS |  |  |  |  |  |  |  |
|  | ASSUCIATE PROFESSOR |  |  |  |  |  |  |  |
| 025 | JOHN A GARDVER | T | 12,000 |  |  | 100 | 2,000 | 2,000 |
| 026 | HARUL O R GREEN | T | 11.300 | 100 | 1.883 |  |  | 1.883 |
| 0.37 | JACOB T B BEARD |  | 11.300 | 100 | 1,883 | 100 | 1,883 | 3,766 |
|  | ASSISTANT PROFFSSOR |  |  |  |  |  |  |  |
| 028 | FRANK V HUGGINS |  | 13,500 | 100 | 2.250 | 100 | 2.250 | 4,500 |
| 0.29 | JAMES R HARVEY | T | 13.500 | 100 | 2.250 |  |  | 2.250 |
| 330 | MERLYND K NESTELL |  | 13,400 |  |  | 100 | 2.233 | 2,233 |
| 031 | M E LIRD |  | 12,900 | 075 | 1.612 | 075 | 1,612 | 3,224 |
| 032 | DANVY D DYER | T | 12.500 | 075 | 1.562 | 075 | 1,562 | 3.124 |
| 0.33 | HESLEY E MEAD JR | T | 12.150 | 050 | 1.012 |  |  | 1,012 |
| 034 | JAMES C NICHOLSON | T | 11,800 | 100 | 1.966 |  |  | 1.966 |
| 035 | GAY \& TURNEY | T | 11.800 | 100 | 1,966 |  |  | 1.966 |
| 036 | NILLIAM O MILLER | T | 11.700 | 100 | 1.950 | 100 | 1.950 | 3,900 |
| 0.7 | MFRVIN R CHILDERS | T | 11.700 | 100 | 1.950 | 050 | 975 | 2.925 |
| 038 | JJF Gll breath | T | 11.175 |  |  | 050 | 931 | 931 |
| 039 | ARTHUR A GILLFSPIE. | T | 11.000 | 075 | 1.374 | 075 | 1.374 | 2.748 |
| 047 | GORERT J FUSTER | T | 10,800 |  |  | 100 | 1,800 | 1,800 |
| 341 | EJOA E DEAN | T | 10,800 | 075 | 1,350 | 075 | 1,350 | 2.700 |
| 043 | KIRBY D WATKINS | T | 10.200 | 100 | 1.700 |  |  | 1.700 |
| 044 | LFE G SHILLING JR | T | 9.900 | 075 | 1,237 | 075 | 1,237 | 2,474 |
| 045 | MARIAN $E$ PAYSINGER | T | 9.600 |  |  | 100 | 1.600 | 1,600 |
| 046 | LIDIE N WARREN | T | 9,400 | 075 | 1.174 | 075 | 1.174 | 2.348 |

[^9]

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SCHOML DF SCIENCE
```

| ITEM | - payrill title - |  | 9 MIJS. | $\begin{aligned} & \text { FIRST TFRM } \\ & 6-1 / 7-15 \end{aligned}$ |  | $\begin{gathered} \text { SECOND TFRM } \\ 7-16 / 8-31 \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NH. | NAME |  | RATE | TIME | SALARY | TIME | SALARY | SALARY |
| 12-? 60 PHYSICS |  |  |  |  |  |  |  |  |
| PQUFESSOR \& CHAIRMAN |  |  |  |  |  |  |  |  |
| 001 | luUis a rayburn | T | 20,300 | 100 | 3.383 | 100 | 3,383 | 6,766 |
| PROFESSOR |  |  |  |  |  |  |  |  |
| 0.? | QICHARD J MARQUIS | T | 16,350 | 070 | 1.910 | 070 | 1,910 | 3,820 |
| 003 | LEGNARD M DIANA | T | 16,300 |  |  | 100 | 2,716 | 2.716 |
| ASSJCIATE PROFESSUR |  |  |  |  |  |  |  |  |
| 004 | truman o black | T | 16,300 | 100 | 2,716 |  |  | 2.716 |
| 026 | ULRICH O HERRMANN | T | 14.700 | 100 | 2,450 |  |  | 2,450 |
| 007 | Jason a fllis | T | 14,700 | 050 | 1,225 |  |  | 1,225 |
| 003 | fullen or massey | T | 14,500 | 050 | 1.208 | C 50 | 1,208 | 2.416 |
| nos | Glf E terrell | T | 14,100 |  |  | 100 | 2,350 | 2,350 |
| 010 | $r$ S Rubins | $T$ | 13,700 |  |  | 050 | 1,142 | 1,142 |
| $\bigcirc 11$ | BMNVIE C THIMPSON | T | 13,300 | 100 | 2,216 |  |  | 2,216 |
| 013 | JuHN L FRY |  | 13,500 |  |  | 100 | 2.250 | 2,250 |

assistant prufessor
Ol4 WILLIAM B SELF
O16 FRWIN G DJUGHTY SJH-TOTAL

| T | 13,000 | 100 | 2.166 |  |  | 2.166 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $T$ | 12,700 | 050 | 1.058 | 050 | 1.058 | 2,116 |
|  |  |  | 18.332 |  | 16.017 | 34.349 |

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SCHOOL AF BUSINFSS
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ITEM - PAYRILL TITLE -
NO. NAME
```

12-330 BUSINESS ADMINISTRATION
PROFESSOR
OO2 LAWRENCE L SCHKADE
003 JOHN O STANLEY
004 JERRY C WOFFORO
275 JESSE D BRYANT
ASSCCIATE PROFESSOR
006 FILLIAM P GREEN
007 $\because$ ILLIAM N LUCAS
nng HIRAM M HELM JR
101 MARNA K CARVEY
102 PAUL M HAYASHI
ASSISTANT PRJFESSOR
012 WILLIAM $\because$ PINNEY
013 BURLEY WALKER JR
O14A THOMAS I KIVDEL
015 CARL D MCDANIEL JR
016 PHILIP F LYNCH
Ol 7 THEDORE $T$ HERBERT
O! R MGEP H GATES
OLG SANFORD Y EUGAR
n2? PAULA A HUGHES
$\therefore 22$ SAM G CAROTHERS
0?3 EDIN A GERLUFF
ก?4 Q[CHARO F FERGUSON

|  | FIRST TERM | SECOND TERM |  |
| :--- | :---: | :---: | :---: |
|  | $6-1 / 7-15$ | $7-16 / 8-31$ |  |
| 9 MUS. | PERCENT IFF | PERCENT OF | TOTAL |
| RATE | TIME SALARY | TIME SALARY SALARY |  |


| T | 20,100 |  |  | 100 | 3.350 | 3.350 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| T | 19,400 | 100 | 3,233 |  |  | 3.233 |
| T | 18,000 | 025 | 750 | 075 | 2,250 | 3,000 |
| T | 13.800 | 100 | 2.300 | 100 | 2,300 | 4.600 |


| T | 16.000 | 025 | 665 | 075 | 1.999 | 2.665 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T | 16.800 | 050 | 1.400 | 050 | 1.400 | 2.800 |
| T | 14,600 | 100 | 2,433 | 100 | 2.433 | 4,866 |
| T | 14.000 | 050 | 1.166 |  |  | 1.166 |
| T | 15,000 | 050 | 1.250 |  |  | 1.250 |



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SCHONL UF BUSINESS
```




| OOG GHALI DUWAJI |  |
| :--- | :--- |
| 007 | JOAN M MCCREA |
| $008 A$ | JOHN B MCCALL |
| 009 | PAUL M HAYASHI |
| 010 | WALTER E MULLENDORE |
| 011 | MARNA K CARNEY |
| 012 | LAWRENCE F ZIEGLER |


| T | 15,900 | 100 | 2.550 | 100 | 2.650 | 5,300 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T | 15,900 | 100 | 2.650 |  |  | 2.650 |
| T | 16.000 | 067 | 1.791 | 067 | 1.791 | 3.582 |
| T | 15,000 | 050 | 1,250 | 050 | 1,250 | 2.500 |
| T | 14,700 | 050 | 1,225 | 100 | 2.450 | 3.675 |
| T | 14,000 | 050 | 1.166 |  |  | 1.166 |
| T | 13,700 | 050 | 1,142 | 100 | 2.283 | 3,425 |


| 12.300 |  |  | 100 | 2,050 | 2.050 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 9.000 | 050 | 750 | 050 | 750 | 1.500 |
| 9.200 | 050 | 767 | 050 | 766 | 1.533 |
| 11.500 | 100 | 1.917 |  |  | 1.917 |
| 13,700 | 050 | 1.142 |  |  | 1.142 |


| 9,200 | 050 | 767 | 050 | 766 | 1.533 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 7.600 | 100 | 1.266 |  |  | 1.266 |
|  | 29.316 |  | 21.289 | 50.605 |  |



## SChiot of ENGINEERING



```
ITEM - PAYROILL TITLE -
NJ. NAME
12-433 AERUSPACE & MECHANICAL ENGR
```

9 MOS. PERCENT OF
SECOND TERM
7-16/8-31
PERCENT OF TOTAL
TIME SALARY SALARY

PRUFESSUR \& CHAIRMAN

| 071 | CARL W | FILES |  | T | 20,000 | 100 | 3.333 | 100 | 3.333 | 6.666 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SRGFESSOR |  |  |  |  |  |  |  |  |  |  |
| 004 | JOSEPH | W ualley |  | T | 19.100 | 033 | 1.061 | 033 | 1.061 | 2.122 |
| 006 | JACK F | FAIRCHILD |  | T | 17,800 | 050 | 1,483 | 050 | 1,483 | 2.966 |
| 007 | CARL i) | WISEMAN |  | T | 16.800 |  |  | 100 | 2,800 | 2,800 |
| 008 | CALVIV | L MAZKER |  | $T$ | 16,600 | 100 | 2.766 |  |  | 2.766 |
| nos | GFORGE | ESMITH |  | T | 16.350 | 033 | 908 | 033 | 908 | 1,816 |
| 010 | CHARLES | C BLACKWELL |  | T | 16.000 | 050 | 1.333 | 056 | 1.333 | 2.666 |
| 011 | A HAJI- | Sill IKH |  | T | 15,700 | 0.50 | 1,308 | 050 | 1,308 | 2.616 |

ASSOCIATE PROFESSOR


IMSTRUCTOR

| 021 | MNALD C FOSTER | T | 9.000 | 100 | 1.500 |  |  | 1.500 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 022 | KICHARD A ALEXANDER |  | 8,800 | 067 | 982 | 067 | 982 | 1,964 |
| ? 3 | THOMAS S HUMTER II |  | 8.600 | 050 | 716 | 050 | 717 | 1.433 |
|  | SUB-TOTAL |  |  |  | 25,664 |  | 299 | 43,963 |

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ITFM - PAYROLLL TITLE -
NO. NAME
    MOS. PERCENT OF PERCENT OF TOIAL
    RATE TIME SALARY TIME SALARY SALARY
12-435 ELECTRICAL ENGINEFQING
    PROFFSSOR & CHAIRMAN
OO1 FLOYOL CASH T 20,000 100 3,333 100 3,333 6,666
    PRIFFSSOR
OO3 STEPHEN F CRUMB
OO5 GHARLES W JILES
006 ALTJV W SISSOM
    ASSOCIATE PROFESSOR
OO7A ALFKEOR PGTVIN
OIO JOHN W MC COVNELL
012 K KKAn
    ASSISTANT PROFESSOR
1) 1 CHAKLES V SMITH \(\quad 13,500 \quad 100 \quad 2,250 \quad 100 \quad 2,250 \quad 49500\)
        INSTRUCTOR
OI3A WILLIAM E DILLDN
12.500 050 1.041 050 1,041 2,082
    23.201 23.201 46.402
```

SCHII:L IF EIVGINFEKING



Very truly yours,
Trande fonanem
Frank Harrison
President

Chancellor Charles A. LeMaistre
The University of Texas System
Austin, Texas 78712
Dear Chancellor LeMaistre:
The following docket for The University of Texas at Dallas is submitted for your approval and submission to the Board of Regents at its meeting in Austin, Texas on April 29, 1972.

RESEARCH AND OTHER ACADEMTC CONTRACTS: 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.
CONTRACTS AND GRANTS (Federal):

1. Grant No. NGL 44-004-130, by which the National Aeronautics and Space Administration, Headquarters, provided $\$ 80,000$ for the period April 1, 1972 through March 31, 1973, for research entitled "A Research Program in Support of NASA's Space Science", under the direction of Dr. Francis S. Johnson, Executive Director, Center for Advanced Studies.
2. Amendment No. 8, Contract NASr-198, by which the National Aeronautics and Space Administration, Headquarters, incorporated the final negotiated overhead rates for Fiscal Years 1964, 1965, 1966, 1967, and 1968. This was for research entitled, "To Develop and Evaluate Techniques and Instrumentation for the Measurement of Cosmic Radiation Anistropies", under the direction of Dr. K. G. McCracken, Professor, Division of Atmospheric and Space Sciences.
3. Supplement No. 7, Grant NGL 44-004-026, by which the National Aeronautics and Space Administration, Headquarters, provided an additional $\$ 90,000$, raising the total amount granted from $\$ 893,751$ to $\$ 983,751$, and extending the period of performance through March 31, 1975, for research entitled "Investigations into the Mechanisms and Rates of Stmospheric Mixing in the Lower Thermosphere", under the direction of Dr. Francis S. Johnson, Professor, Division of Atmospheric and Space Sciences, and Executive Director, Center for Advanced Studies.
4. Supplement No. 1, Grant NGR 44-004-120, by which the National Aeronautics and Space Administration, Headquarters, provided an additional $\$ 120,000$, raising the total amount granted from $\$ 75,000$ to $\$ 195,000$, and extending the period of performance through January 31, 1973, for research entitled "Rocket Studies of the Upper F Region", under the direction of Dr. William B. Hanson, Professor, Division of Atmospheric and Space Sciences.
5. Modification No. 7, Contract NAS 5-9444, by which the National Aeronautics and Space Administration, Goddard Space Flight Center, provided an addit-
ional $\$ 431$, raising the total amount of the contract from $\$ 73,312$ to $\$ 73,743$ and covering additional funds due resulting from negotiated indirect cost rates, for research entitled "Ion Mass Spectrometer (Experiment D) on Explorer 31," under the direction of Dr. John H. Hoffman, Associate Professor, Division of Atmospheric and

Space Sciences.
6. Revised Modification No. 03, Contract N00014-67-A-0310, Task Order 0004, by which the Office of Naval Research corrected the statement that overhead provisions are set forth in Section $E$ rather than Section $D$, as stated in the original modification. There is no change in the estimated cost of the research, entitled "Investigations of Some Topics in Numerical Mathematics", under the direction of Dr. T. N. L. Patterson, Division of Atmospheric and Space Sciences.
7. Contract No. F19628-72-C-0230, by which the Air Force Systems Division, Air Force Systems Command, provided $\$ 40,000$ for the period March 1, 1972 through February 28, 1973, for research entitled "Auroral Data Analysis", under the direction of Dr. W. J. Heikkila, Professor, Division of Atmospheric and Space Sciences.
8. Supply Allowance No. 5, FO2 GM41836-02, by which the National Institute of General Medical Sciences, Department of Health, Education and Welfare, provided $\$ 1,000$ for expenditures during the period October 1,1970 through September 30, 1971, in connection with the fellowship awarded Dr. Stephen L. Goldman, Research Associate, Division of Biology.
9. Grant No. AT 503, by which The Robert A. Welch Foundation provided $\$ 24,000$ for the period May l, 1972 through April 30, 1974, for research entitled "The Circular Dichroism of Oligonucleotides", under the direction of Dr. Donald M. Gray, Assistant Professor, Division of Biology.

## GIFTS TO THE UNIVERSITY OF TEXAS AT DALLAS



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.

## DONOR

Mr. J. Erik Jonsson
President
Excellence in Education Foundation
3300 Republic Bank Tower Dallas, Texas 75201

Mr. Blake Hamman
Continental Life Building
Ft. Worth, Texas 76102
Mr. Thornton Lomax, Jr. 4321 Republic National Bank Tower Dallas, Texas 75201

PURPOSE AND CONDITIONS
In support of and for use by
the Office of the President

Well logs and well completion cards for Geological Information Library of Dallas

Lots and plats for Geological \$ 8,221.05

1972-1973 THE UNIVERSITY OF TEXAS AT DALLAS CATALOG:
Approval is requested for the publication of the 1972-1973 The University of Texas at Dallas catalog as shown on the following pages DA-3 through DA-83.

Cover Page of Catalog - with picture and seal
THE UNIVERSITY OF TEXAS AT DALLAS

$$
1972-73
$$

## Inside Cover

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 PUBLICATION

Published by The University of Texas at Dallas, P.O. Box 30365, Dallas, Texas 75230

Page 1

THE UNIVERSITY OF TEXAS AT DALLAS
1972-73
CONTENTS


## INEORMATION DIRECTORY

```
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Housing
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Advice on Course Registration
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Transcripts of Records
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Adding and Dropping Courses
    Contact the Director of Admissions and Registrar
Location and Address
    Location--The 325-acre campus of The University of Texas at Dallas is
situated approximately two miles west of North Central Expressway (U.S. Highway
75) and one mile east of Coit Road. The campus fronts on Campbell Road where
the entrance to the campus is located. U.T. Dallas is in the City of Richardson
immediately north of the City of Dallas.
    Mailing Address--Post Office Box 30365, Dallas, Texas }7523
    Telephone--(214) 231-1471
```



THE UNIVERSITY OF TEXAS AT DALLAS

Calendar of the Long Session of 1972-1973

Fall Semester
(15 Class Weeks)

| August 31-September 1 | Thursday-Friday. Registration, orientation and advisement for the Fall Semester. |
| :---: | :---: |
| September 1 | Friday. Last day for registration without late registration charge. |
| September 4 | Monday. Labor Day. A holiday. |
| September 5 | Tuesday. Classes begin. |
| September 8 | 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 20 | Wednesday. Twelfth class day and the date on which the official enrollment count is taken. |
| September 29 | Friday. Last day for making application for a graduate degree. |
| October 2 | Monday. Last day for dropping courses with automatic grade of "Q". |
| November 22 | Wednesday. Last day for presenting final copy of the Master's Thesis or Doctoral Dissertation, approved by Committee, to the Dean of Faculties. |
| November 23-25 | Thursday-Saturday, inclusive. Thanksgiving holidays. |
| December 15 | Friday, Last class day. |
| December 19-22 | Tuesday-Friday. Fall Semester final examinations |
| December 22 | Friday. Graduation day. (No public exercises) |
|  | Spring Semester <br> (15 Class Weeks) |
| January 11-12 | Thursday-Friday. Advisement and registration for the Spring Semester. |
| January 12 | Friday, Last day for registration without late registration charge. |
| January 15 | Monday. Classes begin. |
| January 18 | 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. |
| January 30 | Tuesday. Twelfth class day and the date on which the official enrollment count is taken. |


| February 8 | Thursday. Last day for making application for a graduate degree. |
| :---: | :---: |
| February 9 | Friday. Last day for dropping courses with automatic grade of "Q". |
| April 2-7 | Monday-Saturday, inclusive, Spring vacation. (Easter: April 22.) |
| April 9 | Monday. Last day for presenting final copy of the Master's Thesis or Doctoral Dissertation, approved by Committee, to the Dean of Faculties. |
| May 4 | Friday. Last class day. |
| May 10-16 | Thursday-Wednesday, Spring semester final examinations |
| May 19 | Saturday. Commencement. (Public Exercises) |

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First Term (5 Class Weeks) - June 4-July . }1
Second Term (5 Class Weeks) - July 16-August 24
Double Term (10 Class Weeks) - June 4-August }2
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June 4 Monday. Registration. Students registering for any course on June 4 will register and pay fees for all other courses to be taken during the entire Summer Session.

June 5
June 7

June 9

June 18

June 19

July 4
July 10
July 12-13

July 11-16
July 16
July 17
July 19
July 20

July 30

July 30

August 21

August 23-24

August 25

Tuesday. Classes begin.
Thursday. Last day for adding courses.
Friday. Fourth class day and the date on which the official enrollment count is taken.

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

Tuesday. Last day for dropping First Term and Double Term courses with automatic grade of "Q".

Wednesday. Independence Day. A holiday.
Tuesday. Last class day for First Term courses.
Thursday-Friday. Final examinations for First Term courses.

Mid-Session vacation for Double Term courses. Monday. Registration for Second Term only. Tuesday. Classes begin for Second Term courses. Thursday. Last day for adding Second Term courses. Friday. Fourth class day and the date on which the official enrollment count is taken for Second Term courses.

Monday. Last day for dropping Second Term courses with automatic grade of " $Q$ ".

Monday. Last day for presenting final copy of the Master's Thesis or Doctoral Dissertation, approved by Committee, to the Dean of Faculties

Tuesday. Last class day for Second Term and Double Term courses.

Thursday-Friday. Final examination in Double Term and Second Term courses.

Saturday. Graduation day. (No public exercises).

## HISTORY

The University of Texas at Dallas was created in September, 1969, by Act of the $61 s t$ 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 institutuion. 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 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 120 sponsored research projects were underway in the various Research Divisions of The University of Texas at Dallas as of January $1,1972$. A significant building program is planned through 1980.

## ACADEMIC PLAN FOR 1972-76

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.


## The Faculties

At the heart of the academic program structure of The University of Texas at Dallas will be the faculties. As used here, the term faculty denotes the body of teachers and researchers who belong to a particular discipline, for instance the biology faculty. A faculty will ordinarily organize itself, designate a chairman, and serve as the voice of its discipline on the campus. It will not constitute a department, since there are to be no departments within the University. The chairman will be the convener of his faculty, and the spokesman for it.

In furtherance of these goals, it is planned that 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.

## Planned Undergraduate Programs

Through the implementation of the innovative academic arrangement spelled out in the preceding sections, and keeping in mind the four goals set out under The Undergraduate Programs section, The University of Texas at Dallas plans to offer the following undergraduate degree programs at the beginning of the 1975 academic year:

Bachelor of Arts:
Anthropology
Economics and Finance
History
Political Science
English
French
Geography
German
Psychology
Russian
Sociology
Spanish
Bachelor of Science:
Biology Geological Sciences
Business and Public Administration Mathematical Sciences*
Chemistry
Dietetics and Nutrition
Economics and Finance
Physics
Special Education
Educational Media
Speech Pathology and Audiology
*With emphasis in either mathematics, computer science, or statistics.

## 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 will reflect programmatic function rather than academic departmentalization. The Graduate Programs of the University will be 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 will be drawn from one or more faculties for the various Graduate Programs. Heads of Graduate Programs will be responsible for the academic, administrative, and fiscal aspects of Graduate Programs. These administrators will thus have the primary duty of seeing that their Graduate Programs attract good candidates, provide superior teaching, and produce graduates worthy of 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 newly organized Center for Advanced Studies.

## Continuing Graduate Programs

All course work and research activity for the Masters and Doctor of Philosophy degrees listed below are presently offered by The University of Texas at Dallas. Temporarily, with the approval of the Southern Association of Colleges and Schools, the degrees are awarded by The University of Texas at Austin. Upon accreditation by the Southern Association as a free-standing institution, The University of Texas at Dallas will award these degrees.

```
Geological Sciences (M.S., Ph.D.)
    Molecular Biology (M.S., Ph.D.)
    Physics (M.S., Ph.D.)
```


## New 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 or replicating 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. As an example, there is a demonstrable need for an interdisciplinary program aimed at providing trained personnel for industry and government in the field of environmental sciences. (M.S. and Ph.D. to be offered in Fall, 1973.) Such a program will involve intensive work in at least two of the natural sciences, as well as considerable work in such fields as management and social science.

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, the following graduate degree programs will be implemented in the Fall of 1972:

Chemistry (M.S.)<br>Management and Administrative Sciences (M.S.)<br>Mathematical Sciences (M.S., M.A.T.)

For detailed description of both continuing and new Graduate Programs, see the specific entry under Graduate Programs (Beginning page )

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.

## 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 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 of science. Additionally, for many of the current journals there are sets of older volumes covering an extended period of time. A recently acquired collection will form the nucleus of general library materials in all subject fields; also a large collection of scientific materials has been placed on permanent loan to The University by the Texas Research Foundation.

All collections are being expanded as quickly as possible. As new educational programs develop the library is continually adding new material in support of these programs. For example, a core collection in management and administration has been purchased in order to help support the University's new program in Management Sciences.

The University 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 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.

## 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 the divisions.

## COMPUTER SERVICES CENTER

The University of Texas at Dallas Computer Center is built around an IBM 360/50 and a wide range of peripheral equipment, including a 2314 Disk Facility, 3 tape drives, card readerpunch, printer and 2 plotters, a Calcomp 763 drum plotter and a Calcomp 835 microfilm plotter.

In addition to submitting programs at the Computer Center for processing, users have access through remote terminals located strategically around the campus. Use of these remote terminals under the APL and CPS interactive systems provides students and faculty the opportunity to expand the utility of their time in research.

Availability
The Computer Center is open to all inquiries concerning programing and computer utilization. Each inquiry is considered individually to determine the scope of desired operations and user qualification. The Computer Center staff has attained a high level of competence in specialized programming and operational efficiency, and is available to assist users upon request.

## Software

An extensive library of complete programs and sub-routines is available for Computer Center users. The Program Library has been assembled over the past four years to serve particularly the areas of scientific endeavor at The University of Texas at Dallas. Additionally, the Computer Center Program Library includes a large number of specialized programs accumulated through extensive cooperative efforts with academic institutions in the United States and throughout the World.

## User Seminars

Computer Center personnel conduct, two to four times a year, an Advanced Seminar Series in programming languages for the benefit of local and regional students, faculty, and other potential computer users.

## UNIVERSITY OF TEXAS (NORTH CENTRAL TEXAS) REGIONAL COMPUTER CENTER

The University of Texas Southwestern Medical School 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 innovative 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.

Procurement of equipment and construction of the Regional Center are in advanced stages. The center is expected to be completely operational by the Spring of 1972.

## STUDENT AFFAIRS

## In General

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.

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

## Arts and Humanities

series
An Arts and Humanities/ coordinated by a faculty group offers many and varied cultural activities to students on the campus, including art shows, lectures on matters of public interest, and musical events. A student group, in cooperation with the faculty and administration, has recently begun the University of Texas at Dallas Film Society which offers a wide range of film selections. These are shown on campus bi-weekly.

Dallas is a cosmopolitan city with a variety of entertainments. It has upwards of one hundred foreign restaurants. There are many cultural activities, as exempli.r fied by the existence here of the only theater designed by Frank Lloyd Wright. The Dallas Theater Center houses a permanent drama company. The Dallas Symphony Orchestra, founded in 1900 , is well known. In addition, a variety of musical and dramatic activities are associated with Southern Methodist University and the University of Texas at Arlington. There are several art museums, an aquarium, an excellent $z 00$, and a museum of natural history.

## Sports

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. Sports and recreation 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 $45^{\circ}$, and in August $85^{\circ}$. 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.

Dallas Committee for Foreign Visitors
The Dallas Community 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 their home and includes the student in family activities, particularly during the traditional holiday celebrations. The host family and the Committee members may be helpful in providing assistance in finding living accommodations for the student and providing general assistance and advice.

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.

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 to or from the campus. However, the Dallas Transit System does provide commuter service into the center of Dallas from the area adjacent to the Spanish Village Shopping Center located about three miles southwest of the campus.

## 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.

## Health Services

Because of the relatively small number of students presently on campus, the University of Texas at Dallas offers no on-campus health services to the students. However, some assistance in the area of health services is available. Many of the students enrolled at the University are considered employees of the University by virtue of having received a research assistantship. These students are included in the University's Workmen's Compensation insurance program. Employed students may also elect to participate in the Blue Cross - Blue Shield insurance programs offered by the University to its employees through the office of the Director of Personnel. All enrolled students may elect to participate in the student health program offered in cooperation with The University of Texas at Arlington. Information regarding this insurance program is available at registration through the Director of Student Services. Students participating in the student health insurance program may receive treatment by one of the physicians designated by the University's Workmen's Compensation insurance program and are not required to travel to the Arlington campus for treatment.

## Counseling Services

If problems arise concerning personal adjustment, students are encouraged to take up the matter with their Graduate Advisers or the Director of Student Services. Through cooperation with The University of Texas Southwestern Medical School at Dallas, students have access to counseling services available within the community upon referral. No resident counseling service is available on the University campus.

Student Government
Presently, there is not an official, organized student government on the campus. However, interested groups of students have formed in various ways to interact with faculty and the administration. A student committee is actively working on a constitution for an official student government organization. Presently, students are actively participating in virtually all facets of University affairs.

## SPECIAL ACTIVITIES

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

## Coordinator

Clark Foundation Sumer Program
The University of Texas at Dallas
Dallas, Texas 75230


#### Abstract

Closed Circuit Inter-University Television

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 participant institutions for inter-campus exchange. Additionally, courses are made available at many industrial sites, so that students may pursue advanced educational career objectives without leaving their industrial locations.

TAGER provides a unique opportunity for graduate students in North Central Texas. The number of credit courses carried over the TAGER television network now exceeds 100 each semester. Graduate students registered at The University of Texas at Dallas may take advantage of these selected course offerings depending upon their regular academic load.


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 lectures 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 their 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, Vernon's Texas Annotated Code, 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).

|  |  | NON-RESIDENTS |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | U.S. CITIZENS |
| SEMESTER | RESIDENTS |  |  | REGISTERED IN |
| HOURS | OF TEXAS | U.S. CITIZENS | FOREIGN STUDENTS | SPRING, 1971 |


| Long_Session |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: |
| 1 | $\$ 50.00$ | $\$ 40.00$ | $\$ 200.00$ | $\$ 0.00$ |
| 2 | 50.00 | 80.00 | 200.00 | 50.00 |
| 3 | 50.00 | 120.00 | 200.00 | 51.50 |
| 4 | 50.00 | 160.00 | 200.00 | 68.00 |
| 5 | 50.00 | 200.00 | 200.00 | 84.50 |
| 6 | 50.00 | 240.00 | 200.00 | 101.00 |
| 7 | 50.00 | 280.00 | 200.00 | 117.50 |
| 8 | 50.00 | 320.00 | 200.00 | 134.00 |
| 9 | 50.00 | 360.00 | 200.00 | 150.50 |
| 10 | 50.00 | 400.00 | 200.00 | 167.00 |
| 11 | 50.00 | 440.00 | 200.00 | 183.50 |
| 12 | 50.00 | 480.00 | 200.00 | 200.00 |
| 13 | 52.00 | 520.00 | 200.00 | 200.00 |
| 14 | 56.00 | 560.00 | 200.00 | 200.00 |
| 15 | 60.00 | 600.00 | 210.00 | 200.00 |

Summer Session - 6 Week Term

| 25.00 | 40.00 | 100.00 | 50.00 |
| ---: | ---: | ---: | ---: |
| 25.00 | 80.00 | 100.00 | 50.00 |
| 25.00 | 120.00 | 100.00 | 51.50 |
| 25.00 | 160.00 | 100.00 | 68.00 |
| 25.00 | 200.00 | 100.00 | 84.50 |
| 25.00 | 240.00 | 100.00 | 101.00 |
| 28.00 | 280.00 | 100.00 | 117.50 |
| 32.00 | 320.00 | 112.00 | 134.00 |
| 36.00 | 360.00 | 126.00 | 150.50 |

Refund of Registration and Tuition Fee for Students Withdrawing
Upon notification of official withdrawal from the Director of Admissions and Registrar; the business office shall make refund of tuition and fees as follows: (a) during the first week of class work of a semester, a refund of 70 percent of the applicable portion of the fee; (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 Eall semester grades, and who is required to withdraw because of failure in the work of the Fall semester, will have all of his registration and tuition fee for the Spring semester refunded.

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

## Laboratory Fee

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

## 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 depusit 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, which 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.

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 refunds of fees will not be allowed.

Group Health Insurance
A group health insurance plan is available to students and their dependents on an optional basis. Rates for health insurance coverage depend upon the family status of each individual student.

## Student Medical Examination

Until such time as an adequate health center can be established at The University of Texas at Dallas, each entering student will be required, at his own expense, to have completed a physical examination given by a licensed physician and to file immediately following notification of acceptance of his application for admission the results of the examination. Similar evidence of having received the required innoculations must be submitted with the medical examination. (See admission information)

Transcript Fee
A student shall pay a fee of $\$ 1.00$ for each official transcript.

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.

FINANCIAL AID

## General

Several sources of financial assistance to students are available, including parttime research assistantships, student loan funds, and partial tuition fee exemptions. Application forms for all financial aid are available in the Student Financial Aid Office (temporarily in the office of the Business Manager).

## Part-Time Employment

A limited number of part-time research assistantships are available.
The University has an approved College Work Study program that is funded through the Office of Education of the Health, Education, and Welfare Department.

## Student Loan Funds

Long term student loan funds are available:
National Defense 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 progran 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.

## 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. Such exemptions are available to students who are from needy families or residents of Texas who have served in the armed forces of the United States.

## ADMISSION TO THE GRADUATE PROGRAMS

Prospective and regular students seeking admission should write to the Director of Admissions requesting an application form, which must be completed and returned with official transcripts of all academic work beyond high school. Address inquiries to: Director of Admissions and Registrar, or to a specific Program Head, The University of Texas at Dallas, P. O. Box 30365, Dallas, Texas 75230.

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-point 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 Examinations Aptitude Test (see page __
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 (see page

## GRADE-POINT AVERAGE

An applicant with a $B$ average on all work of upper division (junior and senior) and graduate level previously taken has satisfied the minimum requirements of the Gradwate School in this regard. Some applications showing less than a $B$ average may nevertheless be accepted upon special recommendation of the Program Graduate Adviser.

## TRANSCRIPTS

A student may secure a photographic transcript of his record at a cost of one dollar. The term "transcript of records" is understood to refer to the recorded results of the student's work in the classroom. This statement will contain all the important facts pertaining to the student's admission, academic level, and scholarship. No partial or incomplete classroom records (for example, with failure omitted) will be given.

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 ky a fine of not more than $\$ 1,000$, and/or confinement in the county jail for a period not to exceed one year."

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 admissions to the Graduate School of The University of Texas at Dallas. Issued from the Educational Testing Service at Berkeley, California, 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 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:

## Institution

Code

The University of Texas at Dallas
R-6897-3

## ENGLISH REQUTREMENTS

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.

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. Physical examination by a licensed physician. To be official, the physician's findings must be recorded on the permanent medical history form mailed to prospective students by the Office of the Director of Admissions and Registrar.
2. A negative chest $X$-ray or a negative skin test for tuberculosis, dated not more than 90 days before registration.
3. 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. (Polio vaccine is not required for persons nineteen years of age or older.)
4. A minimum of 3 doses of diptheria/tetnus, with the last dose within 10 years. (Booster dose only after initial series - total adult type).

Effective beginning the Spring Semester of 1972, and continuing thereafter, new students (those not previously enrolled in the Summer or Fall Semesters of 1971) who have not completed the required immunizations at time of enrollment must complete them as soon as is medically feasible.

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 ${ }^{3}$ 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.

## 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 Graduate Record Examinations Aptitude Test score, 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 theseconditions 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 as a non-degree student. Such a student may take any course for which he has the prerequisites, provided he has the approval of the instructor and the Graduate Adviser. Students who qualify for admission are encouraged to enroll as degree students and pursue an advanced degree. Normally, an individual will not receive credit toward a graduate degree for courses taken as a non-degree student. Exceptions to this require approval of the Program Head and concurrence of the Dean of Faculties or his designate.

## 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 School. 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 on dissertation courses 909.

GRADES AND GRADE-POINT AVERAGE
Grades used are: A, B, C, F, CR or $S$ (credit or satisfactory), U (no credit or unsatisfactory), X (incomplete), Q (dropped course).

Grade points are computed on the following basis: A (4 points per semester hour), $B(3), C(2), F(0)$. The grades $C R, S, U, X$ and $Q$ are not counted.

The degree candidate is required to present an overall average of at least 3.0 at the end of his program of study. Only courses taken in graduate status at The University of Texas at Dallas are counted in the average.

For some courses the symbols $C R, S$, or $U$ are given. Courses taken on a Satisfactory - Unsatisfactory (S-U) basis are not computed in the grade-point average. No more than twenty percent of the hours submitted for any Master's Degree may be taken on an $\mathrm{S}-\mathrm{U}$ basis.

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 remain on the student's record.

The symbol $Q$ means that the student has dropped the course later than twelve (12) class days after starting the course but before the final examination period begins. (A "class day" is a day on which The University of Texas at Dallas holds classes.) This grade cannot be replaced by another grade, but the student is permitted to take the course a second time.

## COURSE LOAD

The minimum course load for a graduate student to be considered full-time during the long session is nine (9) semester hours. The normal course load for a graduate student during the long session is twelve (12) semester hours; the maximum is fifteen (15) semester hours. The minimum course load for a graduate student to be considered full-time during the Summer session is six (6) semester hours. The normal course load for a graduate student during the Summer session is eight (8) semester hours; the maximum is ten (10) semester hours. Registration in excess of fifteen (15) semester hours during the long session, or ten (10) semester hours during the Summer session must have the recommendation of the Graduate Adviser and approval of the Dean of Faculties or his designate 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 grade-point average for all graduate courses taken in a given semester.

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 his Graduate Adviser that he is on academic probation. A student on academic probation who receives a gradepoint average lower than 3.0 in the following semester will be subject to dismissal.

## REGISTRATION DAYS

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

## REGISTRATION FOR COURSES

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

## 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.

## 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 signed Drop Card signed by the instructor to the office of the Registrar, indicating a grade of $Q$ or $F$.
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

A11 students must be in residence at the University of Texas at Dallas for at least two semesters to qualify for a University of Texas at Dallas degree. A student must also 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
Courses done by correspondence 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 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 Dean of Faculties. In cases where such transfer is approved, the student must still meet the residence requirement of two full semesters.

TIME LIMITS
Master's Degree: 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 Dean of Faculties or his designate, upon recomendation of a particular program.

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

## PROCEDURES AND REQUIREMENTS FOR GRADUATE DEGREE CANDIDATES

## THE MEANING OF GRADUATE EDUCATION

The principal role of a university is to focus on the growth of ideas. From the dawn of mankind the quest for knowledge has been fundamental to the human spirit. It is hardly surprising, then, that scholars should band together to form universities, to pass their knowledge on to others, and to advance the frontiers of knowledge.

The graduate programs of a university contain some of the institution's best faculty and students. The true scholars-both faculty and students-are bound together by their love of learning. The quest for knowledge leads along a difficult path. A scholar must follow it with a spirit of adventure and a love of exploring the unknown. He must exert a tremendous effort to attain competence in his field; he must have the mental discipline to explore topics which may be dull, routine, or difficult; and he must be able to find his way through a forest of petty details. Any attempt to circumvent the difficulties involved in learning leads to mediocrity; there are no short cuts to becoming a scholar.

COMMITTEE ON GRADUATE STUDIES
Each Program has a Committee on Graduate Studies consisting of at least three faculty members. This committee 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 Comittee on Graduate Studies of a particular Program, who is a tenured faculty member, serves as personal adviser (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 Dean of Faculties or his designate.

## SUPERVISING COMMITTEE

After a Supervising Professor has been selected, the Dean of Faculties, upon the recommendation of the Program Faculty, will appoint a Supervising Committee normally consisting of four members drawn chiefly from the candidate's major area (in addition, for Ph.D. candidates, 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.

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

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 and Supervising Comittee for the student (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 Dean of Faculties, during the first thirty calendar days of the final semester or first six days of the final summer term (a) a Diploma Name Card (this must be refiled in case of postponement), (b) an Application for Candidacy, if not filed in an earlier semester, and (c) an official transcript of all work done at The University of Texas at Dallas.
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 Dean of Faculties for final approval two bound final copies of the thesis, along with certification by the Supervising Committee that the student has completed all required work. These items must be submitted no later than the date specified by the Dean of Faculties.
9. Satisfaction of any special requirements of individual Academic Programs, most of which are outlined in the Program descriptions.

## MASTER ${ }^{\text { }}$ 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 Dean of Faculties.

The following procedure outhines, in approximate chronological order, the steps to be followed by students seeking the Doctor of Philosphy 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 other relevant language.
5. Passing of any Preliminary Examination required by the individual Program.
6. Selection of a Supervising Professor and Supervising Committee for the student (see above).
7. Admission to candidacy by satisfactory performance in an oral Qualifying Examination conducted by members of the Program faculty and open to all other 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 Dean of Faculties, during the first fifteen calendar days of the final semester or first six days of the final summer session (a) a Diploma Name Card (this must be refiled in case of postponement), (b) an Application for Candidacy, if not filed in an earlier semester, and (c) an official transcript of all work done at The University of Texas at Dallas.
9. Submission of a dissertation to the student's Supervising Committee not later than 40 days before the first day of final examinations.
10. Request for the final oral examination, a public presentation, scheduled formally through the Office of the Dean of Faculties 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 Final Oral form signed by the Supervising Committee to the Office of the Deanof Faculties immediately following completion of the final oral examination. This form certifies that the student has completed the work assigned by the committee; passed all examinations required by the program, including the final oral; 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 Dean of Faculties Office not later than thirty days before the end of the semester or summer session in which the degree is to be awarded: (a) an unbound copy of the dissertation, signed by the committee; (b) payment of fee for microfilm reproduction to The University of Texas at Dallas in addition to costs for binding one copy for the University Library; (c) official transcript of all graduate work; (d) copyright disclaimer; (e) survey of earned doctorate; (f) microfilm agreement. All necessary forms may be obtained at the Office of the Dean of Faculties.
13. Satisfaction of any special requirements of individual Academic Programs, most of which are outlined in the Program description.

## FOREIGN LANGUAGE REQUTREMENT

1. All doctoral programs in the Graduate Programs have a minimum requirement of proficiency in one relevant foreign language for admission to candidacy. Specific requirements beyond this minimum are stated under each Program.
2. The minimum requirements in foreign languages can be satisfied (a) by an examination approved by the Dean, or (b) by completion of two academic years of study of the language at an approved college with a grade of at least "B", either before or after entering the Graduate Program.
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 sixty calendar days before the prospective date for the awarding of the 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 Comittee have at least thirty calendar days 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 FINAL ORAL

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 giving the final oral examination on the dissertation and on such other parts of the student's program as the committee may determine.

## FINAL ORAL EXAMINATION (PUBLIC DEFENSE OF DISSERTATION)

Until the final oral examination 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 final oral; (3) completed a dissertation which give 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 Dean of Faculties to University Microfilms, Ann Arbor, Michigan, for reproduction. The student is required to pay the cost of binding.

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. 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 PROGRAM IN CHEMISTRY (M.S.) 

Associate Professors: R.A. Caldwell (Acting Head), D. Rapp, H. Werbin<br>Assistant Professors: L. Melton, C. Parx

## 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. Areas of research specialization will not include Inorganic and Analytical Chemistry in 1972-73, but faculty additions prior to September 1973 will make these available in subsequent years. 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.
R.A. Caldwell - Mechanisms of organic photochemical reactions. Photocycloadditions and fragmentations. Applications to synthesis. Instrumental techniques.
L.A. Melton - Experimental studies of electronic, vibrational and rotational energy transfer as studied by optical pumping with a tunable dye laser.
C.A. Parr - Theoretical reaction dynamics. Atomic and molecular interaction potentials, extension of transition state rate theories, classical trajectory studies. Computer animation studies.
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.
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 mass
spectrometer is projected for purchase in 1973. 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 Universitywide facilities.

## 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.

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 his 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 Degree Candidates", page $\qquad$ .

## Chemistry Courses

Course
500

511

513

## Description

Organic Chemistry (3 semester hours) Werbin Chemical bonding, stereochemistry, physical properties, reactions, and mechanism. Characterization by spectroscopic techniques. Primarily for Biology graduate students.

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.

Chemical Dynamics (3 semester hours) Parr
Experimental methods for reaction rates. Theory of unimolecular, bimolecular, and termolecular reactions. Transition state theory and collision theory. Prerequisite: Chemistry 511.

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.

## Course

Description
Thermodynamics and Kinetic Theory (3 semester hours) Parr Classical thermodynamics with particular emphasis on statistical mechanical interpretations. Solutions, non-ideal gases, non-P-V-T variables. Chemical and phase equilibria. Kinetic theory, molecular collisions, velocity distributions, transport properties. Prerequisite: Chemistry 511.

31 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.

Physical Organic Chemistry ( 3 semester hours) Caldwell
Reaction mechanisms. Techniques for determining reaction mechanisms. Reactive intermediates. Applications to synthesis. Prerequisite: Chemistry 531.

Synthetic Organic Chemistry ( 3 semester hours)
A survey of modern synthetic methods in organic chemistry.
Prerequisite: Chemistry 531 (Not offered 1972-73).
Advanced Inorganic Chemistry (3 semester hours) Melton Atomic structure; correlated diagrams, united and separated atoms; molecular orbital theory for 1 st and 2 nd row atoms, introduction to structure and bonding of transition metals, crystal field theory, ligand field theory.

Advanced Inorganic Chemistry ( 3 semester hours) Melton Crystals, detailed study of transition metal chemistry; survey of structure, reactivity and synthesis by periodic table group; additional topics at discretion of instructor.

Instrumental Analysis (3 semester hours)
A survey of electronic and instrumental techniques used in modern chemistry. Lecture only; laboratory skills may be gained by registering in an appropriate Research Course.

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.

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.

## Description

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

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. (Not offered 1972-73).

Natural Products (3 semester hours)
Chemistry and synthesis of naturally occurring and biologically active molecules. (Not offered 1972-73). Prerequisite: Chemistry 533.

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.

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

Research and Literature Seminar (2 semester hours) Staff
Student presentation and critical evaluation of independent work and of the recent literature. May be repeated.

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

Research in Theoretical Chemistry (2 to 12 semester hours) Rapp, Parr
Research in Organic Chemistry (2 to 12 semester hours) Caldwell
Research in Inorganic Chemistry (2 to 12 semester hours) (Not offered 1972-73).

Research in Analytical Chemistry (2 to 12 semester hours) Staff
Research in Biochemistry (2 to 12 semester hours) Werbin
Thesis (3 semester hours) (May be repeated for credit)

Professors: A.L. Hales (Head), C.E. Helsley, M. Landisman
Associate Professors: M. Halpern, E. Pessagno
Assistant Professors: J.L. Carter, W.I. Manton, R.M. Mitterer, D.C. Presnall, P.A. Scholle, J.B. Urban

Undergraduate or Master's work in either chemistry, geology, mathematics, physics, or engineering is acceptable. Deficiencies in undergraduate geology will be offset by strength in order sciences and mathenatics. 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).
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 both for admission to candidacy and for granting degrees for the M.S. and Ph.D. are stated under "General Procedures and Requirements for Degree Candidates".

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 these must be approved by the student's Supervisory Committee before the thesis defense and the submission of the thesis to the University.

## Geological Sciences (continued)

## 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 $360 / 50$ computed which is available for student computing. Other facilities at Southern Methodist University are available to students.

Geological Sciences Courses

GENERAL

Course

500

Description

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.

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.

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.

Use of the Computer (3 semester hours) Roberts
An introduction to computer languages and programming as applied to geological problems. Laboratory sessions are included.

Field Geology (4 semester hours) Helsley, Manton, Halpern, Scholle
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.
Description

Field Geology - Summer Camp (6-12 semester hours) Staff. (Note: Students are responsible for all personal expenses related to field trips.)

## PALEONTOLOGY

Invertebrate Paleontology (3 semester hours) Pessagno Studies of the morphology, evolution, classification, and paleocology of invertebrates important in the fossil record. (two lectures and two labs).

Principles \& Methods of Paleontology (3 semester hours) Urban, Pessagno
Collection, processing, and microscopic techniques in paleontology

Micropaleontology I (4 semester hours) Pessagno
Introduction to the study of invertebrate microfossils with emphasis on the Foraminiferida, Ostracoda, and Radiolaria (Two lectures and one lab).

Palynology I (4 semester hours) Urban An introduction to palynology. Morphology, systematics and stratigraphic distribution of Mesozoic and Cenozoic palynomorphs, including spores, pollen, dinoflagellates, and hystrichospheres.

Paleoecology (3 semester hours) Urban Relations between sediment type, organism distribution, diagenesis, and the historical continuity of community organization.

Micropaleontology II (4 semester hours) Pessagno Morphology, phylogeny, and classification of Mesozoic and Cenozoic planktonic Foraminiferida. (Two lectures and one lab).

Palynology II (4 semester hours) Urban
Morphology, systematics and stratigraphic distribution of Paleozoic palynomorphs, including spores, pollen acritarchs, chitinozoa, and microscopic algae.

Seminar in Paleontology (3 semester hours) Pessagno
Seminar in Palynology (3 semester hours) Urban
Research in Paleontology (1-12 semester hours) Pessagno, Urban May be repeated for credit.

## SEDIMENTARY - STRATIGRAPHY

Course
541


Description
Biostratigraphy (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 paleontology.

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

Introductory Sedimentology (3 semester hours) Scholle, Mitterer Physical and chemical aspects of sedimentation.

Sedimentary Petrography I (4 semester hours) Scholle 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.

Sedimentary Petrography II (3 semester hours) Scholle 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.

Sedimentary Petrography III - Petrography of Carbonate Sediments ( 4 semester hours) Scholle
Description, classification and genesis of carbonate grains as seen in thin-section and hand samples. Includes the microscopic identification of calcareous fossils.

Seminar in Stratigraphy (3 semester hours) Urban, Pessagno
Seminar in Sedimentation (3 semester hours) Staff
Research in Biostratigraphy-Paleontology (1-12 semester hours) Urban, Pessagno

Research in Stratigraphy-Sedimentology (1-12 semester hours) Staff

## GEOCHEMISTRY

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

Geological Sciences (continued)

| Course | Description |
| :---: | :---: |
| 552 | Environmental Geochemistry (4 semester hours) Carter Geochemistry of the sedimentary environment including atmosphere, hydrosphere and biosphere and the effects of man on the environment. |
| 553 | Sedimentary Geochemistry (3 semester hours) Mitterer Organic and inorganic aspects of the sedimentary environment including sediments, water and organisms. |
| 554 | Instrumental Techniques in Geochemistry-Petrology (4 semester hours) Carter <br> Modern instrumental techniques including atomic absorption spectrophogometry, mass spectrometry, electron microprobe spectrophotometry, mass spectrophotometry, scanning electron microscopy, and X-ray diffraction and sample preparation. |
| 555 | Electron Microprobe Techniques ( 4 semester hours) Carter Introduction to principles and procedures in scanning electron microprobe spectrophotometry including energy dispersive analysis. |
| 650 | 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. |
| 653 | 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. |
| 654 | Geochronology ( 4 semester hours) Halpern <br> Uranium-lead, rubidium-strontium, and potassium-argon radiometric age dating as applied to the solution of geologic problems. |
| 655 | 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. |
| 657 | Seminar in Isotope and Trace Element Geochemistry (3 semester hours) Manton <br> Discussion of the application of radiogenic isotopes and trace element fractionation patterns to the problem of the origin of igneous rocks. |
| 658 | Seminar in Geochemistry (3 semester hours) Staff |
| 659 | Seminax in Geochronology (3 semester hours) Halpern |
| 950 | Research in Geochemistry ( $1-12$ semester hours) Staff May be repeated for credit. |

## Geosciences Courses (continued)

Course Description

GENERAL GEOPHYSICS

Applied Geophysics I (3 semester hours) Landisman Techniques and interpretation of seismic, gravitational, magnetic, and electric prospecting methods as applied to exploration of the curst.
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.
Potential Methods in Geophysics (3 semester hours) Hales Potential theory, emphasizing application to geophysical problems, such as gravity, magnetics, and heat flow.
Instrumental Techniques in Geophysics (4 semester hours) Hales A discussion of the instruments commonly used in investigating the interior of the Earth.

Applied Geophysics II (3 semester hours) Landisman Continuation of topics in Applied Geophysics I. (Permission of instructor required).
Seminar in Rock Magnetism (3 semester hours) Helsley
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.
Seminar in Electromagnetic Sounding (3 semester hours) Landisman
Seminar in Paleomagnetism (3 semester hours) Helsley
Current topics in paleomagnetism and their relation to geology and geophysical applications.
Research in Geophysics (1-12 semester hours) Staff May be repeated for credit.

## SEISMOLOGY

Geosciences Courses (continued)

| Course | Description |
| :---: | :---: |
| 693 | Physics of the Interior of the Earth II (3 semester hours) Hales Continuation of 692 . |
| 695 | Theoretical Seismology I (3 semester hours) Landisman <br> Background of elastic wave theory. Mathematical and physical basis, fundamental concepts. Must be taken concurrently with 697. Permission of instructor required. |
| 696 | Theoretical Seismology II (3 semester hours) Landisman Continuation of theoretical basis for elastic wave propagation, dispersion, generation, and attenuation. Must be taken concurrently with 698. Prerequisites: Theoretical Seismology I \& Seismological Literature I. |
| 697 | Seismological Literature I (3 semester hours) Landisman Study of selected references illustrating important ideas related to the propagation, dispersion, generation and attenuation of elastic disturbances. Must be taken concurrently with 695. Permission of instructor required. |
| 698 | Seismological Literature II (3 semester hours) Landisman Continuation of study of selected references illustrating important concepts in elastic waves. Must be taken concurrently with 696. Prerequisites: Theoretical Seismology I and Seismological Literature I. |
| 699 | ```Seminar in Seismology (3 semester hours) Staff Discussion and review of literature on selected topics in seismology.``` |
| 990 | Research in Seismology (1-12 semester hours) Staff May be repeated for credit. |
| 908 | Thesis (3 semester hours) May be repeated for credit. |
| 909 | Dissertation (3 semester hours) May be repeated for credit. |

Geosciences Courses (continued)
Course Description

## PETROLOGY-MINERALOGY

Advanced Mineralogy (4 semester hours) Carter Optical, X-ray and electron microprobe studies of rock-forming minerals.

Introduction to Petrology ( 4 semester hours) Presnall, Carter Igneous and metamorphic petrology for graduate students not specializing in petrology. Topics include use of petrographic microscope, mineralogy, crystallography, and discussion of igneous and metamorphic processes in light of recent concepts of sea floor spreading.
Thermodynamics and Phase Equilibria ( 3 semester hours) Presnall Application of thermodynamics to petrologic problems, open and closed systems, pressure-temperature-composition phase diagrams, pressure temperature projections of multicomponent systems using Schreinemaker's rules, methods of deducing paths of crystallization and fusion, calculation of phase diagrams from thermodynamic data. Prerequisite: Physical chemistry.

Advanced Petrology (3 semester hours) Presnall
Origin of igneous and metamorphic rocks in light of recent theoretical, experimental, and field studies, facies, concept, petrology of the crust and upper mantle, basalt, granite, and andesite genesis. Prerequisite: Thermodynamics and phase equilibria.

Seminar in Petrology ( 3 semester hours) Staff
Research in Petrology (1-12 semester hours) Staff May be repeated for credit.

> STRUCTURAL GEOLOGY - TECTONICS

Structural Geology (3 semester hours) Manton Intermediate Level

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.

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

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

Petroleum Geology (3 semester hours) Scholle, Mitterer, Urban, Ourside 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.
Mechanics of materials, development of rock fabrics, development
of basins and mountain systems with particular emphasis on those
of the North American Continent.

Marine Geology (3 semester hours) Scholle, Hales
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.

Seminar in Tectonics (3 semester hours) Helsley
Discussions of selected topics in major features of the earth, such as sea-floor spreading, plate tectonics, development of island arcs, and deformation of mountain systems.

Researsh in Structural Geology-Tectonics (1-12 semester hours) Helsley
May be repeated for credit

# GRADUATE PROGRAM IN MANAGEMENT AND ADMINISTRATIVE SCIENCES ( M.S. ) 

Professors: L. H. Smith, H. F. VanZandt

Lecturer:
E. E. Payne

Successful management and administrative 'problem solvers' must (1) have a good foundation in the basic disciplines (e. g., economics, mathematics, etc.) which are applicable in management and administration; (2) possess a keen understanding of the basic functions (e. g., accounting, marketing, production, etc.) involved in management and administration; (3) be skilled in both the theory and applications to management and administration of the partially mathematical sciences (e. g., statistics, operations research, computer sciences, etc.); (4) be adept at applying the basic aspects of the behavioral sciences (e. g., psychology, anthropology, etc.) to problems in management and administration; and (5) possess the ability to utilize in innovative and creative ways the above four attributes in a "systems" fashion.

Prerequisites will be set so that an individual entering the program not only will be well grounded in mathematics, computer programming, and the logic of algorithmic processes, but also will possess an ability to read rapidly and comprehend effectively as well as have a good capability in English grammar and composition.

Beginning with these prerequisites, an individual 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 wellstructured 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 and administration, management of financial institutions, management for the delivery of health services, 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 student will be (1) rigorously grounded, (2) application-oriented but theoretically-capable, and (3) motivated toward and capable of "problem solving."

For detailed description of the entire Program, see the Supplement forthcoming in Summer, 1972. A 48 -hour Program will be developed from the following 600level courses and appropriate electives to be described in the Supplement.

Management and Administrative Sciences Courses
Course
Description
511 Mathematics for Management Sciences I (3 semester hours) Elementary mathematics including basic elements of differential and integral calculus and relevant topics from advanced calculus with specific applications in management and administrative sciences.

Mathematics for Management Sciences II (3 semester hours) Elementary mathematics including linear and matrix algebra and relevant topics from difference and differential equations with specific applications in management and administrative sciences.

| 521 | Algorithmic Processes (3 semester hours) <br> An introduction to algorithmic processes and computer sciences with special attention to problems in management and administrative sciences. |
| :---: | :---: |
| 611 | Quantitative Management Sciences I (3 semester hours) An introduction to the basic theory and applications in management and administrative sciences of statistics and operations research. |
| 612 | Quantitative Management Sciences II (3 semester hours) Continuation of 611. |
| 613 | Quantitative Management Sciences III (3 semester hours) Continuation of 612 . |
| 631 | Accounting I (3 semester hours) <br> Basic, managerial, and cost accounting with statistical and operations research applications. Institutions of interest will not be restricted to business and industrial firms. |
| 632 | Accounting II (3 semester hours) Continuation of 631. |
| 641 | Finance I (3 semester hours) <br> Introduction to applied economics and finance, including aspects of both microeconomics and macroeconomics. Emphasis will be given to managerial aspects of microeconomics with business and finance flavor, as well as applications of statistics and operations research in finance. |
| 642 | Finance II ( 3 semester hours) Continuation of 641. |
| 651 | Management Systems I (3 semester hours) <br> An introduction to management information systems, including basic cybernetics and systems theory with major emphasis on data storage, manipulation and retrieval. |
| 652 | Management Systems II (3 semester hours) <br> Continuation of 651 with extensions to the study of design, analysis, and synthesis of operating systems: marketing, production (including service operations), financial, etc. |
| 653 | Management Systems III (3 semester hours) <br> The study of management systems in various institutional settings. Case-flavored quantitative studies of statistics and operations research applications in the various institutions will be included. |
| 661 | Behavioral Management Science ( 3 semester hours) <br> Introduction to behavioral science, including organization theory and human motivation and behavior. |
| 671 | Readings in Management I (3 semester hours) <br> Integrated reading seminar in market, production, value theory, sociology, psychology, computers in society, organization, decision making, management-policy, communication, and other topics. |
| 672 | Readings in Management II (3 semester hours) <br> An integrated reading seminar involving in-depth reading in various type business and public institutions, social problems, and the interactions between the two sets of information. |

## Professors: I. Ozsvath, W.A. Rindler, I. Robinson

## Associate Professor: J.E. Midgley

The need for applied mathematics in 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, beginning with a Master's program. The range of courses offered initially will cover a minimal but basic and respectable field; statistics, computer science, and applied analysis (differential equations, numerical methods, etc.). This could lead to careers in any of these three fields, but it could also lead to work in physics, envirommental 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.

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 program, essentially in applied mathematics, with options whereby the student may pursue special interests in applied mathematics, computer science, statistics, or operations research. This is not to say that courses (and eventually options) in pure mathematics will not be available, for such courses provide essential theoretical training for any mathematician, regardless of his particular goals. The present progran will train the student in the use of the tools of the mathematical sciences to solve problems in the other sciences (physics, biology, chemistry, geology, economics, environmental sciences) as well as in the management, administrative, and social sciences.

For a detailed description of the entire Program, see the Supplement forthcoming in Summer, 1972.

Mathematical Sciences Courses

Course Description
511 Basic Applied Mathematics I (3 semester hours) An introduction to elementary algebra including matrices, determinants, and vector spaces.

512
Basic Applied Mathematics II (3 semester hours)
Introduction to complex variables including analytic functions, conformal mappings, contour integrals and the theory of residues.

Modern Algebra I (3 semester hours)
Study of modern algebra involving groups, rings, and fields.
Modern Algebra II (3 semester hours
Continuation of 513

| Mathen | es Program (continued) |
| :---: | :---: |
| Course | Description |
| 515 | ```Modern Analysis I (3 semester hours) Introduction to modern analysis involving formal set theory, elementary topology and Lebesque theory.``` |
| 516 | Modern Analysis II (3 semester hours) Continuation of 515 |
| 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' Vectors and Matrices; Probability and statistics. (Previous exposure to most of the topics is assumed.) (Same as Physics 501) |
| 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; group representations. (Normally follows 501) (Same as Physics 502) |
| 613 | Numerical Methods I (3 semester hours) <br> 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 inverstions. |
| 614 | Numerical Methods II (3 semester hours) Continuation of 613 |
| 615 | Differential Equations I (3 semester hours) <br> The theory of differential equations with emphasis on modern methods of solution. |
| 616 | Differential Equations II (3 semester hours) Continuation of 615 |
| 621 | Computer Science I (3 semester hours) <br> The theory of computer science, computers, and algorithmic processes. |
| 622 | Computer Science II (3 semester hours) Continuation of 621 |
| 623 | Computer Languages I (3 semester hours) <br> A study of machine languages and various programming languages. |
| 624 | Computer Languages II (3 semester hours) Continuation of 623 |
| 625 | Advanced Computer Science (3 semester hours) Advanced topics in computer science. |

Mathematical Sciences Program (continued)

| Course | Description |
| :---: | :---: |
| 631 | Statistical Inference I (3 semester hours) |
|  | Introduction to Statistical Inference |
| 632 | Statistical Inference II (3 semester hours) |
|  | Intermediate Statistical Inference |
| 633 | Experimental Design 1 ( 3 semester hours) |
|  | Introduction to Experimental Design |
| 634 | Experimental Design II (3 semester hours) |
|  | Intermediate Studies in Experimental Design |
| 635 | Sampling I (3 semester hours) |
|  | Introduction to sampling theory and techniques. |
| 636 | Sampling II (3 semester hours) |
|  | Intermediate study in sampling and sampling techniques. |
| 908 | Thesis (3 semester hours) (may be repeated for credit) |

GRADUATE PROGRAM IN MOLECULAR BIOLOGY (M.S., Ph.D.)

Professors: H. Bremer, R.C. Clowes (Head), W. Haxm, D.L. Harris, J. Jagger, D.J. McCorquodale, C.S. Rupert.<br>Associate Professors: E.W. Guttes, H. Gutz, D.A. Lang, H. Werbin<br>Assistant Professors: R.G. Cutler, D.M. Gray, J. Kemper, M.H. Patrick, P. Witonsky

## 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 that show originality in research; it prepares them for certain roles in industry, research positions in governmental laboratories, and academic careers.

## PROGRAMS

First-year students will normally complete a body of Core Courses that emphasize fundamentals in quantitative biology, biological chemistry, physical chemistry of macromolecules, molecular genetics, and ce 11 physiology. Students may then proceed to advanced course work in any of the four general areas of Biological Chemistry, Genetics, Biophysics, and Cell Physiology. 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 protein and nucleicacid 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; 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, a Spinco Model E analytical ultracentrifuge and several Spinco preparative centrifuges, a Joyce-Loebl microdensitometer, a Hewlett-Packard desk computer, a Coulter counter, a variety of electrophoresis units, a Beckman amino-acid analyzer, 200-1iter and 10-1iter fermentors, a batch lyophilizer, a 150-kilovolt X-ray machine, several planchet counters, five scintillation counters, a gas chromatograph, and many spectrophotometers (Gilford, Zeiss PMQ, Cary recording, Perkin-Elmer infrared, Perkin-Elmer recording spectrofluorimeter, Aminco-Chance duochromator, and BonetMaury biospectrophotometer). A Cary spectrosystem for circular dichroism studies has recently been interfaced with a computer and is now operational. Arrangements for use of nuclear-magnetic-resonance facilities can be made.

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 Library and Computer Center (see "General Information").

## PROCEDURES FOR DEGREE CANDIDATES

For full participation in the graduate program in Molecular Biology, the student ideally should have a solid background in calculus, general physics, physical and organic chemistry, and general biology. Entering students may not have this complete background. Prospective students should therefore expect to take some additional course work in their first year or in the summer immediately preceding.

Students entering in September will be requixed to take a Preliminary Examination in January of their second year if at least three lecture Core Courses have been completed. (Students entering in January will take the Preliminary Examination in September of the following year.) Upon satisfactory completion of the Core Courses, and at least satisfactory performance in the Preliminary Examination, the student will enter either an M.S. program or a Ph.D. program. At that time, a Supervising professor will be appointed for each student, based upon mutual agreement between student and faculty. The Dean of Graduate Studies will then set up a Supervising Committee, with the Supervising Professor as chairman, which will oversee the research and thesis work of the student and will help him plan his Elective Course Curriculum. The Supervising Committee will normally have four faculty members and, for Ph.D. candidates, one or more members from an academic institution other than The University of Texas at Dallas.

Specific requirements for M.S. degree. Requirements for admission to candidacy and for granting of the Master of Science degree include the normal ones (see "Procedures and Requirements for Graduate Degree Candidates", page __ ), plus satisfactory performance on the Preliminary Examination (see above). The thesis 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 admission to candidacy and for granting of the Doctor of Philosophy degree include the normal ones (see "Procedures and Requirements for Graduate Degree Candidates", page $\qquad$ ), plus superior performance on the Preliminary Examination (see above).

## Molecular Biology Courses <br> Core Curriculum

Course Description
501 Introduction to Quantitative Biology (3 semester hours) Jagger, Cutler, Patrick
An introduction to the quantitative approaches used in modern molecular biology, biochemistry, and biophysics. The principal function of the course is to provide training in quantitative problem solving in biology. (Prerequisite: calculus).

510 Biological Chemistry (4 semester hours) McCorquodale, Harris, Witonsky Chemistry and metabolism of cellular constituents: proteins, nucleic acids, carbohydrates, lipids, vitamins, and cofactors.

520
Molecular Genetics (5 semester hours) Bremer, Cutler, Kemper Molecular approach to structure, replication, mutation, and phenotypic expression of genetic material of viruses, prokaryotes, and eukaryotes.

| Course | Description |
| :---: | :---: |
| 530 | Macromolecular Physical Chemistry (4 semester hours) Lang, Gray, Rupert <br> Analysis of the nature and properties of macromolecules: interaction with radiation, thermodynamics of macromolecular solutions, transport processes, conformations of polymers, polyelectrolytes, denaturation, macromolecular associations. (Prerequisite: 501 or equivalent.) |
| 540 | ```Cell Physiology (4 semester hours) Harris, Guttes Molecular organization and function of cells and subcellular organelles; membranes and transport processes; excitation and response; regulation of metabolism; chromosome structure.``` |
| 550 | Methods in Molecular Biology (3 semester hours) Staff Individual laboratory instruction in biological, biophysical, and biochemical techniques. Normally taken for four semesters. |

## 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 his Graduate Advisor and the course instructor. Some courses may be taken for credit at nearby universities, if similar approvals are obtained.

Course
Description
Science and Human Values (I semester hour) Witonsky and 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 problems, and the responsibility of the scientist.

## Advanced Study

Work is offered beyond the Core Curriculum in four major areas that parallel the four lecture-type Core Courses. Each area provides elective courses, advanced colloquia, and dissertation opportunities.

The elective courses will be offered on a systematic rotation over several years, permitting the student to select a course program appropriate to his specialty and interests. In 1972-73 it is expected that about two elective courses will be offered each semester.

## Topics in Biological Chemistry

Bremer, Cutler, Gray, Gutz, Harris, McCorquodale, Werbin, Witonsky

| Course | Description |
| :---: | :--- |
| 611 | Macromolecular Biosynthesis ( 3 semester hours) <br> Mechanisms of DNA, RNA, and protein biosynthesis by viruses, bacteria, <br> and eukaryotes. |

612 Regulation of Biosynthetic Pathways (3 semester hours) Mechanisms that regulate the output of various metabolic pathways -allostery, feedback inhibition, repression, enzyme half-life, etc.

Nucleic Acids (3 semester hours)
Chemical and physical properties of nucleic acids and their constituent nucleotides, nucleosides, sugars, and bases.

614 Proteins (3 semester hours)
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.

615 Enzymology (3 semester hours)
The development of enzyme kinetics from basic principles: activation, inhibition, cooperativity, pH , ionic strength, temperature effects; reaction mechanisms; prosthetic groups and active sites.

Industrial Microbiology (3 semester hours)
Typical and potential uses of microorganisms in industry; techniques for large-scale growth of microorganisms.

619
Colloquium in Biological Chemistry (3 semester hours)

## Topics in Genetics

Bremer, Clowes, Guttes, Gutz, Harm, Kemper, McCorquodale

## Course Description

621 Phage Genetics (3 semester hours)
Phage recombination: lysogeny; mutation; developmental regulation of phage development; correlations of genetic maps with physiological functions.

Bacterial Genetics (3 semester hours)
Recombination, lysogeny, mutation, and regulation in bacteria.
623 Genetics of Eukaryotes (3 semester hours)
Classical genetics of eukaryotes: chromosomal rearrangements; mutagenesis; polyploidy and polyteny; meiosis;sex determination; population genetics.

624 Fungal Genetics (3 semester hours)
Genetics of Ascomycetes and Basidiomycetes, including cytoplasmic
inheritance, genetics of development.
625 Extrachromosomal Factors (3 semester hours)
Genetics, structure, replication and expression of bacterial plasmids: sex factors, colicin factors, infectious drug-resistance factors.

Colloquium in Genetics (3 semester hours)

## Topics in Biophysics

Cutler, Gray, Harm, Jagger, Lang, Patrick, Rupert
Course Description
631 Instrumental Analysis (3 semester hours)
Optical and electronic instruments; computer interfacing.
632 Electron Microscopy (3 semester hours)
Theory and practice of electron microscopy, with emphasis on in vitro studies of macromolecules.

633 Theoretical Biophysics (3 semester hours)
Equilibrium and nonequilibrium thermodynamics; atomic and molecular spectroscopy; quantum biochemistry; excitation and bonding of organic molecules.

634 Radiation Biology (3 semester hours)
Interactions of ionizing, ultraviolet, and visible radiations with matter; radioisotopes; biological effects, cellular repair of radiation damage; biological photoreceptors.

635 Ultraviolet Photobiology (3 semester hours) Action of far-ultraviolet radiation on proteins, nucleic acids, and cells; cellular repair of far-ultraviolet damage; effects of nearultraviolet radiation on molecules and cells; photosensitization and photodynamic action; sunburn and skin cancer. (Prerequisite: 634).

Biophysics of Polymers (3 semester hours) Hydrostatic, hydrodynamic, and optical approaches to determination of structure and function of biologically important polymers.

Colloquium in Biophysics (3 semester hours)

## Topics in Cell Physiology

Bremer, Clowes, Cutler, Guttes, Gutz, Harris, Jagger
641 Bioenergetics (3 semester hours)
Ultrastructural and functional mechanisms for capture, storage, and transduction of energy for biosynthesis, transport, electrical and mechano-chemical activity; regulatory mechanisms; rhythmical phenomena.

642 Cellular Excitation and Response (3 semester hours)
Membrane structure and dynamics; specific transport problems; bioelectric phenomena; excitation and conduction; synaptic transmission; trophic influences; secretion.

643 Cellular Heredity (3 semester hours)
Molecular genetics of eukaryotes; macromolecular synthesis; cell ov. cytokinesis and karyokinesis; nuclear-cytoplasmic transfers; cell hybrids.

Molecular Biology Program (continued)

| Course | Description |
| :---: | :---: |
| 644 | Developmental Biology (3 semester hours) |
|  | Cellular differentiation and specialization in protozoa and multicellular organisms; organelle synthesis and assembly; macromolecular synthesis and regulation in differentiating cells; differentiation in specific cells; multicellular morphogenesis. |
| 645 | Cytopathology (3 semester hours) |
|  | Genetic defects of cell structure and function; cellular responses to physical, chemical or biological stress; immune response; cell transformation; animal and plant viruses. |
| 646 | Cellular Gerontology (3 semester hours) |
|  | Molecular mechanisms of aging processes: descriptions, models, implications. |
| 649 | Colloquium in Cell Physiology (3 semester hours) |

## General Courses

691 Seminar in Molecular Biology (1 semester hour) (S-U grading)
Colloquium in Molecular Biology ( 1 semester hour) (S-U grading)
Research in Molecular Biology ( 1 to 12 semester hours)
Thesis ( 3 semester hours) (may be repeated for credit)
Dissertation (3 semester hours) (may be repeated for credit)

## GRADUATE PROGRAM IN PHYSICS (M.S., Ph.D.)

Professors: $\frac{\text { E. J. Fenyves }}{\text { W. A. Rindler }}, \frac{\text { W. B. Hanson }}{\text { I. Robinson }}$, W. J. Heikkila, F. S. Johnson, I. Ozsvath,
Associate Professors: C. B. Collins (Head), J. H. Hoffman, J. E. Midgley (Graduate Adviser), D. Rapp, B. A. Tinsley

Assistant Professors: R. C. Chaney, R. R. Hodges, Jr., W. B. Hurt, L. Melton, R.A. R. Palmeira, C. Parr

## OBJECTIVES

The basic objective of the Graduate program in Physics is to identify and develop individuals who will ultimately contribute in the most advanced and creative way to the pressing needs of a technologically dependent society. In pursuit of this objective the Master's Program seeks to provide a thorough grounding in the fundamentals of physics and in the techniques of research. The Doctoral Program proceeds from this point to build a capability of contributing in a significant way to the body of physical knowledge.

## PROGRAMS

There are currently eight areas of research specialization in the Physics Program: Applied Physics and Instrumentation; Atmospheric and Space Physics; Atomic and Molecular Physics; Chemical Physics; Plasma Physics; Quantum Electronics; Relativity and Cosmology; and Solid State Physics. Both experimental and theoretical work is done in most of these areas, and it is expected that a student will gain familiarity with several of them in addition to specializing in a particular one.

## FACILITIES

For atmospheric and space physics there are facilities for the design, fabrication and testing of such rocket and satellite-borne instrumentation as electron probes, mass spectrometers, and cosmic ray detectors. Experiments conceived and implemented here have been incorporated into many of the major NASA satellites and probes and into many smaller rocket and balloon flights. The faculty and students continue to participate in many major NASA rocket and satellite programs, including Apollo, Pioneer, ISIS, IMP, and OGO. A modular recoverable rocket probe designed and built entirely in-house provides rapid turnaround time for ionospheric experiments. Atmospheric optical emissions are studied at an affiliated mountain laboratory.

In atomic and molecular physics there exist both pulsed and flowing afterglow systems with visible and ultraviolet tandem double monochromators, a vacuum ultraviolet spectrometer and a microwave interferometer available for diagnostics. An $\mathrm{H}-\mathrm{P} 2116 \mathrm{~A}$ 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.

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 make 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
For admission to candidacy for either the M.S. or Ph.D. the student must satisfy the general institutional 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. Admission to candidacy for the Doctor of Philosophy degree further requires that at least one of the core course grades should be an $A$, and that the student 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 if he is admitted to candidacy. The general oral examination normally follows this seminar within a few days.

Course

## Description

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)

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 haromics; Bessel functions; Green's functions; Vectors and Matrices; Probability and statistics. (Previous exposure to most of the topics is assumed.)

Electromagnetism I (4 semester hours)
Electrostatics, Laplace and Poisson equations, boundary value 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)

## Supplementary Courses

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)

Computer Organization and Usage (3 semester hours) Machine language, symbolic coding; data acquisition, representation, and transfer; control functions.
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.

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)
Classical Mechanics (3 semester hours) LaGrange's equations; two-body problem; motion of a rigid body, inertia tensor; Hamilton's equations, canonical transformations.
Statistical Mechanics (3 semester hours)
Classical and quantum statistical mechanics; localized and non-localized ensembles; thermodynamic properties in texms 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 degererate regions; introduction to the Darwin-Fowler method.

| 522 | Electromagnetism II (3 semester hours) |
| :---: | :---: |
|  | Simple radiating systems; properties of wayes at microwaye frequencies, lahoratory techniques for investigating these properties; waveguides, measurement of impedance and discontinuities, impedance matching, resonant cavity modes, and field configurations. (Normally follows 521) |
| 595 | Electromagnetic Theory (3 semester hours) <br> Development of time dependent electromagnetic theory using the fourvector formalism of special relativity; Lienard Weichert potentials; radiation reaction; radiation from relativistic particles: synchrotron, Cherenkov, bremsstrahlung radiation; multipole radiation. (Normally follows 521) |
| 600. | Quantum Mechanics IT ( 4 semester hours) <br> 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) |
| 609 | ```Special Topics in Mathematical Physics (3 semester hours) Topics vary from semester to semester. May be repeated for credit. Chemical Physics``` |
| 619 | Special Topics in Chemical Physics ( 3 semester hours) Topics vary from semestex to semester. May be repeated for credit. |
| 910 | Research in Chemical Physics (3-12 semester hours). <br> Applied Physics |
| 523 | Elements of Digital Circuits (3 semester hours) <br> Introduction to digital hardware; theory and operation of discrete, integrated, and LSI circuits, logic families, MOS devices, random access memory elements and ROM's. |
| 624 | Logic Design and Digital Systems (3 semester hours) <br> Analysis and synthesis of digital circuits; simplification of logical functions; characteristics of switching memory; input-output devices, both synchronous and nonsynchronous; logic design of counters, shift registers, arithmetic circuitry; computer aided design of circuits. (Normally follows 523). |
| 625 | Data Acquisition and Computer Interfacing (3 semester hours) <br> Real-time data acquisition; computer interfacing of parallel and serial <br> inputs; linear-digital conversions, nonlinear systems, sampling systems; <br> feedback theory, stability, monitoring and control functions. (Normally follows 6.24). |
| 626 | Operating Systems for Data Acquisition (3 semester hours) Organization and programing of executive control systems for data acquisition; multiprogramming; time-sharing; access control; parallel processing; resource allocation. |
| 629 | Special Topics in Applied Physics (3 semester hours) <br> Topics may vary from semester to semester. May be repeated for credit. |
| 920 | Research in Applied Physics ( $3-12$ semester hours) |

## Quantum Electronics

530. Introduction to Quantum Electronics (3 semester hours)

Classical treatment of the finteraction of radiation with matter; resonant structures and normal modes; stimulated emission; non-iinear optics.

630 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; superradîancy and líquid lasers; high energy pulsed lasers. (Normally follows 530)
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.
Special Topics in Quantum Electronics (3 semester hours) Topics vary from semester to semester. May be repeated for credit.
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)
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.
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)
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)
Special Topics in Atomic Physics (3 semester hours)
Topics vary from semester to semester. May be repeated for credit.
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.

Physics Courses (continued)

| 661 | Plastoa Waves and Radiation ( 3 semester hours) <br> Magnetoionic theory, dispersion equation, modes, phase and group <br> velocities; antennas and probes in plasmas; plasma resonances; review of magnetohydrodynamic propagation, anisotropy, two-stream, and crossfield instabilities. (Nomally follows 663) |
| :---: | :---: |
| 663 | Plasma Theory ( 3 semester hours) <br> Statistical behavior of plasmas; distribution functions; Boltzmann equation, kinetic theory; magnetohydrodynamic theory; Fokker-Planck and Vlasov equations. |
| 669 | Special Topics in Plasma Physics (3 semester hours) <br> Topics vary from semester to semester. May be repeated for credit. |
| 960 | Research in Plasma Physics ( $3-12$ semester hours) <br> Solid State Physics |
| 671 | Solid State Physics (3 semester hours) <br> Lattice vibrations and therman properties of solids; band theory of solids; transport properties of metals and semiconductors; optical properties; magnetic properties; magnetic relaxation; superconductivity. |
| 673 | Quantum Theory of Solids ( 3 semester hours) <br> Cystalline symmetry; lattice dynamics; anharmonic processes; band theory; electron-electron interaction; electron-phonon interaction; transport properties; optical properties; Fermi surface; magnetism. |
| 675 | Group Theory as Applied to Crystals (3 semester hours) Finite group theory and applications to solid state physics; symmetry operators of crystals; space groups; reciprocal lattice and brillouin zones; group of the $k$ vector; crystal field splitting; construction of wave functions for band structure calculations. |
| 679 | Spectal Topics in Solid State Physics (3 semester hours) <br> Topics vary from semester to semester. May be repeated for credit. |
| 970 | 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.

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, mateoroids 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.
Upper Atmospheres ( 3 semester hours)
Characteristics of the neutral upper atmosphere of the earth and planets; photodissociation and chemical reactions; tides, circulation, winds, and wave propagational diffusion, eddy mixing and heat balance; satelifte drag. (Normally follows 581)

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).

Physics Courses (continued)

| Course | $\frac{\text { Description }}{689} \quad$Special Topics in Space Physics (3 semester hours) <br> Topics will vary from semester to semester. May be repeated for credit. |
| :--- | :--- |
| 980 | 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.
Relativity and Cosmology (3 semester hours)
Tensor calculus and Riemannian geometry; mathematical foundation of
general relativity; the crucial tests; the linearized theory; funda-
mentals of theoretical relativistic cosmology; the Friedmann model
universes; comparison with observation. (Normally follows 591)
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)
Special Topics in Relativity ( 3 semester hours)
Topics vary from semester to semester. May be repeated for credit.
Research in Relativity (3-12 semester hours)

Thesis and Dissertation
Thesis (3 semester hours)
Dissertation (3 semester hours)

Physics Courses (continued)
Typical Degree Plans
The following typical degree plans are illustrative of the course sequence for typical 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.

|  | Year | Fall |  |  |  | Spring |  |  |  | Summer |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Applied | 1 | 500, | 501, | 505, | 920 | 521, | 523, | 503, | 920 | 522, | 920 |
| Physics | 2 | 507, | 624, |  | 920 | 625, | 626, |  | 920 |  | 920 |
| Atmospheric | 1 | 500, | 501, | 505, | 980 | $521,$ | 513, | 581, | 980 | 663, | 980 |
| and Space | 2 | 507, | 661, | 683, | 980 | 685, |  |  | 980 | 687, | 980 |
| Atomic and | 1 | 500, | 501, | 505, | 950 | 521, | 513, | 600, | 950 | 522, | 950 |
| Molecular | 2 | 652, | 653, |  | 950 | 654, | 631, |  | 950 |  | 950 |
| Chemical | 1 | 500, | 501 | Chl, | 910 | Ch2, | 513, | 600 | 910 |  | 910 |
| Physics | 2 | 521, | 651, | Ch3, | 910 | 652, | Ch4, | Ch5, | 910 |  | 910 |
| plasma | 1 | 500, | 501, | 505, | 960 | 521, | 513, | 560, | 960 | 663, | 960 |
| Physics | 2 | 600, | 661, |  | 960 | 669, |  |  | 960 | 552, | 960 |
| Quantum | 1 | 500, | 501, | 505, | 930 | 521, | 513 | 600, | 930 | 522, | 930 |
| Electronics | 2 | 502, | 530, |  | 930 | 630, | 631, |  | 930 |  | 930 |
| Relativity | 1 | 591, | 501, | 505, | 990 | 521, | 592, | 500, | 990 | 595, | 990 |
|  | 2 | 502, | 697, | 699, | 990 |  | 513, |  | 990 |  | 990 |
| Solid | 1 | 500, | 501, | 505, | 970 | 521, | 671 | 600 | 970 | 675, | 970 |
| State | 2 | 502, | 513, | 673, | 970 | 503, |  |  | 970 |  | 970 |

BREMER, HANS - Associate Professor - Biology
Vordiplom, U. of Heidelberg, 1949; Ph.D., U. of Goettingen, 1957
CALDWELL, RICHARD A. - Associate Professor - Chemistry; Acting Head, Graduate Program in Chemistry; Acting Director, Institute for Chemical Sciences B.S., Massachusetts Institute of Technology, 1961; Ph.D., U. of California, Berkeley, 1965

CARTER, JAMES L. - Assistant Professor - Geosciences B.S., Texas Western College, 1961; Ph.D., Rice University, 1965

CHANEY, ROY C. - Assistant Professor - Physics
B.S., U. of Oklahoma, 1965, M.S.; U. of Oklahoma, 1967; Ph.D., U. of Oklahoma, 1971

CLOWES, ROYSTON C. - Professor - Biology; Head, Graduate Program in Biology; Director, Institute for Molecular Biology B.S., U. Of Birmingham, 1942; Ph.D., U. of Birmingham, 1951; D.Sc., U. of Birmingham, 1965
COLLINS, CARL B., Jr. - Associate Professor - Physics; Head, Graduate Program in Physics
B.S., U. of Texas at Austin; 1960; M.S., U. of Texas at Austin, 1961; Ph.D., U. of Texas at Austin, 1963

CUTLER, RICHARD G. - Assistant Professor - Biology
B.S., California State College, 1961; M.S., U. of Houston, 1966; Ph.D., U. of Texas, 1966
DODSON, JAMES - Associate Professor - Learning Resources and Educational Media; University Librarian
B.S., Denison U., 1954; M.A., Ohio State U., 1961; M.S. Case Western Reserve U., 1962

Fenyves, ERVIN J. - Professor - Physics
M.S., Roland Eotvos U. of Budapest, 1946; Ph.D., Roland Eotvos U. of Budapest, 1950; Dr. Physical Sciences, Hungarian Academy of Sciences, 1960

GRAY, DONALD M. - Assistant Professor - Biology
B.A., Susquehanna U., 1960; M.S., Yale U., 1967; Ph.D., Yale U., 1967

GUTTES, EDMUND W. - Associate Professor - Biology Abitur, Gymasium M. Gladbach, Germany, 1942; Ph.D., U. of Bonn, 1953
GUTZ, HERBERT - Associate Professor - Biology Diplom, Vorpruefung in Biology, Free U. of Berlin, 1951; Ph.D., Free U. of Berlin, 1955
HALES, ANTON L. - Professor - Geosciences; Head, Graduate Program in Geological Sciences; Director, Institute for Geological Sciences B.S., U. of Cape Town, 1929; M.S., U. of Cape Town, 1930; B.A., St. John's College, Cambridge, 1933; Ph.D., U. of Cape Town, 1936; M.A., Cambridge U., 1952
HALPERN, MARTIN - Associate Professor - Geosciences B.S., McGill U., 1959; M.S., U. of Wisconsin, 1961; Ph.D., U. of Wisconsin, 1963

HANSON, WILLIAM B. - Professor - Physics; Director, Institute for Physical Sciences B.S., U. of Minnesota, 1944; M.S., U. of Minnesota, 1949; Ph.D., George Washington U., 1954

HARM, WALTER - Professor - Biology
Diplom. Biology, Humboldt U., Berlin, 1949; Ph.D., Free U. of Berlin, 1951
HARRIS, DANIEL L. - Professor - Biology A.B., U. of Minnesota, 1936; Ph.D., U. of Pennsylvania, 1942

HEIKKILA, WALTER J. - Professor - Physics
B.A., U. of Toronto, 1950; M.S., U. of Toronto, 1951; Ph.D., U. of Toronto, 1954

HELSLEY, CHARLES E. - Professor - Geosciences
B.S., California Institute of Technology, 1956; M.S., California Institute of Technology, 1957; Ph.D., Princeton U., 1960

HODGES, R. RICHARD, Jr. - Assistant Professor - Physics
B.S., U. of Illinois, 1955; M.S., U. of Illinois, 1957; Ph.D., U. of Illinois, 1964
HOFFMAN, JOHN H. - Associate Professor - Physics
B.S., St. Mary's College, 1951; M.S., U. of Minnesota, 1954; Ph.D., U. of Minnesota, 1958

HURT, WORTH B., Jr. - Assistant Professor - Physics B.S., U. of Texas at Austin, 1960; M.A., U. of Texas at Austin, 1961; Ph.D., U. of Texas at Austin, 1964

JAGGER, JOHN - Professor - Biology B.S., Yale College, 1949; M.S., Yale U., 1953; Ph.D., Yale U., 1954

JOHNSON, FRANCIS S. - Professor - Physics; Executive Director, Center for Advanced Studies
B.S., U. of Alberta, 1940; M.A., U. of California, 1942; Ph.D., U. of California, 1958

JORDAN, BRYCE - Professor - History of Music; President B.Mus., U. of Texas at Austin, 1948; M.Mus., U. of Texas at Austin, 1949; Ph.D., U. of North Carolina, 1956

KEMPER, JOST - Assistant Professor - Biology Ph.D., U. of Cologne, 1964

LANDISMAN, MARK - Professor - Geosciences A.B., Columbia College, 1949; Ph.D., Columbia U., 1959

LANG, DIMITRIJ A. - Associate Professor - Biology M.S., U. of Frankfurt/Main, 1953; Ph.D., U. of Frankfurt/Main, 1959

MANTON, WLLEIAM I. - Assistant Professor - Geosciences B.S., U. of Witwatersrand, 1959; M.S., U. of Witwatersrand, 1963; Ph.D., U. of Witwatersrand, 1968

McCORQUODALE, D. JAMES - Associate Professor - Biology B.A., U. of British Columbia, 1950; Ph.D., U. of Wisconsin, 1955

MELTON, LYNN A. - Assistant Professor - Chemistry B.S., California Institute of Technology, 1966; Ph.D., Harvard U., 1971

MIDGLEY, JAMES E. - Associate Professor - Physics B.S., U. 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 U., 1966

OZSVATH, ISTVAN - Professor - Physics Diploma (Mathematics, Physics, \& Astronomy) U. of Budapest, 1951; Ph.D., U. of Hamburg, 1960

PALMEIRA, RICARDO - Assistant Professor - Physics B.S., U. of Recife, Brazil, 1953; Ph.D., Massachusetts Institute of Technology, 1963

PARR, CHRISTOPHER A. - Assistant Professor - Chemistry B.S., U. of California, Berkeley, 1962; Ph.D., California Institute of Technology, 1969
PATRICK, MICHAEL H. - Assistant Professor - Biology
A.B., U. of California, Santa Barbara, 1958; Ph.D., U. of Chicago, 1964

PAYNE, EUGENE E. - Lecturer - Management and Administrative Sciences; Planning and Management Systems Officer B.S., Texas A\&M U., 1964; M.S., Texas A\&M U., 1965; Ph.D., U. of Oklahoma, 1970

PESSAGNO, EMILE A., Jr. - Associate Professor - Geosciences
B.A., Princeton U., 1955; M.S., Corne11 U., 1957; Ph.D., Princeton U., 1960

PRESNALL, DEAN C. - Assistant Professor - Geosciences
B.S., Pennsylvania State U., 1957; M.S., California Institute of Technology, 1959; Ph.D., Pennsylvania State U., 1963

RAPP, DONALD - Associate Professor - Physics
B.S., Cooper Union, 1955; M.S., Princeton U., 1956; Ph.D., U. of California, Berkeley, 1959
RINDLER, WOLFGANG A. - Professor - Physics B.S., U. of Liverpool, 1945; M.S., U. of Liverpool, 1947; Ph.D., U. of London, 1956

ROBINSON, IVOR - Professor - Physics
B.A., Cambridge U., 1947

RUPERT, CLAUD S. - Professor - Biology B.S., California Institute of Technology, 1941; Ph. D., Johns Hopkins U., 1951

SCHOLLE, PETER A. - Assistant Professor - Geosciences B.S., Yale U., 1965; M.A., Princeton U., 1969; Ph.D., Princeton U., 1970

SHAW, MICHAEL J. - Assistant Professor - Physics B.S., U. of Sheffield, 1965; Ph.D., U. of York, 1970

SMITH, LEE H. - Professor - Management and Administrative Sciences; Dean of Faculties B.A., Texas A\&M U., 1957; M.S., Southern Methodist U., 1961; Ph.D., Texas A\&M U., 1964
TINSLEY, BRIAN A. - Associate Professor - Physics B.S., U. of Canterbury, 1958; M.S., U. of Canterbury, 1961; Ph.D., U. of Canterbury, 1963

URBAN, JAMES B. - Assistant Professor - Geosciences B.S., U. of Oklahoma, 1957; M.S., U. of Oklahoma, 1960; Ph.D., U. of Oklahoma, 1962

VAN ZANDT, HOWARD - Professor - International Studies and Management and Administrative Sciences
B.S., U. of Oklahoma, 1929; M.A., U. of Oklahoma, 1937

WERBIN, HAROLD - Associate Professor - Biology B.A., Brooklyn College, 1944; M.S., Polytechnic Institute of Brooklyn, 1947; Ph.D., Polytechnic Institute of Brooklyn, 1950

WITONSKY, PHILIP - Assistant Professor - Biology B.S., Queens College, New York, 1953; Ph.D., U. of Minnesota, 1961

## RESEARCH ASSOCIATES

ANDERSON, GERRY - Biology
B.S., Oregon State U., 1963; Ph.D., Oregon State U., 1967

ARAI, TOSHIHIKO - Biology
M.D., Keio U. School of Medicine, Japan, 1963; D. Med. Sci., Keio U. School
of Medicine, Japan, 1967
BECKMAN, L. DAVID - Biology
B.S., Wayne State U., 1963; Ph.D., Wayne State U., 1969

BLANARU, LAURENTIU - Atmospheric \& Space Sciences Diplome, Universitatea din Bucuresti, 1955; Ph.D., Clausthal U., Germany, 1968

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DALBOW, DAVID G. - Biology
    B.S., U. of Oklahoma, 1966; Ph.D., U. of Oklahoma, 1971
DENNIS, PATRICK P. - Biology
    B.S., Wisconsin State U., 1965; Ph.D., U. of Minnesota, }196
FORMOSO, CARL J. - Biology
    B.S., Pennsylvania State U., 1961; M.S., U. of California, Berkeley, 1963;
    Ph.D., U. of California, Berkeley, 1970
GRAY, CARIA WINLUND - Biology
    B.A., U. of California, Riverside, 1965; Ph.D., U. of California, Berkeley, 1971
HARM, HELGA - Biology
    Ph.D., Free U. of Berlin, 1951
KEATH, EDWIN P. - Atmospheric & Space Sciences
    B.S., North Texas State U., 1965; M.S., North Texas State U., 1967; Ph.D.,
    North Texas State U., 1971
LAKHCHAURA, BALA D. - Biology
    B.S., Agricultural U., India, 1963; M.S., U.P. Agricultural U., India, 1965;
    Ph.D., U. of Oklahoma, }196
LOEWENTHAL, DAN - Geosciences
    B.S., Tel Aviv U., Israel, 1965; M.S., Weizmann Institute of Science, Rehovot,
    1967; Ph.D., Weizmann Institute of Science, Rehovot, }197
MILLIKEN, CHRISTINE E. - Biology
    B.S., U. of Bristol, 1963; Ph.D., U. of Bristol, 1967
MUNAKATA, NOBUO - Biology
    B.S., U. of Tokyo, 1964; M.S., U. of Tokyo, 1966; Ph.D., U. of Tokyo, 1969
PRASHAD, NAGINDRA - Biology
    B.S., Osmania U., India, 1956; M.S., Osmania U., India, 1958; M.S., U. of
    Houston, 1966; Ph.D., U. of Houston, 1969
STERLING, DONALD L. - Atmospheric & Space Sciences
    B.S., Michigan Technical U., 1958; M.S., Michigan Technological U., 1961;
    Ph.D., Southern Methodist U., }197
STORM, DAVID A. - Atmospheric & Space Sciences
    B.A., Lehigh U., 1960; Ph.D., Polytechnic Institute of Brooklyn, 1970
WILSON, CAROL A. - Biology
    B.A., Northwestern U., 1958; Ph.D., Wayne State U., 1963
WINNINGHAM, J. DAVID - Atmospheric & Space Sciences
    B.S., Texas A&M U., 1963; M.S., Texas A&M U., 1965; Ph.D., Texas A&M U., 1970
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APPENDIX A.
RESIDENCE STATUS
Pursuant to State Law, The Coordinating Board, Texas Colleges and University System is responsible for establishing Rules and REgulations for determining Residence Status, pursuant to Title 3, Texas Education Code.

Effective August 15, 1971

## 1. MINORS

Statute: Section 54.052(b) An individual, under twenty-one (21) years of age, who is living away from his family, and whose family resides in another state or has not resided in Texas for the l2-month period immediately preceding the date of registration shall be classified as a nonresident student;

Section 54.052 (c) An individual twenty-one (21) years of age or under whose family has not resided in Texas for the 12month 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 21 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 21 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 a 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. Enancipated Child

Under certain circumstances, a minor may become emancipated or freed from parental control. If the minor has broken completely with his parents, is in fact residing apart from them, and has been entirely independent and wholly self-supporting, he may establish that he is "emancipated." If emancipation is clearly proved, 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 otherwise satisfied the statutory requirements applicable to those over 21 (e.g., see presumption arising from residence while a student). Proof of his emancipation is the responsibility of the minor.

## F. Married Minors

A minor male who is married shall have the power and capacity of a single person to full age with the exception of the right to vote and is entitled to select his own place of legal residence. After 12 months' residence in Texas under such circumstances the minor may be classified as a resident if he otherwise satisfies the statutory requirements applicable to those over 21 years of age. The legal residence of a minor female who is married is controlled by the legal residence of her husband. The residence classification for tuition purposes of either a nonresident male or female who marries a Texas resident shall be governed by the provisions of the tuition statute and of those 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 2lst. 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 22nd. 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.
11. RESIDENCE OF INDIVIDUALS OVER TWENTY-ONE

Statute: Section 54.052(d) An individual twenty-one (21) years of age or over who has come from outside Texas and who is gainfully employed in Texas for a 12 -month period immediately preceding registration in an educational institution shall be classified as a resident student as long as he continues to maintain a legal residence in Texas; and

Section 54.052(e) An individual twenty-one (21) years of age or over who resides out of the state or who has come from outside Texas and who registers in an educational institution before having resided in Texas for a 12 -month period shall be classified as a nonresident student.

Section 54.054 A nonresident student classification is presumed to be correct as long as the residence of the individual in the state is primarily for the purpose of attending an educational institution. After residing in Texas for at least twelve (12) months, a nonresident student may be reclassified as a resident student as provided in the rules and regulations adopted by the Coordinating Board, Texas College and University System. Any individual reclassified as a resident student is entitled to pay the tuition fee for a resident of Texas at any subsequent registration as long as he continues to maintain his legal residence in Texas.

## Establishment of Residence

Any individual 21 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 non-resident 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 his 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.

## 111. 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. The legal residence of a wife, regardless of her age, follows that of her husband. Therefore, a woman who is a resident of Texas and who marries a nonresident shall be classified as a nonresident for all enrollment periods subsequent to her marriage; provided, however, that she
shall be permitted to pay the resident tuition so long as she does not affirmatively by her actions adopt the legal residence of her husband (for example, registering to vote in another state).

In the event a nonresident male or female student who marries a resident of Texas, and subsequently, is divorced, such nonresident student shall be classified as a nonresident for all enrollment periods subsequent to the date of such divorce.

## IV. MILITARY PERSONNEL AND VETERANS

Statute: Section 54.058(a) Military personnel are classified as provided by this section in the following manner:
(b) An officer, enlisted man or woman, 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 units 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 Reserves training with units in Texas under similar regulations be exempted from nonresident tuition by virtue of such training status. It is the intent of the legislature that only those members of the Army or Air National Guard, Texas State Guard, or other reserve forces mentioned above be exempted from the nonresident tuition fee and other fees and charges only when they become members of Texas units of the military organizations mentioned above.
(c) As long as they reside continuously in Texas, the spouse and children of a member of the Armed Forces of the United States who has been assigned to duty elsewhere immediately following assignment to duty in Texas are entitled to pay the tuition fees and other fees or charges provided for Texas residents.
(d) 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;
(e) A Texas institution of higher education may charge to the United States Government the nonresident tuition fee for a veteran enrolled under the provisions of a Federal law or regulation authorizing educational or training benefits for veterans;
(f) The spouse and children of a member of the Armed Forces of the United States who dies or is killed are entitled to pay the resident tuition fee, if the wife and children become residents of Texas within 60 days of the date of death; and
(g) If a member of the Armed Forces of the United States is stationed outside Texas and his spouse and children establish residence in Texas by residing in Texas and by filing with the Texas institution of higher education at which they plan to register a letter of intent to establish residence in Texas, the institution of higher education shall permit the spouse and children to pay the tuition, fees, and other charges provided for Texas residents without regard to length of time that they have resided within the State.
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 purposes on military personnel records, business transactions or activities not normally engaged in by military personnel, memberskip in professional or other state organizations, and marriage to a resident of Texas. Purchase of property during teminal 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 his separation from military service must be classified as a nonresident student unless, (1) he was a legal resident of Texas at the time he entered military service and has not relinquished that residence, (2) he can prove that during his military service he has, in fact, established a bona fide, legal residence in Texas at a time at least 12 months prior to his registration, or (3) he has resided in Texas other than as a student for 12 months prior to his registration and subsequent to his discharge from service.

## V. EMPLOYEES OF INSTITUTIONS OF HIGHER EDUCATION OTHER THAN STUDENTS

Statute: Section 54.059 A teacher, professor, or other employees of a Texas institution of higher education is entitled to register himself, his spouse, and their children in a state institution of higher education by paying the tuition fee and other fees or charges required for Texas residents without regard to the length of time he has resided in Texas. A teacher, professor, or other employee of a Texas institution of higher education is any person employed at least one-half time on a regular monthly salary basis by a state institution of higher education.

A person employed at least half-time on a regularly monthly salary basis (not an hourly employee) by any public institution of higher education, with an effective date of employment on or before the 12 th class day of a regular semester or the 4 th class day of a summer term, may pay the same tuition as a resident of Texas for himself, his 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 from the Director of Personnel or a designated representative of the institution of higher education for which he is employed certifying that such employment will be in effect at the time of registration.

## VI. STUDENT EMPLOYEES

Statute: Section 54.051(0) A teaching assistant, research assistant, or other student employee of any institution covered by this section is entitled to register himself, his spouse, and their children in a state institution of higher education by paying the tuition fees and other fees or charges required for Texas residents, without regard to the length of time he had resided in Texas; provided that said student employee is employed at least one-half time in a position which relates to his degree program under rules and regulations established by the employer institution. This exemption shall continue for students employed two consecutive semesters through the summer session following such employment if the institution is unable to provide employment and, as determined under standards established by the institution, if the employee has satisfactorily sompleted 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 12 th class day of a regular semester, or the 4 th class day of a summer term, may pay the same tuition as a resident of Texas for 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 Sumer 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 RESIDENCE 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 student 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.

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 semesters in which he was so erroneously classified.

## XII. PENALTIES

Statute: Section 54.053 The governing board of such 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 Institutional Rules and Regulations

Each institution has been authorized by statute to assess and collect from each nonresident student failing to comply with the provisions of the tuition statute and with these interpretations concerning nonresident fees a penalty not to exceed $\$ 10.00$ a semester. In addition, if a student has obtained residence classification by virtue of deliberate concealment of facts, or misrepresentation of fact, 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.

Source of funds for payment of salaries, unless otherwise indicated, is the departmental salaries account.

## GENERAL ADMINISTRATION

Office of the President

```
1. Transfer of Funds
Amount of Transfer - \$5,050
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| From: | Unallocated | $\$ 5,050$ |
| ---: | :--- | ---: |
| To:Office of the President -  <br>  Maintenance \& Operation | $\$ 4,050$ |  |
|  | Travel | 1,000 |
| For: |  |  |
|  | To provide for additional expenses to be incurred in |  |
|  |  |  |

## General Accounting

2. Transfer of Funds

Amount of Transfer - \$9,207

| From: Unallocated | $\$ 9,207$ |
| ---: | :--- | ---: |
| To:General Accounting - <br> Classified Salaries | $\$ 9,207$ |

For: To provide for additional personnel requirements (RBC D50)

Personne1
3. Transfer of Funds

Amount of Transfer - $\$ 500$
From: Personnel - Classified Salaries \$ 500

To: Personne1 - Trave1 \$ 500
For: To provide funds for expenses of attending two Personnel association meetings in Kentucky and New Mexico. (RBC D59)

GENERAL INSTITUTIONAL

## Information Services

4. Increase Alfred T. Mitchell, Director of Information, from an annual salary of $\$ 14,500$ to $\$ 15,000$ effective January 1, 1972. Source of funds for this increase: Unallocated. (RBC D43)

## Central PBX

5. Transfer of Funds

Amount of Transfer - $\$ 1,600$

| From: | Unallocated - <br> Maintenance \& Operation | $\$ 1,600$ |
| :---: | :--- | :---: |
| To: | Central PBX - <br> Maintenance \& Operation | $\$ 1,600$ |
| For: | To provide for five additional trunk <br> overload in outside calls. (RBC D60) |  |

RECOMMENDED AMENDMENTS TO THE 1971-72 BUDGET (continued)

## RESIDENT INSTRUCTION

## Physics

6. Transfer of Funds

Amount of Transfer - \$2,557

| From: | DASS Organized Research - <br> Classified Salaries | $\$ 2,557$ |
| :---: | :--- | :---: |
| To: | Physics - <br> Classified Salaries | $\$ 2,557$ |

For: To provide for secretarial services for program chairman. (RBC D52)
7. Grant a leave of absence without pay to Brian A. Tinsley, Associate Professor (Tenure) academic rate $\$ 13,600$, for the period March 13, 1972 through March 31, 1972. He will also be on leave from DASS Contracts and Grants. (RBC D54)

## Geosciences

8. Appoint Mark Landisman, Professor (Tenure) academic rate $\$ 19,200$, for the period January 1, 1972 through May 31, 1972. Appoint him also to Geosciences Contracts and Grants. Source of funds for this appointment: Geosciences and Geosciences Contracts and Grants. (RBC D46)

Biology
9. Transfer of Funds

Amount of Transfer - $\$ 450$
From: Biology -
Maintenance \& Operation \$ 450
To: Biology -
Computer Services \$ 450
For: To provide for computer services for instructional purposes which were not anticipated in the original budget. (RBC D49)

Chemistry
10. Transfer of Funds

Amount of Transfer - \$5,500
From: Unallocated Development Funds $\$ \quad 5,500$
To: Chemistry -
Maintenance \& Operation $\quad \$ \quad 4,500$ Travel 1,000
For: To provide an operating budget for year as Chemistry was not in the original budget. (RBC D47)

RECOMMENDED AMENDMENTS TO THE 1971-72 BUDGET (continued)
ORGANIZED RESEARCH
Biology
11. Transfer of Funds

Amount of Transfer $\$ 2,150$

| From: | Biology Organized Research - <br>  <br>  <br> Classified Salaries | $\$ 2,150$ |
| :--- | :--- | :--- |
| To: | Biology Organized Research - |  |
|  | Administrative \& Professional Salaries | $\$ 2,150$ |
| For: | To provide funds for additional personnel. (RBC D45) |  |

## Chemistry

12. Transfer of Funds

Amount of Transfer - $\$ 21,600$

| From: | Unallocated Development Funds | $\$ 21,600$ |
| ---: | :--- | ---: |
| To: | Chemistry Organized Research |  |
|  | Computer Services | $\$ 18,000$ |
|  | Maintenance \& Operation | 3,600 |
| For: | To provide an operating budget for the year as Chemistry Organized |  |
|  | Research was not in the original budget. (RBC D47) |  |

## CONTRACTS \& GRANTS

Division of Atmospheric \& Space Sciences
13. Promote Donald L. Sterling from a Research Scientist Associate I at an annual rate of $\$ 10,440$ to a Research Associate at an annual rate of $\$ 14,400$ effective February 1, 1972. (RBC D25)
14. Increase John D. Winningham, Research Associate, from an annual rate of $\$ 12,000$ to $\$ 13,500$ effective March 1, 1972. (RBC D48)

## Division of Biology

15. Appoint Donald M. Gray, Assistant Professor (non-tenure) academic rate $\$ 12,300$ for the period June 1, 1972 through August 31, 1972. (RBC D62)
16. Resign Sadamasa Minato, Research Associate at an annual rate of $\$ 9,500$, effective April 4, 1972. (RBC D61)
17. Extend a leave of absence without pay to Helga Harm, Research Associate at an annual rate of $\$ 10,400$, for the period April 1, 1972 through August 31, 1972. (BC D51)

Sincerely,


Bryce Jordan
President

Dr. Charles A. LeMaistre
Chancellor
The University of Texas System
Austin, Texas 78712
Dear Dr. LeMaistre:
The following docket for The University of Texas Southwestern Medical School at Dallas is submitted for your approval and presentation to the Board of Regents at its next meeting in Austin on April 29, 1972.

TRAVEL PERMTTS. Approval is requested for the following travel:


1. Heinz F. Eichenwald, M.D., Professor and Chairman of Pediatrics, to travel to Saigon, South Vietnam to visit the American Medical Association Educational Project at the University of Saigon for the period from May 1, 1972 through May 29, 1972. Expenses will be paid by the American Medical Association.
2. Paul A. Srere, Professor of Biochemistry to travel to the University of Iund, Sweden on a sabbatical leave for the period from June 1, 1972 through November 30, 1972. No expenses are requested.
3. Revise the travel of David P. Nicholson, M.D., Associate Professor of Internal Medicine to extend through February 12,1972 and include laboratory work in Canada. No additional expenses are requested.

GIFTS OF $\$ 5,000$ OR MORE. It is recommended the following gifts be approved and that the appreciation of the Board of Regents be sent to the donor.

Donor
Purpose and Condition
Amount

1. Ross Laboratories

Columbus, Ohio 43216
Research in Obstetrics and Gynecology \$ 6,000.00
2. *American College of Physicians

4200 Pine Street
Philadelphia, Penn. 19104 To support course in behalf of the college
3. M Mrs. Florence Latz
c/o Mr. John S. Kubie
666 Fifth Avenue
New York, New York Research in Diabetes 5,000.00
4. Southwesterm Medical Foundation

333 Medical Arts Building
Dallas, Texas 75201 Human Growth and Development Program in Pediatrics

5,000.00
5. Southwestern Medical Foundation

333 Medical Arts Building
Dallas, Texas 75201 Phase I Building Program 1,049,000.00
6. Southwestern Medical Foundation

333 Medical Arts Building
Dallas, Texas 75201 Fred F. Florence Bioinformation Building

115,000.00
*No original letter from donor.

GRANTS (NON-GOVERNMENTAL). Approval of the following grants is requested and it is reconmended that the appreciation of the Board of Regents be sent to the donors:

1. Grant whereby the Medical Research Foundation of Texas, Adams Petroleum Center Building, Houston, Texas 77025 grants $\$ 5,000$ for their annual "seed research" grant. This is directed by Dr. Charles C. Sprague and the Research committee.
2. Grant whereby The Arthritis Foundation, 1212 Avenue of the Americas, New York, New York 10036, provides an increase in the stipend for Dr. Hugo Jasin for the 1972 year. Dr. Jasin is an Associate Professor of Internal Medicine.
3. Grant SG $72-7$ (R) whereby the National Academy of Sciences, National Research Council, 2101 Constitution Avenue, Washington, D. C. 20418, provides \$9,333 for the James Picker Foundation Scholar in Radiological Research for the period from September 1, 1972 through August 31, 1973. This is for Dr. Robert W. Parkey, Assistant Professor of Radiology and directed by Dr. Frederick J. Bonte, Professor and Chairman of Radiology.
4. Grant whereby the Dallas Area Chapter, National Cystic Fibrosis Research Foundation, 1206 Stemmons Tower West, Dallas, Texas 75207 , provides additional support in the amount of $\$ 6,401$ for the Dalla s Cystic Fibrosis Care and Teaching Center for the period from March 1, 1972 through October 31, 1972. This is directed by Dr. Robert Kramer, Clinical Associate Professor of Pediatrics.
5. Grant whereby Schering Corporation, 60 Orange Street, Bloomfield, New Jersey, provides $\$ 3,425$ additional support for research on Evaluation of Intrathecal Therapy of Gram Negative Meningitis of Infancy. This is directed by Dr. George McCracken, Assistant Professor of Pediatrics.
6. Grant I-038 whereby The Robert A. Welch Foundation, 2010 Bank of the Southwest Building, Houston, Texas 77002, provides $\$ 30,000$ for research on Chemical Mechanisms of Protein Metabolism for the period from May 1, 1972 through April 30, 1974. This is directed by Dr. Donald S. Wiggans, Professor of Biochemistry.
7. Grant I-405 whereby The Robert A. Welch Foundation, 2010 Bank of the Southwest Building, Houston, Texas 77002, provides $\$ 24,000$ for research on Metabolic Control of Microbial Hydrocarbon Oxidation Reactions for the period from May 1, 1972 through April 30, 1974. This is directed by Dr. Julian A. Feterson, Assistant Professor of Biochemistry.
8. Grant I-334 whereby The Robert A. Welch Foundation, 2010 Bank of the Southwest Building, Houston, Texas 77002, provides $\$ 24,000$ for research on Tumor Inhibitory Enzymes for the period from May I, 1972 through April 30, 1974. This is directed by Dr. Morton D. Prager, Professor of Surgery and Associate Professor of Biochemistry.
9. Grant I-305 whereby The Robert A. Welch Foundation, 2010 Bank of the Southwest Building, Houston, Texas 77002, provides $\$ 15,000$ for research on The Isolation and Identification of some Hypothalamic Releasing Factors for the period from May 1, 1972 through April 30, 1973. This is directed by Dr. C. Peter Fawcett, Assistant Professor of Physiology and Dr. S. M. McCann, Professor and Chairman of Physiology.
10. Grant I-181 whereby The Robert A. Welch Foundation, 2010 Bank of the Southwest Building, Houston, Texas 77002 , provides $\$ 15,000$ for research on Ultramicro Analysis of Steroid Hormones in Biological Tissues for the period from May 1, 1972 through April 30, 1973. This is directed by Dr. Pentti K. Siiteri, Professor of Biochemistry.
11. Grant I-510 whereby The Robert A. Welch Foundation, 2010 Bank of the Southwest Building, Houston, Texas 77002, provides $\$ 20,000$ for research on Biochemical Mechanism of a-Keto Acid Oxidative Decarboxylation for the period from May 1, 1972 through April 30, 1974. This is directed by Dr. Tracy C. Linn, Assistant Professor of Biochemistry.

GRANTS (NON-GOVERNMENTAL). (continued)
12. Grant whereby The John A. Hartford Foundation, Inc., 405 Lexington Avenue, New York, New York 10017, provides $\$ 135,964$ for research on Studies of the Clinical Pharmacology of Antimicrobial Agents in Neonates and Young Infants for the period from September 1, 1972 through August 31, 1975. This will be directed by Dr. George H. McCracken, Jr., Assistant Professor of Pediatrics.
13. Grant whereby The Lalor Foundation, 4400 Lancaster Pike, Wilmington, Delaware 19805, provides $\$ 7,700$ for a Fellowship Award for the period from March 1, 1972 through February 28, 1973. This is for Dr. Norman F. Gant, Jr., Assistant Professor of Obstetrics and Gynecology.
14. Grant whereby Calbiochem, P. O. Box 12087, San Diego, California 92112, provides $\$ 13,750$ for research on Double-Blind Study of Azaribine in Psoriasis. This will be directed by Dr. James H. Herndon, Jr., J. B. Shelmire Assistant Professor of Internal Medicine and Chairman of the Division of Dermatology.
15. Grant whereby Clayton Foundation for Research, 1621 Bank of the Southwest Building, Houston, Texas 77002, provides an amount not to exceed \$15,087 for research on Bacterial Asparaginases and the Treatment of Leukemia for the period from October I, 1971 through September 30, 1972. This will be directed by Dr. Morton D. Prager, Associate Professor of Biochemistry and Professor of Surgery and Dr. Eugene Frenkel, Professor of Internal Medicine.
16. Grant whereby Marion Laboratories, Inc., 10236 Bunker Ridge Road, Kansas City, Missouri 64137 provides $\$ 34,000$ additional funds for research on Study of Silvadene. This is directed by Dr. Charles R. Baxter, Professor of Surgery.

CONTRACTS AND GRANTS (FEDERAI). Approval is requested for the following:

1. Revised Research Grant 5 SO1 RR 05426-11 whereby the National Institutes of Health, Public Health Service, provides \$284,190 for the General Research Support Grant for the period from January l, 1972 through December 31, 1972. This is directed by Dr. Charles C. Sprague, Dean.
2. Revised Award 44-P-30064/6-07 Amendment No. 1, whereby the Department of Health, Education and Welfare, Rehabilitation Services Administration, provides revised award in the amount of $\$ 15,375$ for the Teaching Grant and Traineeships in Rehabilitation Medicine for the period from September 1, 1971 through June 30, 1972. This is directed by Dr. Alexander D. Raptou, Assistant Professor and Acting Chairman of Physical Medicine and Rehabilitation.
3. Research Fellowship Award 1 FO2 DE 51513-01 whereby the National Institutes of Health, Extramural Programs, Public Health Service, provides $\$ 1,000$ for a Postdoctoral Supply Allowance for Douglas P. Sinn, and sponsored by Dr. Bruce N. Epker, Assistant Professor of Oral Surgery.
4. Revised Award 44-P-30064/6-07, Amendment No. 2, whereby the Department of Health, Education and Welfare, Rehabilitation Services Administration, provides $\$ 5,400$ additional funds for the Teaching Grant \& Traineeships in Rehabilitation Medicine for the period from September l, 1971 through June 30, 1972. This is directed by Dr. Alexander D. Raptou, Assistant Professor and Acting Chairman of Physical Medicine and Rehabilitation.
5. Contract NIH 71-4710; Supplemental Agreement \#1 whereby the Contract Management Section, National Library of Medicine, 8600 Rockville Pike, Bethesda, Maryland 20014, increases the total award to \$231,161, extends the expiration date to January 31, 1973, amends the description of work, adjusts overhead to $67.1 \%$ of salaries and wages, and adds an article on billing instructions. This is directed by Dr. Donald D. Hendricks, Director of Library.

CONTRACTS AND GRANIS (FEDERAL). (continued)
6. Training Grant 5 TO1 AI 00030-13 whereby the National Institute of Allergy and Infectious Diseases, Public Health Service, provides \$65,774 for Graduate Training: Infectious Disease and Immunology for the period from July 1, 1972 through June 30, 1973. This is directed by Dr. Jay $P$. Sanford, Professor of Internal Medicine.
7. Research Grant 5 ROI HD 03765-04 whereby the National Institute of Child Health and Human Development, Public Health Service, provides direct costs in the amount of $\$ 11,634$ plus applicable indirect costs for research on Pregnancy Wastage and Maternal Folate Metabolism for the period from March I, 1972 through February 28, 1973. This is directed by Dr. Jack A. Pritchard, Professor of Obstetrics and Gynecology.
8. Research Grant I ROI NS 09975-O1 whereby the National Institute of Neurological Diseases and Stroke, Public Health Service, provides direct costs in the amount of $\$ 49,386$ plus applicable indirect costs for research on Nonsynaptic Electrogenesis During Hippocampal Seizure for the period from February l, 1972 through January 31, 1974. This will be directed by Dr. Robert M. Lebovitz, Assistant Professor of Physiology.
9. Research Grant NGL 44-012-151, Supplement No. 2 whereby the National Aeronautics and Space Administration, Manned Spacecraft Center, Houston, Texas 77058 , provides an additional $\$ 38,000$ for the project entitled Cardiovascular Effects of Variations in Habitual Levels of Physical Activity and extends the period of performance to December 15, 1972. This is directed by Dr. Jere Mitchell, Professor of Internal Medicine and Physiology.
10. Project No. 06-H-000,074-04-0 whereby the Department of Health, Education and Welfare, Regional Office, Ill4 Commerce Street, Dallas, Texas 75202, provides $\$ 793,912$ for the Greater Dallas Family Planning Project for the period from January I, 1972 through December 31, 1972. This is directed by Dr. Jack Pritchard, Professor of Obstetrics and Gynecology.
11. Research Grant I ROI NS 10046-01 whereby the National Institute of Neurological Diseases and Stroke, Public Health Service, provides direct costs in the amount of $\$ 41,680$ plus applicable indirect costs for research on Brain Mechanisms in Thermoregulation for the period from February 1, 1972 through January 3I, 1974. This is directed by Dr. James M. Lipton, Assistant Professor of Psychology.
12. Research Grant 2 RO1 CA IIII3-O4 whereby the National Cancer Institute, Public Health Service, provides direct costs in the amount of $\$ 29,887$ plus applicable indirect costs for research on Tumor Inhibitory Enzymes for the period from February I, 1972 through January 31, 1973. This is directed by Dr. Morton D. Prager, Professor of Surgery.
13. Training Grant 2 T01 AI 00337-06 whereby the National Institute of Allergy and Infectious Diseases, Public Health Service, provides $\$ 55,527$ for training in Pediatric Infectious Disease and Immunology for the period from July I, 1972 through June 30, 1973. This is directed by Dr. Heinz F. Eichenwald, Professor and Chairman of Pediatrics.
14. Research Grant 5RO1 HL 05181-12 whereby the National Heart and Lung Institute, Public Health Service, provides direct costs in the amount of \$9,789 plus applicable indirect costs for research on Dynamic Radionuclide Study of Blood Pools for the period from April 1, 1972 through March 31, 1973. This is directed by Dr. Frederick J. Bonte, Professor and Chairman of Radiology.
15. Research Grant 5 POI HI 11662-05 whereby the National Heart and Lung Institute, Public Health Service, provides direct costs in the amount of $\$ 193,177$ plus applicable indirect costs for research on Regulation of Fluid, Electrolyte, and Acid-Base Balance for the period from February 1, 1972 through January 31, 1973. This is directed by Dr. Donald W. Seldin, Professor and Chairman of Internal Medicine.

CONTRACTS AND GRANTS (FEDERAI). (continued.)
16. Career Award 4 K06 HL 01958-11 whereby the National Heart and Iung Institute, Public Health Service, provides $\$ 27,505$ for a research career program entitled Regulation of Intermediary Metabolism for the period from March 1, 1972 through February 28, 1973. This is for Dr. Marvin D. Siperstein, Professor of Internal Medicine and sponsored by Dr. Donald W. Seldin, Professor and Chaiman of Internal Medicine.
17. C\&Y Project \#647, Budget Revision No. 2 whereby the Department of Health, Education and Welfare, Regional Office, 1114 Commerce Street, Dallas, Texas 75202, approves the Budget Revision No. 2 of the Children and Youth Project. The amount remains $\$ 664,000$ and the period of the gran is April 1, 1971. through March 31, 1972. This is directed by Dr. Heinz F. Eichenwald, Professor and Chairman of Pediatrics.
18. Contract F41609-68-C-0028, Modification P00003, whereby the Aerospace Medical Division (AFSC), Brooks AFB, Texas 78235, revises the amount of the contract from \$32,382.10 to \$14,741.80.
19. Development Award $5 \mathrm{KO} 4 \mathrm{HD} 46345-03$ whereby the National Institute of Child Fealth and Fuman Development, Public Health Service, provides $\$ 24,500$ for a research career program entitled Membrane Biogenesis in Mammalian Growth for the period from May I, 1972 through April 30, 1973. This is for Dr. Charles E. Mize, Assistant Professor of Pediatrics and Biochemistry and sponsored by Dr. Heinz F. Eichenwald, Professor and Chairman of Pediatrics.
20. Contract No. NIH-72-C-527 whexeby the National Institutes of Health, Bethesda, Maryland 20014, approves a contract not to exceed $\$ 17,246$ to arrange and conduct a conference entitled Consideration of Induced \& Spontaneous Variation in Immune Responsiveness for the period from March I, 1972 through August 31, 1972. This will be directed by Dr. Rupert Billingham, Professor and Chairman of Cell Biology.
21. Research Grant 2 ROI HL 13625-03 whereby the National Heart and Iung Institute, Public Health Service, provides direct costs in the amount of $\$ 32,650$ plus applicable indirect costs for research on Radionuclide Study ô̂ Regional Myocardial Blood Flow for the period from June 1, 1972 through May 31, 1973. This is directed by Dr. Frederick J. Bonte, Professor and Chairman of Radiology.
22. Research Grant 5 ROI HL 08771-09 whereby the National Heart and Lung Institute, Public Fealth Service, provides direct costs in the amount of $\$ 28,556$ pius applicable indirect costs for research on Circulatory Changes and Fluid Volumes in Burns for the period from April 1, 1972 through March 3I, 1973. This is directed by Dr. CharIes R. Baxter, Professor of Surgery.
23. Training Grant 5 TOI HD 00256-05 whereby the National Institute of Child Health and Human Development, Public Health Service, provides \$69,109 for training in Physiology of Reproduction for the period from July 1, 1972 through June 30, 1973. This is directed by Dr. Jack A. Pritchard, Professor of Obstetrics and Gynecology.
CONTRACIS AND AGREEMENTS (OTHER). Approval is requested for the following:

1. Interagency Contract IAC (72-73)-390 whereby the State Board of Control, P. O. Box 13047, Capitol Station, Austin, Texas 78711 , approves a contract not to exceed $\$ 280$ for The University of Texas Southwestern Medical School at Dallas, School of Allied Health Professions to provide courses of instruction and instructional aids to approved employees of the Texas Employment Commission for the period from January 10, 1972 through August 31, 1972.

AMENDMENTS TO 1971-1972 BUDGET. Approval is requested for the following. The following amendments to the 1971-72 budget are written on the basis of "budget rates" rather than the "freeze rates" resulting from the President's Executive Order. For the duration of the wage-price freeze, while reported amendments to the budget are based on budget rates, all payrolls are processed in compliance with the rules, regulations, and guidelines issued under authority of the Executive Order.

## Anesthesiology

1. Transfer funds in the amount of $\$ 7,500$ from Unallocated Faculty Salaries, account No. 207000, to Anesthesiology Teaching Salaries, account No. 204100, and change the source of salary for Samuel J. Montgomery (non-tenure), Visiting Assistant Professor, for the period February 1, 1972 through July 31, 1972, from an annual salary rate of $\$ 15,000$ from Various Donors to $\$ 15,000$ from Anesthesiology budget. (RBC No. 210)
2. Change the status of Jo-Allene Forne (non-tenure), effective March 1, 1972, from Assistant Professor of Anesthesiology, to Assistant Professor of Anesthesiology and Pediatrics, with no change in salary. Dr. Horne is budgeted at an annual salary rate of $\$ 25,000$ payable as follows: \$19,747 from Anesthesiology budget and $\$ 5,253$ from Various Donors. (RBC No. 275)
3. Change the status of Donald G. Lee (non-tenure), effective February 1, 1972, from Teaching Fellow at an annual salary rate of $\$ 12,000$ payable from Veterans Administration Hospital, to Instructor at an annual salary rate of $\$ 16,000$ payable from Veterans Administration Hospital. (RBC No. 169)

Biochemistry
4. Transfer funds in the amount of \$2,749.98 from Unallocated Faculty Salaries, account No. 207000, to Biochemistry Teaching Salaries, account No. 204300, and change the source of salary of Iuean E. Anthony (nontenure), Instructor, effective March 1, 1972, from an annual salary rate of $\$ 11,000$ payable as follows: $\$ 5,500$ from USPHS 5 PII GM 16488 and $\$ 5,500$ from School of Allied Health Professions budget, to $\$ 5,500$ from Biochemistry budget and $\$ 5,500$ from School of Allied Health Professions budget. (RBC No. 258)
5. Transfer funds in the amount of $\$ 5,500.02$ from Unallocated Faculty Salaries, account No. 207000, to Biochemistry Teaching Salaries, account No. 204300, and change the source of salary of Michael Waterman, (nontenure), Assistant Professor, effective March 1, 1972, from an annual salary rate of $\$ 15,500$ payabie as follows: $\$ 4,500$ from Biochemistry budget and $\$ 11,000$ from USPHS 5 P1I GM 16488, to $\$ 15,500$ from Biochemistry budget. (RBC NO. 21.4)
6. Transfer funds in the amount of $\$ 6,999.96$ from Unallocated Faculty Salaries, account No. 207000, to Biochemistry Teaching Salaries, account No. 204300, and change the source of salary of Michael Franklin (non-tenure), Research Assistant Professor, effective March 1, 1972, from an annual salary rate of $\$ 14,000$ from USPHS 5 P1I GM 16488, to $\$ 14,000$ from Biochemistry budget. (RBC No. 215)
7. Transfer funds in the amount of $\$ 7,000.02$ from Unallocated Faculty Salaries, account No. 207000, to Biochemistry Teaching Salaries, account No. 204300 and change the source of salary of Jeffrey Baron (non-tenure), Research Assistant Professor, effective March 1, 1972, from an annual salary rate of $\$ 14,000$ from USPHS 5 PII GM 16488, to $\$ 14,000$ from Biochemistry budget. (RBC No. 216)
8. Transfer funds in the amount of $\$ 3,102$ from Unallocated Faculty Salaries, account No. 207000, to Biochemistry Teaching Salaries, account No. 204300, and change the source of salary of Gakashi Matsubara, (nontenure), Associate, effective March I, 1972, from an annual salary rate of $\$ 10,000$ from USPHS 5 PII GM 16488, to $\$ 10,000$ payable as follows: \$6,204 from Biochemistry budget and \$3,796 from USPHS 5 PII GM 16488. (RBC No. 217)
9. Appoint Russell A. Prough (non-tenure), Instructor, effective March 1, 1972, at an annual salary rate of $\$ 12,000$ payable from USPHS 5 P11 GM 16488. (RBC No. 270)

AMENDMENTS TO 1971-72 BUDGET. (continued)
Biochemistry (continued)
10. Transfer funds in the amount of $\$ 5,899.98$ from Unallocated Faculty Salaries, account No. 207000, as follows: $\$ 1,897.98$ to Biochemistry Teaching Salaries, account No. 204300, and \$4,002.00 to Internal Medicine Teaching Salaries, account No. 204500, and change the source of salary of John Denis McGarry (non-tenure), Assistant Professor of Internal Medicine and Biochemistry effective March 1, 1972, from an annual salary rate of $\$ 18,000$ payable as follows: $\$ 6,200$ from Biochemistry budget and $\$ 11,800$ from Damon Runyon Fund, to $\$ 9,996$ from Biochemistry budget and $\$ 8,004$ from Internal Medicine budget. (RBC No. 264)

Cell Biology
11. Transfer funds in the amount of $\$ 9,677.46$ from Unallocated Faculty Salaries, account No. 207000, to Cell Biology Teaching Salaries, account No. 204000, and appoint William B. Neaves (non-tenure), Assistant Professor of Cell Biology, effective March 7, 1972, at an annual salary rate of $\$ 20,000$ payable from Cell Biology budget. (RBC No. 271)

Internal Medicine
12. Transfex funds in the amount of $\$ 3,000$ from Unallocated Faculty Salaries, account No. 207000, to Internal Medicine Teaching Salaries, account No. 204500, and change the source of salary of Jack A. Barnett (tenure), Professor of Internal Medicine and School of Allied Heaith Professions and Chairman of Division of Preventive Medicine and Public Heal th, effective March 1, 1972 from an annual salary rate of $\$ 30,500$ payable as follows: $\$ 24,500$ from Internal Medicine budget, $\$ 2,000$ from USPHS 5 ROI HD 00851 and $\$ 4,000$ from USPHS 5 TOI AI 00030, to $\$ 30,500$ from Internal Medicine budget. (RBC No. 233)
13. Transfer funds in the amount of $\$ 8,350.02$ from Unallocated Faculty Salaries, account No. 207000, to Internal Medicine Teaching Salaries, account No. 204500 and change the source of salary of Norman W. Carter (tenure), Professor, effective March I, 1972, from an annual salary rate of $\$ 32,000$ payable as follows: $\$ 13,300$ from Internal Medicine budget, $\$ 12,700$ from USPHS 5 TOI HE 05469, \$4,000 from USPHS 5 POI HE 11662 and $\$ 2,000$ from USPHS 5 E03 PE 00174 , to $\$ 30,000$ from Internal Medicine budget and $\$ 2,000$ from USPHS 5 E03 PE 00174. (RBC No. 246)
14. Transfer funds in the amount of $\$ 6,499.98$ from Unallocated Faculty Salaries, account No. 207000, to Internal Medicine Teaching Salaries, account $\mathbb{N o}$. 204500 , and change the source of salary of John M. Dietschy, (tenure), Professor, effective March 1, 1972, from an annual salary rate of $\$ 32,000$ payable as follows: $\$ 10,000$ from Internal Medicine budget, $\$ 13,000$ from USPHS 5 RO1 HE 09610 and $\$ 9,000$ from USPHS 5 TOI AM 05490, to $\$ 23,000$ from Internal Medicine budget and $\$ 9,000$ from USPHS 5 TOI AM 05490. (RBC No. 232)
15. Transfer funds in the amount of $\$ 4,999.98$ from Unallocated Faculty Salaries, account No. 207000, to Internal Medicine Teaching Salaries, account No. 204500, and change the source of salary of John S. Fordtran, (tenure), Professor, effective March 1, 1972, from an annual salary rate of $\$ 32,000$ payable as follows: $\$ 22,000$ from Internal Medicine budget and $\$ 10,000$ from USPFS 5 ROI AM 06506, to $\$ 32,000$ from Internal Medicine budget. (RBC No. 234)
16. Transfer funds in the amount of $\$ 3,049.98$ from Unallocated Faculty Salaries, account No. 207000, to Internal Medicine Teaching Salaries, account No. 204500, and change the source of salary of Eugene P. Frenkel. (tenure), Professor, effective March 1, 1972, from an annual salary rate of $\$ 32,000$ payable as follows: $\$ 18,900$ from Internal Medicine budget, $\$ 7,000$ from USPHS $5 \mathrm{Tl2}$ CA 08062 and $\$ 6,100$ from USPHS 69-40, to $\$ 25,000$ from Internal Medicine budget and $\$ 7,000$ from USPHS $5 \mathrm{TII2} \mathrm{CA} 08062$. (RBC No. 240)

AMENDMENTS TO 1971-72 BUDGET. (continued)
Internal Medicine (continued)
17. Transfer funds in the amount of $\$ 2,749.98$ from Unallocated Faculty Salaries, account No. 207000, to Internal Medicine Teaching Salaries, account No. 204500, and change the source of salary of Jay P. Sanford (tenure), Professor of Intemal Medicine and School of Allied Health Professions and MEND Coordinator, effective March I, 1972, from an annual salary rate of \$32,000 payable as follows: \$21,000 from Internal Medicine budget, $\$ 4,500$ from USPHS 5 TOI AI 00030, \$1,000 from USPHS 5 ROI HD 00851, $\$ 2,000$ from Faculty Gifts for Pathology and $\$ 3,500$ from Southwesterm Medical Foundation, to $\$ 2,00$ from Internal Medicine budget, $\$ 2,000$ from Faculty Gifts for Pathology and \$3,500 from Southwestern Medical Foundation. (RBC No. 245)
18. Transfer funds in the amount of $\$ 2,500.02$ from Unallocated Faculty Salaries, account No. 207000, to Internal Medicine Teaching Salaries, account No. 204500, and change the source of salary of Morris Ziff (tenure), Professor, effective March 1, 1972, from an annual salary rate of $\$ 32,000$ payable as follows: $\$ 25,000$ from USPHS 5 K 6 AM 14, 155 , $\$ 5,000$ from North Texas Chapter Arthritis Foundation and \$2,000 from Internal Medicine budget, to $\$ 25,000$ from USPHS $5 \mathrm{~K} 6 \mathrm{AM} 14,155$ and $\$ 7,000$ from Internal Medicine budget. (RBC No. 242)
19. Transfer funds in the amount of $\$ 600$ from Unallocated Faculty Salaries, account No. 207000, to Internal Medicine Teaching Salaries, account No. 204500, and change the source of salary of Hugo E. Jasin (tenure), Associate Professor, effective March I, 1972, from an annual salary rate of $\$ 27,000$ payable as follows: $\$ 8,300$ from Internal Medicine budget, $\$ 10,500$ from Arthritis Foundation Fellowship, $\$ 1,200$ from North Texas Chapter Arthritis Foundation, $\$ 500$ from USPHS 5 RO1 AM 09989 and $\$ 6,500$ from USPHS 5 TOI AM 05154, to \$9,500 from Internal Medicine budget, \$10,500 from Arthritis Foundation Fellowship, $\$ 500$ from USPHS 5 ROI AM 09989 and $\$ 6,500$ from USPHS 5 TOI AM 05154. (RBC No. 243)
20. Transfer funds in the amount of $\$ 1,249.98$ from Unallocated Faculty Salaries, account No. 207000, to Internal Medicine Teaching Salaries, account No. 204500, and change the source of salary of Carl Gunnar Blomqvist (non-tenure), Assistant Professor of Intermal Medicine and Physiology, effective March 1, 1972, from an annual salary rate of $\$ 8,500$ payable as follows: \$500 from Internal Medicine budget, $\$ 5,500$ from USPHS 5 E03 PE 00174 and $\$ 2,500$ from USPFS 5 POI HE 06296, to $\$ 3,000$ from Internal Medicine budget and $\$ 5,500$ from USPHS 5 E 03 PF 00174 . Dr. Blomqvist also receives $\$ 15,000$ directly from American Heart Association. (RBC No. 238)
21. Transfer funds in the amount of $\$ 1,812.48$ from Unallocated Faculty Salaries, account No. 207000, to Internal Medicine Teaching Salaries, account No. 204500, and change the source of salary of Iawrence D. Horowitz (non-tenure), Assistant Professor, effective March 1, 1972, from an annual salary rate of $\$ 21,000$ payable as follows: \$11,000 from Intemal Medicine budget, $\$ 3,625$ from USPHS 5 POI HE 06296 and $\$ 6,375$ from USPHS 5 EO3 PE 00174 , to $\$ 14,625$ from Internal Medicine budget and $\$ 6,375$ from USPHS 5 E03 PE 00174. (RBC NO. 239)
22. Transfer funds in the amount of $\$ 5,199.96$ from Unallocated Faculty Salaries, account No. 207000, to Internal Medicine Teaching Salaries, account No. 204500, and change the source of salary of Eric Furd (nontenure), Assistant professor, effective March 1, 1972, from an annual salary rate of $\$ 22,625$ payable as follows: $\$ 3,225$ from Internal Medicine budget, \$2,400 from USPHS 5 ROI AM 09989, \$5,000 from USPHS 5 ROI AM 13866, \$3,000 from North Texas Chapter Arthritis Foundation and \$9,000 from Arthritis Foundation Fellowship, to $\$ 13,625$ from Internal Medicine budget and $\$ 9,000$ from Arthritis Foundation Fellowship. (RBC No. 244)
23. Transfer funds in the amount of $\$ 6,210$ from Unallocated Faculty Salaries, account No. 207000, to Internal Medicine Teaching Salaries, account No. 204500, and change the source of salary of Juha P. Kokko, (non-tenure), Assistant Professor, effective March 1, 1972, from an annual salary rate of $\$ 24,000$ payable as follows: $\$ 11,580$ from Internal Medicine budget, $\$ 6,210$ from USPHS 5 TO1 HE 05469 and $\$ 6,210$ from USPHS 5 POI HE 11662, to $\$ 24,000$ from Internal Medicine budget. (RBC No. 235)

AMENDMENTS TO 1971-72 BUDGET. (continued)
Internal Medicine (continued)
24. Transfer funds in the amount of $\$ 6,499.95$ from Unallocated Faculty Salaries, account No. 207000, to Internal Medicine Teaching Salaries, account No. 204500, and change the source of salary of James T. Willerson (non-tenure), Assistant Professor, effective March 1, 1972, from an annual salary rate of $\$ 21,000$ payable as follows: $\$ 8,000$ from Internal Medicine budget and $\$ 13,000$ from USPHS 5 POI IE 06296, to $\$ 21,000$ from Internal Medicine budget. (RBC No. 236)
25. Transfer funds in the amount of $\$ 750$ from Unallocated Faculty Salaries account No. 207000, to Internal Medicine Teaching Salaries, account No. 204500, and change the source of salary of Marvin J. Stone (non-tenure), Assistant Professor, effective March 1, 1972, from an annual salary rate of $\$ 8,500$ payable as follows: $\$ 7,000$ from USPHS 5 T12 CA 08062 and $\$ 1,500$ from USPHS 69-40, to $\$ 7,000$ from USPHS 5 T12 CA 08062 and $\$ 1,500$ from Internal Medicine budget. Dr. Stone also receives $\$ 14,000$ directly from American Heart Association. (RBC NO. 241)
26. Appoint Michael S. Brown (non-tenure), Instructor, effective Febmary I, 1972, at an annual salary rate of $\$ 13,300$ payable as follows: $\$ 4,000$ from Internal Medicine budget and $\$ 9,300$ from USPHS 5 TOI AM 05490. (RBC NO. 213)
27. Transfer funds in the amount of $\$ 4,000$ from Unallocated Faculty Salaries account No. 207000, to Internal Medicine Teaching Salaries, account No. 204500, and appoint Robert N. Hyland (non-tenure), Instructor, for the period February I, 1972 through June 30, 1972, at an annual salary rate of $\$ 20,500$ payable as follows: \$9,600 from Internal Medicine budget and \$10,900 from USPHS 5 TOI AI 00030. (RBC NO. 256)
28. Transfer funds in the amount of $\$ 7,200$ from Unallocated Faculty Salaries account No. 207000, to Internal Medicine Classified Salaries, account No. 204501, to create the position of Research Scientist and appoint to this position Masahiro Onata, Research Scientist, effective March 1, 1972, at an annual salary rate of $\$ 14,400$ payable from Internal Medicine budget. (RBC No. 268)

## Neurology

29. Increase the annual salary rate of Myra V. Charest, (non-tenure), Assistant Professor of Nursing Education, effective February 1, 1972, frm an annual salary rate of $\$ 14,000$ payable from USPHS 3 GO2 RM 00007, to \$15,000 from USPHS 3 GO2 RM 00007 . (RBC NO. 254)

Obstetrics and Gynecology
30. Transfer funds in the amount of \$1,999.98 from Unallocated Faculty Salaries, account No. 207000, to Obstetrics and Gynecology Teaching Salaries, account No. 205100, and change the source of salary of Jack A. Pritchard, (tenure), Gillette Professor, effective March I, 1972, from an annual salary rate of $\$ 35,000$ payable as follows: $\$ 22,500$ from Obstetrics and Gynecology budget, $\$ 4,000$ from Family Planning Project, $\$ 3,000$ from Gillette Professorship Fund and \$5,500 from Southwestern Medical Foundation, to $\$ 26,500$ from Obstetrics and Cymecology budget, $\$ 3,000$ from Gillette Professorship Fund and \$5,500 from Southwestern Medical Foundation. (RBC No. 251)
31. Transfer funds in the amount of $\$ 4,999.98$ from Unallocated Faculty Salaries, account No. 207000, to Obstetrics and Gynecology Teaching Salaries, account No. 205100, and change the source of salary of Pentti K. Siiteri (tenure), Professor of Obstetrics and Gynecology and Biochemistry, effective March 1, 1972, from an annual salary rate of $\$ 26,500$ payable as follows: \$11,500 from Obstetrics and Gynecology budget, \$5,000 from Biochemistry budget and $\$ 10,000$ from USPHS 5 RO1 HD 00107 , to $\$ 21,500$ from Obstetrics and Gynecology budget and \$5,000 from Biochemistry budget. (RBC No. 247)

AMENDMENTS TO 1971-72 BUDGET. (continued)
Obstetrics and Gynecology (continued)
32. Transfer funds in the amount of $\$ 8,550$ from Unallocated Faculty Salaries, account No. 207000, to Obstetrics and Gynecology Teaching Salaries, account No. 205100, and change the source of salary of Frances G. Martin (non-tenure), Assistant Professor, effective March 1, 1972, from an annual salary rate of $\$ 18,000$ payable as follows: $\$ 17,100$ from Family Planning Project and $\$ 900$ from Obstetrics and Gynecology budget, to $\$ 18,000$ from Obstetrics and Gynecology budget. (RBC INo. 249)
33. Transfer funds in the amount of $\$ 10,350$ from Unallocated Faculty Salaries, account No. 207000, to Obstetrics and Gynecology Teaching Salaries, account No. 205100, and change the source of salary of Walter W. Taylor (non-tenure), Assistant Professor; Chief Physician for Family Planning, effective March 1, 1972, from an annual salary rate of $\$ 23,000$ payable as follows: $\$ 2,300$ from Obstetrics and Gynecology budget and $\$ 20,700$ from Family Plaming Project, to $\$ 23,000$ from Obstetrics and Gynecology budget. (RBC No. 248)
34. Transfer funds in the amount of $\$ 7,050$ from Unallocated Faculty Salaries, account No. 207000, to Obstetrics and Gynecology Teaching Salaries account No. 205100, and change the source of salary of Barbara Cambridge (non-tenure), Instructor in Sociology, effective March 1, 1972, from an annual salary rate of $\$ 14,100$ from Family Planning Project to $\$ 14,100$ from Obstetrics and Gynecology budget. (RBC No. 250)
35. Accept the resignation of Ikuko Moriyama, (non-tenure), Visiting Assistant Professor effective March 31, 1972. Dr. Moriyama is budgeted at an annual salary rate of $\$ 14,000$ pryable as follows: $\$ 6,000$ from Obstetrics and Gynecology budget and $\$ 8,000$ from American Cancer Society. (RBC No. 263)

Pathology
36. Appoint William T. Sparrow (non-tenure), Assistant Professor, effective July 1, 1972, at an annual salary rate of $\$ 24,000$ payable as follows: $\$ 16,000$ from Pathology budget and $\$ 8,000$ from Parkland Memorial Hospital Services. (RBC No. 253)

## Peaiatrics

37. Change the source of salary of Kenneth C. Haltalin (non-tenure), Assistant Professor, for the period Febmaxy I, 1972 through March 12, 1972, from an annual salary rate of $\$ 22,000$ payable as follows: $\$ 19,500$ from Pediatrics budget and \$2,500 from USPHS 5 TOI AI 00337, to \$22,000 paid from American Medical Association Contract. (RBC No. 203)
38. Appoint James M. Brown (non-tenure), Instructor in Pediatrics and Psychology, effective for the period February 14, 1972 through June 30, 1972, at an annual salary rate of $\$ 15,640$ payable as follows: $\$ 12,512$ from USPHS 12 HS 328 and $\$ 3,128$ from Texas Department of Mental Health and Retardation. (RBC No. 255)
39. Transfer funds in the amount of $\$ 4,750$ from Unallocated Faculty Salaries, account No. 207000, to Pediatrics Teaching Salaries, account No. 205500, and change the source of salary of Amy Talbot (non-tenure), Assistant Professor of Pediatrics and Psychology, effective April 1, 1972 from an annual salary rate of $\$ 17,750$ paid from USPHS 06-H-000,079, to $\$ 11,400$ from Pediatrics budget and $\$ 6,350$ from USPHS 06-H-000,079. (RBC NO. 265)
40. Transfer funds in the amount of $\$ 4,750$ from Unallocated Faculty Salaries, account No. 207000, to Pediatrics Teaching Salaries, account No. 205500, and change the source of salary of Peggy C. Fry (non-tenure), Assistant Professor, effective April 1, 1972, from an annual salary rate of $\$ 18,000$ paid from USPHS $06-\mathrm{H}-000,079$, to $\$ 11,400$ from Pediatrics budget and $\$ 6,600$ from USPHS $06-\mathrm{H}-000,079$. (RBC No. 266)

## Pediatrics

4I. Change the source of salary of JoAnne Whitaker, Professor without tenure, effective February 1, 1972, from an annual salary rate of $\$ 37,500$ payable as follows: $\$ 30,000$ salary from American Medical Association Contract and $\$ 7,500$ overseas differential from American Medical Association Contract, to \$29,400 salary from American Medical Association Contract, \$7,350 overseas differential from American Medical Association Contract, $\$ 600$ salary from William Buchanan Fund, and $\$ 150$ overseas differential from William Buchanan Fund. (RBC No. 272)
42. Remove the overseas differential payment for JoAnne Whitaker, Professor without tenure, as follows: For the period December 16, 1972 through January 6, 1972, at the rate of $\$ 7,000$ from American Medical Association Contract, and for the period February I, 1972 through February 5, 1972, at the rate of $\$ 7,500$ as follows: $\$ 7,350$ from American Medical Association Contract and \$150 from William Buchanan Fund. (RBC No. 273)

Physical Medicine and Rehabilitation
43. Change the status of Ursula Krusen (non-tenure), effective September 1, 1971, from Clinical Associate Professor, 33\%, at an annual salary of $\$ 7,350$ payable from Physical Medicine and Rehabilitation budget to Clinical Professor, $33 \%$, at an annual salary of $\$ 7,350$ payable from Physical Medicine and Rehabilitation budget. (RBC NO. 204)
44. Change the status of George F. Cromes, Jr. (non-tenure), effective February 1, 1972, from Assistant Professor in Vocational Rehabilitation; Department of Physical Medicine and Rehabilitation and School of Allied Health Professions, to Assistant Professor and Chairman of Division of Vocational Rehabilitation; Assistant Professor in Division of Psychology and School of Allied Health Professions, with no change in salary. Dr. Cromes is budgeted at an annual salary rate of $\$ 12,500$ payable as follows. \$6,600 fron Physical Medicine and Rehabilitation budget, \$5,100 from SRS 44-P-30064/6-07 and \$800 from School of Allied Health Professions, Rehabilitation Science. (RBC No, 200)

Physiology
45. Appoint Harry Fred Downey (non-tenure), Assistant Professor, for the period February 1, 1972 through June 30, 1972, at an annual salary rate of $\$ 15,500$ payable from USPHS 5 TOI HE 05396. (RBC NO. 207)
46. Change the status of John T. Watson, (non-tenure), effective February 1, 1972, from Instructor in Thoracic and Cardiovascular Surgery to Instructor in Physiology and Thoracic and Cardiovascular Surgery, with no change in salary. Dr. Watson is budgeted at an annual salary rate of $\$ 17,000$ payable from Surgery budget. (RBC No. 212)
47. Increase the annual salary rate of Stuart A. Bergman, Jr. (non-tenure), Instructor, for the period from March 1, 1972 through June 30, 1972, from an annual salary rate of $\$ 8,520$ from USPHS 5 POI HE 06296 , to $\$ 9,520$ from as follows: $\$ 8,520$ from USPHS 5 POI HE 06296 and $\$ 1,000$ from NASA Contract. (RBC No. 267)

## Psychiatry

48. Transfer funds in the amount of $\$ 5,660.89$ from Unallocated Faculty Salaries, account No. 207000, to Psychiatry Teaching Salaries, account No. 206100, and appoint Mahmoud Kamal E1-Din (non-tenure), Instructor, effective February 7, 1972, at an annual salary rate of $\$ 10,000$ payable from Psychiatry budget. (RBC No. 211)
49. Change the status of Judith H . Forgotson, (non-tenure), effective February 21, 1972, from Clinical Assistant Professor, 20\%, at an annual salary of $\$ 5,000$ payable from USPHS 5 TO1 MH 10856, to Clinical Assistant Professor, 50\%, at an annual salary of $\$ 12,500$ payable as follows: $\$ 5,000$ from USPHS 5 TOI MH 10856 and $\$ 7,500$ from USPHS 5 TO2 MH 05928. (RBC No. 257)

AMENDMENTS T0 1971-72 BUDGET. (continued)
Psycilatry (continued)
50. Transfer funds in the amount of $\$ 3,333.34$ from Unallocated Faculty

Salaries, account No. to Psychiatry Feaching Salaries, account No. and appoint John L. Kall (non-tenure), Instructor, effective
July 1, 1972, at an annual salary rate of $\$ 20,000$ payable from Psychiatry budget. (RBC No. 261)

Radiology
51. Iransfer funds in the amount of $\$ 8,499.96$ from Unallocated faculty Salaries, account No. to Radiology Teaching Salaries, account No. and change the source of salary of Mary Esther Gaulden, (non-tenure), Eman Freeman Associate Professor, effective March I, 1972, fron an annual salary rate of $\$ 20,000$ payable as follows: $\$ 3,000$ fron Radiology budget and $\$ 17,000$ from Emra Freeman Professorghip Fund, to $\$ 20,000$ from Rediology budget. (RSC No. 219)
52. Change the status of Dale 8 . Fuller (non-tenure), effective March i, 1972, from Clinical Assistant Professor, $40 \%$, to Clinical Associate Professor, $40 \%$, with no change in salary. Dr. Fuller is budgeted at an annual salary of $\$ 10,000$ payable from Radiology oudget. (RBC No. 260)

Surgery
53. Transfer funds in the amount of $\$ 3,200$ from Unallocated Faculty Salaries 53. Transfer funds in the anount of $\$ 3,200$ from Unallocated Faculty Salar
account No. change the source of salary of Donald D. Trunkey (non-tenure), Research Assistant Professor, effective January 1, 1972, at an annual salary rate of $\$ 4,800$ paid from Surgery Trust Fund, to $\$ 4,800$ paid from Surgery oudget. Dr. Trunkey receives a direct NLK Fellowship in the amount of $\$ 18,000$. (RBC No. 195)
54. Transter funds in the amount of $\$ 3,200$ from Unallocated Faculty Salaries, account No. to Surgery Teaching Salaries, account No. and change the source of salary of Lewis M. Flint, Jr. (non-tenure), Research Instructor effective January 1, 1972 from $\$ 4,800$ paid from Surgery Trust Fund, to $\$ 4,800$ paid from Surgery budget. Dr. Flint receives a direct NLH Fellowship in the amount of $\$ 13,000$. (RBC No. 296)
55. Transfer funds in the amount of $\$ 11,333.36$ from Unallocated Faculty Salaries, account No. $\longrightarrow$ to Surgery Teaching Salaries, account No. , and change the source of salary of John T. Watson (non-tenure) Instructor in Thoracic and Cardiovascular Surgery, effective January 1, 1972, from an annual salary rate of $\$ 17,000$ paid from USPFS 5 PO1 GM 1489, to $\$ 27,000$ paid from Surgery oudget. (RBC No. 201)
56. Change the status of Bruce N. Epker (non-tenure), Assistanc Professor of Oral Surgery, effective January 1, 1972 through June 30, 1972, from full time at an annual salary rate of $\$ 16,500$ payable as follows: $\$ 15,000$ from Surgery budget and $\$ 1,500$ fron USPHS 5803 NE 00174 , to $20 \%$ time at an annual salary of $\$ 3,500$ payable as follows: $\$ 1,000$ from Surgery budget and $\$ 2,500$ fram USPHS 5 EO3 ME 00274. (RAC NO. 202)
57. Transfer funds in the amount of $\$ 4,643.69$ fron Unallocated Faculty Salaries, account No. to Surgery Teaching Salaries, account No. 206400 , and appoint Berbara Minshew (non-temure), Assistant Professor of Surgery and kicrobiology at an annual salary rate of $\$ 16,000$ payable as follows: $\$ 8,000$ from Surgery budget and $\$ 8,000$ fram USPHS 5 PO1 GM 14892. (RBC No. 208)
58. Transfer flunds in the arcount of $\$ 3,388.50$ fron Unallocated Faculty Salaries, account No. to Surgery Teaching Salaries, account No. Peofessor and change the source of salary of Morton D. Prager (tenure)
Professor of Surgery, Associate Professor of Biochemistry, effective March 1, 1972, fram en annual salary rate of $\$ 25,177$ payable as follows: $\$ 18,400$ fron Surgery budget and $\$ 6,777$ from USFFS 5 FOL GM 14892 , to $\$ 25,177$ froa Surgery budget. (RBC No. 223)

Surgery (continued)
59. Transfer funds in the amount of $\$ 3,750$ from Unallocated Faculty Salaries, account No. 207000, to Surgery Teaching Salaries, account No. 206400, and change the source of salary of Ronald I. Holliday (non-tenure), Research Instructor, effective March 1, 1972, from \$7,500 payable from USPHS 5 POI GM I4892, to $\$ 7,500$ payable from Surgery budget. (RBC No. 222)
60. Transfex funds in the amount of $\$ 7,000.02$ from Unallocated Faculty Salaries, account No. 207000, to Surgery Teaching Salaries, account No. 206400, and change the source of salary of Joel H. Horovitz (non-tenure) Research Instructor, effective March 1, 1972, from an annual salary rate of $\$ 14,000$ payable from USPHS 5 POI GM 14892, to $\$ 14,000$ from Surgery budget. (RBC No. 221)
61. Transfer funds in the amount of $\$ 2,388.54$ from Unallocated Faculty Salaries, account No. 207000, to Surgery Teaching Salaries, account No. 206400, and change the source of salary of Robert N. McClelland (tenure) Professor, effective March 1, 1972, from an annual salary rate of \$24,777 payable as follows: $\$ 20,000$ from Surgery budget, $\$ 2,000$ from USPHS 5 TOI GM 01733, and $\$ 2,777$ from USPHS 5 PO1 GM 14892, to $\$ 24,777$ from Surgery budget. (RBC No. 220)
62. Transfer funds in the amount of $\$ 3,999.96$ from Unallocated Faculty Salaries, account No. 207000, to Surgery Teaching Salaries, account No. 206400, and change the source of salary of Barbara Minshew, (non-tenure) Assistant Professor, effective March I, 1972, from an annual salary rate of $\$ 16,000$ payable as follows: $\$ 8,000$ from Surgery budget and $\$ 8,000$ from USPHS 5 POI GM 14892, to $\$ 16,000$ from Surgery budget. (RBC No. 226)
63. Transfer funds in the amount of $\$ 2,499.96$ from Unallocated Faculty Salaries, account No. 207000, to Surgery Teaching Salaries, account No. 206400, and change the source of salary of James L. Nelson, (non-tenure), Research Instructor, effective March 1, 1972, from \$5,000 payable from USPHS 5 POI GM 14892, to $\$ 5,000$ payable from Surgery budget. (RBC No. 225)
64. Transfer funds in the amount of $\$ 1,000.02$ from Unallocated Faculty Salaries, account No. 207000, to Surgery Teaching Salaries, account No. 206400, and change the source of salary of Malcolm O. Perry (tenure), Professor, effective March 1, 1972, from an annual salary rate of $\$ 24,000$ payable as follows: $\$ 22,000$ from Surgery budget and $\$ 2,000$ from USPHS 5 PO1 GM 14892, to $\$ 24,000$ from Surgery budget. (RBC NO. 224)
65. Transfer funds in the amount of $\$ 2,650.02$ from Unallocated Faculty Salaries, account No. 207000, to Surgery Teaching Salaries, account No. 206400, and change the source of salary of Ronald C. Jones (tenure), Associate Professor, effective March I, 1972, from an annual salary rate of $\$ 20,500$ payable as follows: $\$ 15,200$ from Surgery budget and \$5,300 from Facuity Gifts for Surgery, to $\$ 20,500$ from Surgery budget. (RBC No. 227)
66. Transfer funds in the amount of $\$ 5,970.48$ from Unallocated Faculty Salaries, account No. 207000, to Surgery Teaching Salaries, account No. 206400, and change the source of salary of Robert J. Hays (non-tenure), Assistant Professor, effective March 1, 1972, from an annual salary rate of $\$ 24,941$ payable as follows: $\$ 13,000$ from Surgery budget and $\$ 11,941$ from Faculty Gifts for Surgery, to $\$ 24,941$ from Surgery budget. (RBC No. 230)
67. Transfer funds in the amount of $\$ 5,970.48$ from Unallocated Faculty Salaries, account No. 207000, to Surgery Teaching Salaries, account No. 206400, and change the source of salary of William Curreri (non-tenure), Assistant Professor, effective March 1, 1972, from an annual salary rate of $\$ 24,941$ payable as follows: $\$ 13,000$ from USPFS 5 E03 PE 00174 and $\$ 11,941$ from Faculty Gifts for Surgery, to $\$ 13,000$ from USPHS 5 EO3 PE 00174 and \$11,941 from Surgery budget. (RBC No. 229)

AMENDMENPS TO 1971-72 BUDGET. (continued)
Surgery (continued)
68. Transfer funds in the amount of $\$ 3,708$ from Unallocated Faculty Salaries, account No. 207000, to Surgery Teaching Salaries, account No. 206400, and change the source of salary of Charles J. Carrico, (non-tenure), Assistant Professor, effective March 1 , 1972 , from an annual salary rate of $\$ 22,416$ payable as follows: $\$ 15,000$ from Surgery budget and $\$ 7,416$ from Faculty Gifts for Surgery, to $\$ 22,416$ from Surgery budget. (RBC No. 228)
69. Transfer funds in the amount of $\$ 5,215.98$ from Unallocated Faculty Salaries, account No. 207000, to Surgery Teaching Salaries, account No. 206400, and change the source of salary of Erwin R. Thal (non-tenure), Assistant Professor, effective March 1, 1972, from an annual salary rate of $\$ 22,582$ payable as follows: $\$ 12,150$ from Surgery budget and $\$ 10,432$ from Faculty Gifts for Surgery, to $\$ 22,582$ from Surgery budget. (RBC No. 231)
70. Transfer funds in the amount of $\$ 4,999.98$ from Unallocated Faculty Salaries, account No. 207000, to Surgery Teaching Salaries, account No. 206400, and change the source of salary of Terry D. Allen (tenure), Associate Professor of Urology, effective March I, 1972, from an annual salary rate of $\$ 20,000$ payable as follows: $\$ 10,000$ from Surgery budget and $\$ 10,000$ from Various Donors, to $\$ 20,000$ from Surgery budget. (RBC No. 252)

Medical Art and Visual Education
71. Change the status of Karen Waldo (non-tenure), effective Feb. 1, 1972 from an Assistant at annual salary rate of $\$ 9,500$ payable from Med. Art \& Visual Education budget, to Instructor at an annual salaxy rate of $\$ 10,000$ payable from Medical Art and Visual Education budget. (RBC No. 237)

Unallocated Accounts
72. Transfer funds in the amount of $\$ 15,000$ from Unallocated Classified Salaries, account No. 207001, to Unallocated Maintenance and Operation, account No. 207005. (RBC No. 199)

Iibrary
73. Change the status of Violet M. Baird, effective April 1, 1972, from Historical Bibliographer, at an annual salary rate of $\$ 16,800$ payable from Library budget, to Librarian Emeritus, without salary. (RBC No. 269)
74. Change the status of Maryann Duggan, for the period February 1, 1972 through March 31, 1972, from full time at an annual salary rate of $\$ 18,600$ payable as follows: \$16,740 from Southwestern Library Association and $\$ 1,860$ from USPES 5 GOL LM 00785, to $50 \%$ time at an annual salary of $\$ 9,300$ payable as follows: $\$ 8,370$ from Southwestern Library Association and $\$ 930$ from USPHS $5 G 04$ IM 00785. Miss Duggan will revert to full time effective April 1, 1972. (RBC No. 164)

Instructional Communications
75. Transfer funds in the amount of $\$ 1,455$ from Unallocated Classified Salaries, account No. 207001, to Instructional Communications Classified Salaries, account No. 216201, and appoint Virginia Lee Helton, Senior Secretary, effective February 1, 1972, at an annual salary rate of $\$ 6,780$ payable from Instmactional Communications budget. (RBC No. 205)

University Police
76. Transfer funds in the amount of $\$ 600$ from Unallocated Maintenance and Operation, account NO. 207005, to University Police - Travel, account No. 220506. (RBC NO. 218)

ANENDMENTS TO 1971-72 BUDGET. (continued)
School of Allied Health Professions
77. Reappoint Robert E. Thomas (non-tenure), Adjunct Assistant Professor, approximately $47 \%$, for the period February 1, 1972 through June 30, 1972, at an annual salary of $\$ 7,500$ payable as follows: $\$ 7,080$ from NIH $44-\mathrm{P}-$ 30148/6-01 and $\$ 420$ from NIH 44-P-30137/6-01. (RBC NO. 209)

Student Health Service
78. Transfer funds in the amount of $\$ 1,270$ from Interest on Current Restricted Funds Time Deposits, account No. 745405 to Renovation of Student Health Services, account No. 748705. (RBC No. 274)



THE UNIVERSITY OF TEXAS
MEDICAL SCHOOL AT SAN ANTONIO
March 28, 1972

Dr. Charles A. LeMaistre
Chancellor
The University of Texas System
601 Colorado Street
Austin, Texas 78701
Dear Dr. LeMaistre:
The following docket for The University of Texas Medical School at San Antonio is submitted for your approval and presentation to the Board of Regents at its next meeting in Austin on April 29, 1972:

GIFTS: Acceptance is recommended for the following gift which has been received by The University of Texas Medical School at San Antonio:



## Amount

440 shares of stock of the Niagara Mohawk Power Corporation (Value \$7,226.69) and 200 shares of Conill Corp. stock (Value \$7,533.72)
Cash - $\$ 10,000$

GRANTS (NON-GOVERNMENTAL): Approval is requested for the following: National Tuberculosis and Respiratory Disease Association

1. Research Grant

Characterization of the pattern and Magnitude of the Total Cellular and Antibody Immune Response in the Respiratory Tract Following Initial Challenge with Viral and Mycobacterial Antigens Dr. Jerry J. Eller
July 1, 1972 - June 30, 1973
$\$ 12,000$
The Robert $A$. Welch Foundation
2. Research Grant $A Q-366$

Studies on the Metabolism of Trehalose, Implications for Metabolic Control.
Dr. Alan D. Elbein
May 1, 1972 - April 30, 1973
\$12,000

CONTRACTS AND GRANTS (Federal): Approval is requested for the following:
Department of Health, Education and Welfare
National Institute of Arthritis and Metabolic Diseases

1. Research Grant 1 ROD AM15917-01

Hemoglobin Production During Animal Development
Dr. John C. Lee
January 1, 1972 - December 31, 1972
\$13,596

## National Cancer Institute

2. Research Grant 5 R10 CA12275-02

Central Oncology Group
Dr. J. Bradley Aust
February 1, 1972 - January 31, 1973 \$19,806
3. Contract NIH-NCI-E-72-3210

Development of IN VITRO Methods for the Detection of CellMediated Immunologic Reactivity to Chemical Carcinogens Dr. Daniel E. Thor February 16, 1972 - February 15, 1973 $\$ 84,583$
4. Training Grant 2 T12-CA08069-06 Clinical Cancer Training
Dr. J. Bradley Aust
July 1, 1972-June 30, 1973
$\$ 59,191$
Change in Grant Previously Approved:
5. Training Grant 5 T12 CA08069-05

Dr. J. Bradley Aust
Extension of time until June 30, 1973
No additional funds

National Institute of Child Health and Human Development
6. Development Award - Research Career Program 5 KO4 HD47279-02 Mechanisms Regulating Tubal Transport of Ova
Dr. Carl J. Pauerstein
March 1, 1972 - February 28, 1973 \$25,000

National Heart and Lung Institute
7. Research Grant 2 R01 HL12415-04

Evaluation of Left Ventricular Function Dr. Vernon S. Bishop February 1, 1972 - January 31, 1973 \$33,239

Social and Rehabilitation Services
Change in Grant Previously Approved:
8. Training Grant 44-P-30145/6-01

Undergraduate Traineeships in Rehabilitation Medicine Dr. Arthur E. Grant
Extension of time to September 30, 1972
Additional funds of $\$ 3,900$

The National Urban Coalition

Health Manpower Development Program
9. CAP 30020 ( $9875-\mathrm{B} / 1$ )

Health Careers Opportunity Program
Dr. Fred M. Taylor
January 27, 1972 - January 26, 1973
\$60,000

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CONTRACTS AND AGREEMENTS (OTHER): Approval is requested for the following:
    Bexar County Hospital District
        Change in Contract Previously Approved:
    1. Change the amount of BCHD Contract 非6 ending December 31,1972
        from \(\$ 349,250.00\) to \(\$ 532,523.66\).
Texas State Department of Health
    2. Interagency Contract (72-73)-417
        Reimbursement for Professional Services
        February 24, 1972 - January 31, 1973
        \$31,632
City of San Antonio
3. Alcohol Safety Action Program
January 1, 1972 - December 31, 1974
\(\$ 100,000\)
(Subcontract to Contract DOT HS-049-1-065 between the City of San Antonio and the U.S. Department of Transportation proposed December 29, 1971.)
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RECOMMENDED AMENDMENES TO THE 1971-72 BUDGET:
Office of Academic Development

1. Increase the annual salary rate of Dr. Carlos Pestana, Associate Dean Eor: Academic Development ( $50 \%$ time) from $\$ 19,500$ to $\$ 21,000$ effective March 1, 1972. Funds needed for this change to come from Unallocated Administrative and Professional Salaries. Dr. Pestana is also paid as Associate Professor (tenure), $50 \%$ time, from the Department of Surgery. (RBC 152)

## Personnel Clinic

2. Increase the annual salary rate of Dr. David J. Kudzma, Director, Personnel Clinic (50\% time), from $\$ 18,000$ to $\$ 19,500$ effective April 1, 1972 . Funds needed for this increase to come from Unallocated Administrative and professional Salaries. Dr. Kudzma is also paid as Assistant Professor (non-tenure) (50\% time) from the Department of Medicine. (RBC 164)

Anesthesiology
3. Accept the resignation of Dr. Barry F. Bass (non-tenure), Assistant Professor at an annual salary rate of $\$ 17,500$, effective at the close of business March 31 , 1972. Transfer unused Teaching Salaries in the amount of $\$ 7,291.65$ to Unallocated Faculty Salaries. (RBC 140)

## Medicine

4. Appoint Dr. Stephen F. Hoffman (non-tenure) as Assistant Professor at an annual salary rate of $\$ 20,000$ effective August 1 , 1972. Funds needed for this appointment to come from Unallocated Faculty Salaries. (RBC 150)
5. Increase the annual salary rate of Dr. Everard J. Siller (non-tenure), Assistant Professor, from $\$ 18,000$ to $\$ 19,500$ effective March 1, 1972. Funds needed for this change to come from Unallocated Faculty Salaries. (RBC 153)
6. Appoint Dr. James S. Loftis (non-tenure) as Associate Professor at an annual salary rate of $\$ 25,400$ effective March 13, 1972. Funds needed for this appointment to come from OEO Grant $6810 \mathrm{~B} / 0$. (RBC 163)
7. Increase the annual salary rate of Dr. David J. Kudzma (non-tenure), Assistant Professor ( $50 \%$ time) from $\$ 18,000$ to 19,500 effective April 1, 1972 . Funds needed for this increase to come from Unallocated Faculty Salaries. Dr. Kudzma is also paid as Director, Personnel Clinic (50\% time). (RBC 165)
8. Increase the annual salary rate of Dr. Michael $S$. Gold (non-tenure), Assistant Professor, from $\$ 18,000$ to $\$ 19,500$ effective Apri1 1, 1972. Funds needed for this increase to come from Unallocated Faculty Salaries. (RBC 166)

## Obstetrics-Gynecology

9. Reappoint Dr. Carl J. Pauerstein (tenure) as Associate Professor at an annual salary rate of $\$ 25,000$ effective March 1,1972 . Funds needed for this reappointment to come from DHEW Grant 5 K04 HD47279-02. (RBC 146)
10. Appoint Dr. Robert $W$. Huff (non-tenure) as Instructor at an annual salary rate of $\$ 18,000$ effective July 1, 1972. Funds needed for this appointment to come From Unallocated Eaculty Salaries. (RBC 148)
11. Appoint Dr. Jack A. Goff (non-tenure) as Instructor at an annual salary rate of $\$ 18,000$ effective July 1, 1972. Funds needed for this appointment to come from Unallocated Faculty Salaries. (RBC 149)
12. Appoint Dr. Marshall L. Houston (non-tenure) as Assistant Professor (without salary) effective March 1, 1972. Dr. Houston also serves as Assistant Professor (without salary) in the Department of Anatomy. Dr. Houston is paid From the San Antonio Dental School. (RBC 161)

## Pathology

13. Reappoint Miss Elizabeth Ludolph (non-tenure) as Instructor at an annual salary rate of $\$ 10,500$ effective February 1,1972 through March 31, 1972 . Funds needed for this appointment to come from Cytopathology Laboratory, (RBC 142)
14. Change the status of Dr. Phillenore A. Howard from Instructor (non-tenure) at an annual salary rate of $\$ 14,500$ to Assistant Professor (non-tenure) effective February 9, 1972. Annual salary rate remains unchanged. Dr. Howard is paid Erom BCHD Contract \#6. (RBC 145)

## Psychiatry

15. Appoint Dr. Harry A. Wilmer (non-tenure) as Clinical Professor, $25 \%$ time, at an annual salary rate of $\$ 28,000$ effective February 1,1972 through June 30 , 1972. Funds needed for this appointment to come from DHEW Grant 5 TOI MH11891-03. (RBC 144)
16. Appoint Dr. John W. Worsham, Jr. (non-tenure) as Assistant Professor (Psychology) -- $50 \%$ time -- at an annual salary rate of $\$ 18,000$ effective February 1, 1972. Funds needed for this appointment to come from Alcohol Safety Action Program Contract - City of San Antonio. (RBC 155)
17. Change the status of Miss Margaret S. Keir (non-tenure), Instructor (part-time) at a salary of $\$ 6,000$ for 12 months (BCHD Contract 非6) to Instructor (part-time) at a salary of $\$ 9,000$ for 12 months ( $\$ 6,000$ from BCHD Contract 非6 and $\$ 3,000$ from DHEW Grant 5 TO2 MH11661-03), effective February 1 , 1972. No change in annual salary rate of $\$ 10,500$. (RBC 162)

## Surgery

18. Increase the annual salary rate of Dr. Carlos pestana (tenure), Associate Professor ( $50 \%$ time) from $\$ 19,500$ to $\$ 21,000$ effective March 1, 1972. Funds needed for this change to come from Unallocated Faculty Salaries. Dr. Pestana is also paid as Associate Dean for Academic Development ( $50 \%$ time), from the Office of Academic Development. (RBC 15I)
19. Increase the annual salary rate of Miss Elizabeth A. Montgomery (non-tenure), Instructor, From $\$ 9,600$ to $\$ 10,600$ effective March 1, 1972. Funds needed for this increase to come Erom Unallocated Administrative and Professional Salaries. (RBC 156)

Library
20. Appoint Miss Jacqueline R. Raquet (non-tenure) as Assistant Instructor of Medical Bibliography and Assistant Reference Librarian at an annual salary rate of $\$ 8,500$ effective February 7, 1972. Additional funds needed for this appointment in the amount of $\$ 4,186.78$ to be transferred from Classified Salaries to Administrative and Professional Salaries; $\$ 624.98$ of the funds required are currently available. (RBC 141)

## Physical Plant (General Services)

21. Change the status of Mr. Benny R. Clements (non-tenure) from Safety Engineer at an annual salary rate of $\$ 9,600$, Institutional Safety Program Department to Assistant to the Director of Physical Plant at an annual salary rate of $\$ 10,500$, Physical Plant (General Services). Funds needed for this change to be transFerred to Physical Plant (General Services), Administrative and Professional Salaries from Unallocated Administrative and Professional Salaries (\$450) and Institutional Safety Program Department, Classified Salaries (\$4,800). (RBC 147)

TRANSFER OF FUNDS:

1. Amount of Transfer: $\$ 6,200.00$

To: Office of the Purchasing Agent, Maintenance \& Operation $\$ 5,000.00$
Office of the Personnel Director, Maintenance \& Operation 1,000.00
Office of the Personnel Director, Travel 200.00
From: Office of the Purchasing Agent, Classified Salaries
$\$ \quad 692.18$
Office of the Personnel Director, Classified Salaries
182.07

Office of the Business Manager, Wages 609.48
Central Receiving, General Stores \&
Inventory, Classified Salaries 1,013.28
Mail Service, Classified Salaries
827.79

Personnel Clinic, Classified Salaries $2,875.20$
For: To provide these departments with the
necessary funds required to meet their operational requirements. (RBC 139)
2. Amount of rransfer: $\$ 2,450.00$

To: Animal Care Services, Salaries
From: Volume Variance - Unallocated
For: To provide the salary funds necessary
for the temporary employment of
additional technical assistance. (RBC 143)
3. Amount of Transfer: $\$ 3,150.00$

To: Office of Academic Development, Maintenance and Operation
From: Unallocated Maintenance and Operation
For: To provide the funds necessary to enable this department to meet its operational requirements. ( RBC 154)
4. Amount of Transfer: $\$ 3,390.00$

To: Office of the Purchasing Agent, Classified Salaries
From: Central Receiving, General Stores, and Inventory, Classified Salaries
For: To provide the salary funds necessary for a classified position being transferred to Office of the Purchasing Agent. (RBC 157)
5. Amount of Transfer: \$3,666.16

To: Central Receiving, General Stores, and Inventory, Classified Salaries \$1,123.25
Physical Plant (General Services), Classified Salaries

2,542.91
From: Unallocated Classified Salaries $\$ 3,666.16$
For: To provide the salary funds necessary
for the performance of required clerical assistance in these departments. (RBC 158)


Dean

THE UNIVERSITY OF TEXAS
DENTAL SCHOOL AT SAN ANTONIO

March 28, 1972

Dr. Charles A. LeMaistre
Chancellor
The University of Texas System
Austin, Texas 78701
Dear Dr. LeMaistre:
The following docket for The University of Texas Dental School at San Antonio is submitted for your approval and presentation to the Board of Regents at its next meeting in Austin on April 29, 1972:

## RECOMMENDED AMMENDMENTS TO 1971-72 BUDGET:

Orthodontics

1. Appoint Dr. Dan C. Peavy, Jr. (non-tenure) as Assistant Professor
( $10 \%$ time) at an annual salary rate of $\$ 20,000$ effective February 7, 1972 . Funds needed for this appointment to come from Unallocated Faculty Salaries. (RBC 9)

## TRANSFER OF FUNDS:

1. Amount of Transfer: $\$ 6,000.00$

To: Medical Communications, Maintenance and Operation
From: Medical Communications, Classified Salaries
For: To provide the funds necessary to enable this department to meet its operational requirements. (RBC 4)

JVO: er


GALVESTON, TEXAS
March 31, 1972

Dr. Charles A. LeMaistre
Chancellor
The University of Texas System
Austin, Texas
Dear Dr. LeMaistre:
The following docket is submitted for your approval and presentation to the Board of Regents at its meeting in Austin, Texas, on April 29, 1972:

CHANGE OF STAFF STATUS OF MEMBERSHIPS ON THE MEDICAL STAFT OF THE UNIVERSITY OF TEXAS MEDICAL BRANCH HOSPITAIS AT GALVESTON: On the recommendation of the Executive Committee of the Medical Staff, approval is respectfully requested for a change of the staff status of the following memberships on the Medical Staff:

1. Change the staff status of Martin P. Rappaport, M.D., from Associate Membership to Courtesy Membership, effective February 1, 1972.
2. Change the staff status of Leo J. Castigioni, M.D., from Associate Membership to Courtesy Membership, effective February I, 1972.
3. Change the staff status of Barry A. Portnoy, M.D., from Associate Membership to Courtesy Membership, effective February $1,1972$.
4. Change the staff status of Ewell G. Scott, M.D., from Associate Membership to Courtesy Membership, effective February 1, 1972.
5. Change the staff status of Oliver C. Hunter, M.D., from Associate Membership to Courtesy Membership, effective February 1, 1972.
6. Change the staff status of Stephan E. Ritzmann, M.D., from Associate Membership to Consulting Membership, effective February I, 1972.
7. Change the staff status of Gordon C. Mills, M.D., from Associate Membership to Consulting Membership, effective February 1, 1972.
8. Change the staff status of Ernest S. Barratt, M.D., from Associate Membership to Consulting Membership.
9. Change the staff status of Charles Gaston, M.D., from Associate Membership to Consulting Membership.
10. Change the staff status of Vernon K. Jenkins, M.D., from Associate Membership to Consulting Membership.
11. Change the staff status of Harold Goolishian, Ph.D., from Associate Membership to Consulting Membership.
12. Change the staff status of Miss Agnes Ritchie from Associate Membership to Consulting Membership.
13. Resign Walter Reid, M.D., as an Associate Member of the Medical Staff, effective December 1, 1971. Dr. Reid has resigned his position in the Department of Neurology and Psychiatry.
14. Change the staff status of Robert R. Perry, M.D., from Associate Membership to Consulting Membership.
15. Resign Charles K. Hendrick, M.D., from Associate Membership (PartTime) on the Medical Staff.
16. Resign William A. Walker, M.D., from Associate Membership (Part-Time) on the Medical Staff.
17. Resign Elmer Heimbignex, M.D., from Courtesy Membership (Part-time) on the Medical Staff.
18. Change the staff status of Bill S. Caldwell, Ph.D., from Associate Membership to Consulting Membership.
19. Change the staff status of Donald A. Rappoport, Ph.D., from Associate Membership to Consulting Membership.
20. Change the staif status of Rose G. Schneider, Ph.D., from Associate Membership to Consulting Membership.
21. Change the staff status of Lennart I. Kopra, Ph.D., from Associate Membership to Consulting Membership.
22. Resign Marjorie Forman, M.D., Associate Membership on the Medical Staff. Dr. Forman is on a Leave of Absence.
23. Change the staff status of William S. Hughes, M.D., from Associate Membership to Active Membership on the Medical Staff. Dr. Hughes has received his license to practice medicine in the State of Texas.
24. Change the staff status of Edwaxd Regis McFadden, M.D., from Associate Membership to Active Membership. Dr. McFadden has received his license to practice medicine in the State of Texas.
25. Change the staff status of Herman A. Barnett, M.D., from Associate Membership to Courtesy Membership.
26. Change the staff status of Nathan Cedars, M.D., from Associate Member~ ship to Courtesy Membership.
27. Change the staff status of Robert L. Edwards, M.D., from Associate Membership to Courtesy Membership.
28. Change the staff status of John R. McKenna, M.D., from Associate Membership to Courtesy Membership.
29. Change the staff status of Benjamin J. Nasits, D.D.S., from Associate Membership to Courtesy Membership.
30. Change the staff status of Edward A. Blackburn, Jr., M.D., from Associate Membership to Courtesy Membership.
31. Change the staff status of Edward Lynn Heartield, M.D., from Associate Membership to Courtesy Membership.
32. Resign Robert V. Bucklin, M.D., from Active Membership as he has resigned his position with the Department of Pathology.
33. Resign John L. Spikes, Ph.D., from Associate Membership as he has resigned his position with the Department of Pathology.
34. Resign Kurt Weiss, M.D., from Active Membership. He has resigned his position with the Department of Pathology.

MEMBERSHIP IN THE GRADUATE FACUITY: In compliance with Part I, Chapter $\overline{V-B}$, Section 7.11 of the Rules and Regulations of the Board of Regents, approval is requested for the following named faculty member, who has been certified by the appropriate Committee on Graduate Studies, approved by the Executive Committee of the Graduate Faculty, the Chancellor, the Vice-Chancellor for Health Affairs, and the President, for membership in the Graduate Faculty at The University of Texas Medical Branch at Galveston:

Norman M. Trieff, Ph.D.
Associate Professor
Department of Preventive Medicine and Community Health

EMP LOYMENT OF MR. SEVERN M. FREY, OVER AGE SIXTY FTVE: Upon the recommendation of President Blocker, concurred in by Deputy Chancellor Walker and System Personnel Director Kennedy, approval is requested for the waiver of Section 31.(17), Chapter III, Regents' Rules and Regulations, Part One, to permit the part-time employment of Mr. Severn M. Frey as Research Associate (approximately 20 hours per week) in the Department of Pediatrics. Although Mr. Frey is 72 years of age, he is in excellent health and is a highly qualified individual with analytical expertise. He will be working on a project entitled studies on the control of Collagen Accumulation in Hypertrophic Scars. His time will be spent on the extraction and assay of tropocollagen, procollagen, and collagen, and the determination of hydroxproline. He will also be required to make radioactive assays of these fractions.

AMENDMENTS TO THE BY-IAWS OF THE FACULTY OF THE SCHOOI OF ALEIED HEALTH SCIENCES: Upon the recommendation of the Faculty, the Chairman of the By-Laws Committee, Dean of the School of Allied Health Sciences, Vice President for Academic Affairs and Dean of Medicine, and approved by all appropriate members of System Administration, approval of the following Amendments to the By-Laws of the Faculty of the School of Allied Health Sciences as set out on Pages G-4 through G-9 is respectfully requested.

# AMENDIENTS TO THE BY-LAWS of the <br> Faculty of Allied Health Sciences of the <br> School of Allied Health Sciences 

The University of Texas Medical Branch

Galveston
January, 1972
(1) Amend Article I, Section 4, Administrative Affairs by re-deisignating Article I, Section 4 as Article I, Section 5, with all subsequent sections under Article I numbered accordingly, Article I, Section 4 will then read:

## Article I Name, Object, Puxpose

Section 4. Continuing Education - The Faculty of Allied Health Sciences shall plan and engage in continuing education activities to encourage and nurture professional competencies.
(2) Amend Article II, Section I, Full Members to read:

Article II Membership
Section I. Full Members - All persons who shall have been duly appointed to any rank in the School of Allied Health Sciences and are fulltime employees of the University of Texas Medical Branch, and who shall have duly accepted a faculty appointment in a Department of the School of Allied Health Sciences at the University of Texas Medical Branch at Galveston, shall be full members of the Faculty of Allied Health Sciences; provided that the provisions of Section 4 of this Article shall have been complied with. The Chancellox of the University of Texas System, [THE DEPUTY CHANCELLOR OF THE UNIVERSITY OF TEXAS SYSTEM, ] the President of the University of Texas Medical Branch, and the Dean of Allied Health Sciences shall be full membexs of the Faculty of Allied Health Sciences, ex officio, and shall have all privileges and responsibilities of full members including the xight to vote upon the business of the Faculty of Allied Health Sciences.
(3) Amend Article II, Section 2, Associate Members to read:

Article II Membership
Section 2. Associate Members - All other persons who have been appointed to the Faculty who are not employed by the School of Allied Health Sciences of the Univexsity of Texas Medical Branch, and who shall have duly accepted such a position in the School of Allied Health Sciences at the University of Texas Medical Branch at Galveston, shall be associate members of the faculty of Allied Health Sciences, provided that the provisions of Section 4 of this axticle have been complied with.
(4) Amend Article III, Section 2, Dean of Allied Health Sciences by dividing Section 2 into Subsection $A$, and $B$. to read:

Article III The Administration of the School of Allied Health Sciences
Section 2. Dean of Allied Health Sciences
> A. The Dean of Allied Health Sciences shall be the Chairman of the Faculty of Allied Health Sciences and its Chief Executive. A recommendation for the appointment of a Dean of Allied Health Sciences shall be made by the President of the University of Texas Medical Branch upon the advice of a Special Committee of the Eaculty of Allied Health Sciences, convened for this purpose. The Dean of Aliied Health Sciences may appoint a temporary Chairman of the Faculty of Allied Health Sciences, to serve during his absence and, in case of emergency, the President of the University of Texas Medical Branch shall appoint a Chairman. The Dean of Allied Health Sciences shall be, ex officio, a member of all standing and special committees, without vote, unless otherwise provided for in these By-Laws.
> B. The Dean of Allied Health Sciences shall have in his Administrative Office whatever associates are necessary to carry out his responsibilities. These may include such associates or assistants as are approved by the Executive Committee of the School of Allied Health Sciences, the President of the University of Texas Medical Branch, the Chancellor of the University of Texas System, [THE DEPUTY CHANCELLOR OF THE UNIVERSITY OF TEXAS SYSTEM, ] and the Board of Regents of the University of Texas System. Such administrative associates and assistants may represent without vote the Dean of Allied Health Sciences on all standing and special committees.
(5) Amend Article IV, Section 1. D. Committees of the Faculty, General, to read:

Axticle IV Committees of the Faculty
Section 1. General
D. No member of the Faculty shall sexve on more than three standing committees which axe:
Executive Committee of the School of Allied Health Sciences
Student Affairs Committee
Admissions Committee
Curricula Committee
Continuing Education Committee
Core Curriculum Committee
or others created in Article IV Section [7] 8.
(6) Amend Article IV, Section 2, Committees of the Faculty, Executive Committee of the School of Allied Health Sciences by creating Sub-section D. to be inserted after Sub-section C. to read:

Article IV Committees of the Faculty
Section 2. Executive Committee of the School of Allied Health Sciences
D. Any Assistant and/or Associate of the Dean of Allied Health Sciences may, upon recommendation of the Dean and approval of the Executive Committee, be invited to attend meetings of the Executive Committee, for the purpose of acting as a resource person to the Executive Committee or receiving communication from the Executive Committee. Except as otherwise provided in these By-Laws, an Assistant and/or Associate of the Dean of Allied Health Sciences invited to attend any meeting of the Executive Committee, may have the right to speak but may not make motions or vote upon matters coming before the Executive Committee.
(7) Amend Article IV, Section 7. Committees of the Faculty, Other Standing Committees by redesignating Article IV, Section 7. as Article IV Section 8., with all subsequent sections under Article IV numbered accordingly. Article IV Section 7. will then read:

Article IV. Committees of the Faculty
Section 7. Core Curriculum Committee
A. The Core Curriculum Committee, composed of the Chairman or his designated representative, of each Department which utilizes one or more courses in the core curriculum, shall consider, plan and recommend to the Faculty of Allied Health Sciences on all matters having to do with content and sequence of subject matter in the core curriculum courses except that no curriculum changes may occur upon action of the Faculty without prior approval of the Executive Committee of the School of Allied Health Sciences.
B. The Chairman of the Core Curriculum Committee shall be the Coordinator - Allied Health Sciences Core Curriculum and Shall be appointed by the Dean of Allied Heal th Sciences.
(8) Amend Axticle V, Section 1. Meetings, Rules and Procedures, Regular Meetings to read:

Article V. Meetings, Rules and Procedures
Section 1. Regular Meetings -- The Faculty of Allied Health Sciences shall meet in regular session [FOUR] three times each year upon the second Thursday in [SEPTEMBER,] December, April, and August at 3:30 P.M., at a place designated in the Call of the Meeting in order to conduct the regular business of the Faculty of Allied Health Sciences. A call of a regular meeting together with a tentative agenda shall be sent to each full member of the Faculty of Allied Health Sciences prior to the date of each meeting by the Secretary of the Faculty of Allied Health Sciences. Postponement of a regular meeting shall require written notice in advance of the date and time of the meeting to be postponed.
(9) Amend Article V, Section 3., Meetings, Rules and Procedures, Rules of Order to read:

Article V Meetings, Rules and Procedures
Section 3. Rules of Order - All regular and special meetings of the Faculty of Allied Health Sciences shall be conducted in accordance with Roberts' Rules of Order, newly revised, except as otherwise provided for in these By-Laws. The Dean of Allied Health Sciences, or in his absence, a full member of the Faculty of Allied Health Sciences designated by him, shall preside.
(10) Amend Article V, Section 5., Meetings, Rules and Procedures, Minutes to read:

Axticle V Meetings, Rules and Procedures
Section 5. Minutes -- Minutes of each meeting shall be published and distributed to the full members of the Faculty of Allied Health Sciences [BY THE SECRETARY OF THE FACULTY,] and upon request of the Departmental Chairmen or Dean of Allied Health Sciences may be distributed to associate members. Publication and distribution of the minutes shall be done by the secretary of the faculty.

## ENDORSEMENTS

1. Approved by the Faculty of the Schop of Allied Health Sciences:

2. Recommend Approval
$\frac{1-24-72}{\text { Date }}$
3. Recommend Approval
$1-27-72$
Date
4. Recommend Approval
$2-2-72$
Date

5. Recommend Approval

Date

Chairman of the Board of Regents University of Texas System

GIFTS: In compliance with Section I, 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:

*No letter of transmittal received from the donor.
GRANTS (NONGOVERNMENTAL): Approval is respectfully requested for the acceplance of the following grants:

Donor and Address
Purpose and Conditions
Amount

1. Eaton Laboratories

Division of the Norwich
Pharmacal Company
Norwich, New York
2. Nuclear Battery Corporation
P. O. Box 810

Columbia, Maryland
3. ${ }^{*}$ G. D. Searle \& Co.

Box 5110
Chicago, Illinois
For the establishment of
$\$ 1,200.00$
an Eaton Plastic Surgery
Resident Fellowship for the
period January I, 1972
through December 31, 1972.
Experiment to perform acute
$\$ 1,714.00$
implantation of two Intra-
cranial Pressure Sensors
(ICPS) in dogs (one in
each). The project is
directed by Dr. Glenn
Meyer, Associate Professor, Department of
Surgery.
To study the effect of
long term administration of an anti-pepsin agent, propantheline and their combination for the prevention of recurrences in patients with duodenal ulcer, utilizing a "double-blind" study; directed by Dr. Marcel Patterson, Professor of Internal Medicine.
*No letter of transmittal received from the donor.

GRANTS (NONGOVERNMENTAL) - continued

Donor and Address
4. United Cerebral Palsy Research and Educational Foundation, Inc. 66 East 34th Street New York, N. Y.
5. The Robert A. Welch Foundation 2010 Bank of the Southwest Building
Houston, Texas
6. The Robert A. Welch Foundation 2010 Bank of the Southwest Building
Houston, Texas
7. The Robert A. Welch

Foundation
2010 Bank of the Southwest Building
Houston, Texas
8. The Robert A. Welch

Foundation
2010 Bank of the Southwest Building
Houston, Texas

Purpose and Conditions
Grant No. CF-92-72C for a \$10,000.00
Clinical Fellowship in
Pediatrics for a period
of one year commencing July l, 1972; directed by Dr. Douglas M. Daniels, Assistant Professor, Department of Pediatrics.

Transferred Grant No. H-520
for research on Geochemical Studies of Thorium and Uranium, for the period December 22, 1971 through April 30, 1973; directed by Dr. A. D. Suttle, Jr., Assistant to the Director for Physical Sciences, Marine Biomedical Institute.

Renewal Grant No. H-380 for research on The Subclasses of Human Immunoglobulin M, for the period May I, 1.972 through April 30, 1973; directed by Dr. James P. Chen, Assistant Professor, Department of Human Biological Chemistry and Genetics.

Renewal Grant No. H-168
for research on Oxidative Metabolism of Steroids for the period May l, 1972
through April 30, 1973; directed by Dr. Leland I . Smith, Professor, Department of Human Biological Chemistry and Genetics.

Grant No. H-504 for reserch \$24,000.00 on Characterization of a New L-glutamic Acid Decarboxylase - A Novel System of Enzymatic Catalysis, for the period May 1, 1972 through April 30, 1974; directed by Dr. Bernard Haber, Assistant Professor, The Marine Biomedical Institute.

GRANTS (NONGOVERNMENTAL) - continued
Donor and Address
The Robert A. Welch
Foundation
Building of the Southwest
Houston, Texas
10. The Robert A. Welch
Foundation
2olo Bank of the Southwest
Building
Houston, Texas
Purpose and Conditions
Renewal Grant No. H-378
for research on Biochemical
Characterization of the
Haptoglobin B Chain, for
the period May I, l972
through April 30, 1973;
directed by Dr. Barbara
H. Bowman, I. H. Kempner
Professor and Chairman,
Department of Human
Biological Chemistry and
Genetics.
Renewal Grant No. H-416
for research on Chemistry
of Dinoflagellate Toxins,
for the period May 1,
lg72 through April 30,
l973; directed by Dr.
Norman M. Trieff,
Associate Professor,
Department of Preventive
Medicine and Community
Health.

CONTRACTS AND GRANTS (FEDERAL) : The following contracts and grants have been signed by the appropriate official upon the recommendation of the respective technical directors, fiscal officer, and the Director of the Office of Sponsored Research. I recommend approval and ratification of signatures:

1. Contract No. HSM-99-72-12, by which the Department of Health, Education, and Welfare, Public Health Service, provides $\$ 12,873.00$, for the period February 4, 1972 , to February 1, 1973, for support of a Symposium on Occupational Osteonecrosis in Divers and publishing fifteen (15) copies of a hardback book of the proceedings of the symposium. The project is directed by Dr. Edward L. Beckman, Chief, Marine Medicine Division, The Marine Biomedical Institute.
2. Modification No. 4 to Contract No. NIH-69-831, by which the Department of Health, Education, and Welfare, Public Health Service, extends the expiration date of the contract to April 30, 1973, without additional funds, and amends Item 2(a), Paragraph B, Article III, of the contract to read: "Honoraria, at the rate of $\$ 100.00$ per day, excluding the Project Director." The project on Conferences Concerning Cholera Toxin continues under the direction of Dr. W. F. Verwey, Professor and Chairman, Department of Microbiology.
3. Ietter, dated February 16, 1972, by which the Department of Health, Education, and Welfare, Public Health Service, extends the current budget period of Grant No. AI 09166-03 to May 31, 1973, without additional funds. The total project period will now be June 1,1969 through May 31, 1973. The research on Life Cycle Studies on a Toxoplasma-Eike Avian Parasite is directed by Dr. Edith D. Box, Associate Professor, Department of Microbiology.

## CONIRACTS AND GRANTS (FEDERAL) - continued

4. Grant No. 5 ROI AM12745-05, by which the Department of Health, Education, and Welfare, Public Health Service, provides $\$ 22,889.00$ plus indirect costs, for the period January I, 1972 through December 31, 1972, for research on Effect of Parathyroid Hormone on Bone. The project is directed by Dr. Wm. P. Deiss, Jr., Professor and Chairman, Department of Internal Medicine.
5. Grant No. 44-P-30066/6-10, by which the Department of Health, Education, and Welfare, Social and Rehabilitation Service, provides a supplemental award of $\$ 16,295.00$, for the period September 1, 1971 through August 31, 1972, for a Teaching Grant and Traineeships in Physical Therapy. The project is directed by Miss Jeanne Schenck, Chairman, Department of Physical Therapy, School of Allied Health Sciences.
6. Modification No. E to contract No. NOOO14-66-C-0208-A02, by which the Department of the Navy, Office of Naval Research, Arlington, Virginia, establishes the negotiated overhead rate for the period September I, 1969 through January 31, 1971, at 53\% of the salaries and wages reimbursed under Clause 2(h)(3) of the contract. The contract expired January 31, 1971.
7. Modification No. P00005 to Contract No. NOOOI4-68-A-OIO5 (Basic Navy Contract), by which the Department of the Navy, Office of Naval Research, Arlington, Virginia, provides that overhead negotiated rates shall be set forth in a modification to this basic contract rather than in modifications to each individual Task Order, and also establishes the overhead rate for the period September I, 1969 through August 31, 1972, at 53\% of direct salaries and wages including vacation, holiday and sick pay, but excluding other fringe benefits, on Campus and $25 \%$ Off Campus.
8. Modification No. 08 to Contract No. NOOO14-68-A-0105-0001, by which the Department of the Navy, Office of Naval Research, Arlington, Virginia, provides that the overhead under this Task Order shall be reimbursed at the rates set forth in Clause 2 of the Basic Contract No. NOOO14-68-A-0105. (See Item No. 7 above)
9. Modification No. 14 to Contract No. NOOO14-68-A-0105-0002, by which the Department of the Navy, Office of Naval Research, Arlington, Virginia, provides that the overhead rates under this Task Order shall be reimbursed at the rates set forth in Clause 2 of the Basic Contract No. W00014-68-A0105. (See Item No. 7 above)

CONTRACTS AND AGREEMENTS (OTHER):


1. Notice of Approval Amendment, dated February 24, 1972, State Project Number 02-1102SS, by which the Texas Education Agency, Austin, Texas, provides $\$ 16,490.00$ (State and Federal Assistance), for the fiscal year beginning July 1, 1971 and ending June 30, 1972, for Improving Educational Opportunities for Multiple Handicapped Children at the Moody State School for Cerebral Palsied Children. The project is directed by Mr. Clyde A. Damewood, Business Manager, Moody State School for Cerebral Palsied Children.

General Administration
Office of the President

1. Accept the resignation of Mr. Nicholas K. Kralj, Assistant to the President at a salary rate of $\$ 19,500$ for 12 months, effective January 31, 1972. (RBC 463)

## Office of Patient Finance

2. Accept the resignation of Mr. Lester G. Furry, Director of Patient Finance, Ambulatory Service, and Admitting, part-time, at a salary of \$9,750 for 12 months, effective January 31, 1972. (RBC 453)
3. Appoint Mr. Henry P. Chauvin, Jr., as Director of Patient Finance, one-half time, at a salary of $\$ 7,800$ for 12 months, effective February 1, 1972. Funds needed are to come from the departmental non-teaching salaries budget. Mr. Chauvin also serves as Director of Patient Finance, one-half time, at a salary of $\$ 7,800$ for 12 months in the Office of the Vice President for Hospital Services. Total salary for 12 months, $\$ 15,600$. (RBC 459)

General Institutional Expense
Development office
4. Accept the resignation of Mr. Charles W. Chadwick, Assistant to the President for Development at a salary rate of $\$ 20,500$ for 12 months, effective February 29, 1972. (RBC 474)

Instruction and Departmental Operations
Office of the Vice President for Academic
$\overline{\text { Affairs }}^{\text {and Dean of Medicine }}$
5. Appoint Dr. Robert V. Bucklin as Visiting Professor of Jurisprudence, part-time, without salary, effective January 1, 1972. (RBC 462)

Interdisciplinary Laboratory
6. Change the source of funds only for Mr. Marshall V. Ross, Laboratory Supervisor, at a salary rate of $\$ 14,700$ for 12 months, from DHEW Grant No. 5E03-00170-06 to General Budget, effective February 1, 1972. General Budget funds needed are to come from Unallocated Appropriations Instructional. (RBC 416)
7. Change the status of Dr. Gordon L. Johnson, Assistant Director Interdisciplinary Laboratory, part-time, from a salary of $\$ 1,000$ for 12 months to without salary effective February 1, 1972. Dr. Johnson also serves as Assistant Professor (non-tenure) at a salary rate of $\$ 15,000$ for 12 months in the Department of Pharmacology and Toxicology. (RBC 441)

Anatomy
8. Increase the salary rate of Dr. Donald Duncan, Professor (Tenure), from $\$ 28,000$ to $\$ 29,000$ for 12 months, effective March 1, 1972. Additional funds needed are to come from Unallocated Appropriations - Instructional. (RBC 470)

## Anesthesiology

9. Change the source of funds only for Dr. Joe A. Walker (Tenure), Associate Professor, at a salary rate of $\$ 24,500$ for 12 months ( $\$ 23,000$ from General Budget and $\$ 1,500$ from DHEW Grant NO. 5E03-PE-00170-06) to General Budget only, effective February 1, 1972. Funds needed are to come from Unallocated Appropriations - Instructional. (RBC 417)

RECOMMENDED AMENDMENTS TO 1971-72 BUDGET - continued

Anesthesiology
10. Change the source of funds only for $D r$. Roy D. Wilson (Tenure), Professor, at a salary rate of $\$ 24,000$ for 12 months, from $\$ 11,500$ from General Budget, $\$ 11,500$ from Professional Fees - Anesthesiology, and $\$ 1,000$ from DHEW Grant No. 5 E03-PE-00170-06 to $\$ 12,500$ from General Budget and $\$ 11,500$ from Professional Fees - Anesthesiology, effective Februaxy 1, 1972. Additional General Budget funds needed are to come from Unallocated Appropriations - Instructional. (RBC 425)
11. Grant a Leave of Absence, without salary, to Dr. Cecile Khoury (non-tenure) Instructor at a salary rate of $\$ 12,000$ for 12 months, effective January 31, 1972. (RBC 451)
12. Increase the salary rate of Dr. Joe A. Walker (Tenure), Associate Professor, from $\$ 24,500$ to $\$ 25,000$ for 12 months, effective March 1, 1972. Additional funds needed are to come from Unallocated Appropriations - Instructional. (RBC 478)

Dermatology
13. Change the source of funds only for Dr. Orville J. Stone (Tenure), Associate Professor at a salary rate of $\$ 29,100$ for 12 months, from \$25,000 from General Budget, \$3,600 from MSRDP - Dermatology and \$500 from DHEW Grant No. 5 E03-PE-00170-06 to General Budget, effective February 1, 1972. Funds needed are to come from Unallocated Appropriations Instructional. (RBC 426)
14. Increase the salary rate of Dr. Orville J. Stone, Jr., Associate Professor (Tenure) from $\$ 29,100$ to $\# 30,600$ for 12 months, effective March 1, 1972. Additional funds needed are to come from Unallocated Appropriations - Instructional. (RBC 475)

Human Genetics
15. Change the source of funds only for Mr. Curtis W. Lambext, Assistant to the Chairman at a salary rate of $\$ 14,500$ for 12 months from DHEW Grant No. 5E03-PE-00170-06 to General Budget, effective February 1, 1972. Funds needed are to come from Unallocated Appropriations - Instructional. (RBC 418)
16. Change the source of funds only for $\operatorname{Dr}$. James P. Chen (non-tenure), Assistant Professor, part-time, at a salary of $\$ 1,000$ for 12 months from DHEW Grant No. 5 E03-PE-00170-06 to General Budget, effective February I, 1972. Funds needed are to come from Unallocated Appropriations -

Instructional. Dr. Chen also serves as Research Assistant Professor, without tenure, part-time, at a salary of $\$ 16,207$ for 12 months in the Department of Physiology. Total salary for 12 months, $\$ 17,207$. (RBC 427)

Internal Medicine
17. Change the source of funds for Dr. Gerald A. Beathaxd (non-tenure), Assistant Professor, part-time, at a salary of $\$ 10,500$ for 12 months from $\$ 10,000$ from General Budget and $\$ 500$ from DHEW Grant No. 5 E03-PE-00170-06, to $\$ 10,500$ from General Budget, effective February 1, 1972. Funds needed are to come from Unallocated Appropriations - Instructional. Dr. Beathard (non-tenure) also serves as Assistant Professor, part-time, at a salary of $\$ 10,500$ for 12 months in the Department of Pathology. Total salary for 12 months, $\$ 21,000$. (RBC 428)

## Internal Medicine

18. Increase the salary of Dr. Gerald A. Beathard (non-tenure), Assistant Professor, part-time, from $\$ 10,500$ to $\$ 11,500$ for 12 months, effective March l, 1972. Additional funds needed are to come from Unallocated Appropriations - Instructional. Dr. Beathard (non-tenure) also serves as Assistant Professor, part-time, at a salary of $\$ 10,500$ for 12 months in the Department of Pathology. Total salary for 12 months, $\$ 22,000$. (RBC 468)
19. Increase the salary rate of Dr . Edward C . Larkin (non-tenure), Assistant Professor, from $\$ 20,000$ to $\$ 21,000$ for 12 months, effective March 1, 1972. Additional funds needed are to come from Unallocated Appropriations Instructional. (RBC 487)
20. Accept the resignation of Dr . Jemes D. Lindley (non-tenure), Instructor, part-time, at a salary of $\$ 5,600$ for 12 months, effective January 31, 1972. (RBC 506)
21. Appoint Dr. Harry B. Kelso, Jr., (non-tenure), as Clinical Instructor, part-time, without salary, effective Februaxy 1, 1972. (RBC 509)

Microbiology
22. Appoint Dr. Johnny W. Peterson (non-tenure) as Assistant Professor at a salary rate of $\$ 14,500$ for 12 months, effective February 1, 1972. Funds needed are to come from the departmental teaching salaries budget. (RBC 409)

Neurology and Psychiatry
23. Increase the salary rate of Dr. Mark I. Mcelhaney (non-tenure), Assistant Professor - Psychology, from \$16,000 to $\$ 17,000$ for 12 months, effective February 1, 1972. Additional funds needed are to come from Unallocated Appropriations - Instructional. (RBC 405)
24. Increase the salary rate of Dr. James R. Markette (non-tenure), Assistant Professor, from $\$ 20,000$ to $\$ 21,000$ for 12 months, effective February 1, 1972. Additional funds needed are to come from the departmental teaching salaries budget. (RBC 410)
25. Increase the salary rate of Dr. Perrie M. Adams (non-tenure), Assistant Professor, from $\$ 15,500$ ( $\$ 7,500$ from General Budget and $\$ 8,000$ from 342010210-USDJ-NI-71-103G Grant) to $\$ 17,000$ for 12 months ( $\$ 9,000$ from General Buaget and \$8,000 from 342010210-USDJ-N1-71-103G Grant), effective February l, 1972. Additional General Budget funds needed are to come from the departmental teaching salaries budget. (RBC 411)
26. Change the source of funds only for Dr. Gerda J. Smith (non-tenure), Instructor, at a salary rate of $\$ 14,000$ for 12 months from DHEW Grant No. 5E03-PE-00170-06 to General Budget, effective February 1, 1972. Funds needed are to come from Unallocated Appropriations - Instructional. (RBC 419)
27. Change the source of funds only for Dr. Lawrence G. Hornsby (tenure), Associate Professor and Chief, at a salary rate of $\$ 23,000$ for 12 months from $\$ 22,000$ from General Budget and $\$ 1,000$ from DHEW Grant No. 5 E03-PE-00170-06 to General Budget, effective February 1, 1972. Funds needed axe to come from Unallocated Appropriations - Instructional. Dr. Hornsby (tenure) also serves as Associate Professor and Chief, part-time, without salary, in the Department of Pediatrics.

RECOMMENDED AMENDENSS TO 1971-72 Budget - continued

Neurology and Psychiatry
28. Change the status of Mr. Francisco Gomez-Mont from Teaching and Research Assistant at a salary rate of $\$ 4,200$ for 12 months to Research Associate at a salary rate of $\$ 9,240$ for 12 months, effective February 1, 1972. Funds needed are to come from DHEW Grant No. 5 ROI-MH-14675-04. (RBC 46I)
29. Change the source of funds only for Dr. Ernest $S$. Barratt (tenure), Research Professor - Psychology, at a salary rate of $\$ 26,400$ for 12 months ( $\$ 16,000$ from DHEW Grant $\mathbb{N O} 0.5$ TOI-06527-15 and $\$ 10,400$ from DHEW Grant No. 5 E03-PE-00170-06) to $\$ 16,000$ from DHEW Grant No. 5 TOI-06527-15 and $\$ 10,400$ from General Budget, effective March 1, 1972. General Budget funds needed are to come from Unallocated Appropriations - Instructional. Dr. Barratt also serves as Research Professor, part-time, without salary, in the Department of Physiology. (RBC 507)
30. Increase the salary of Dr. Charles G. Cambor (non-tenure), Clinical Associate Professor, part-time, from $\$ 3,600$ to $\$ 6,500$ for 12 months, effective March 1, 1972. Funds needed are to come from DHEW Grant No. 5TOl-M M-06527-15. This change in salary is due to the increase in the hours of service from four to eight per week. (RBC 5II)

Ophthalmology
31. Change the source of funds only for Dr. Gerald R. Christensen (nontenure), Assistant Professor, at a salary rate of $\$ 20,500$ for 12 months from \$19,000 from General Budget and \$1,500 from MSRDP - Ophthalmology to General Budget only, effective February 1, 1972. Funds needed are to come from Unallocated Appropriations - Instructional. (RBC 449)
32. Increase the salary rate of Dr. Gerald R. Christensen (non-tenure), Assistant Professor, from $\$ 20,500$ to $\$ 22,000$ for 12 months, effective March 1, 1972. Additional funds needed are to come from Unallocated Appropriations - Instructional. (RBC 466)
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33. Appoint Dr. Berner S. Chesnutt (non-tenure) as Assistant Professor at a salary rate of $\$ 16,000$ for 12 months, effective February 1, 1972. Funds needed are to come from the departmental teaching salaries budget. (RBC 452)

Pathology
34. Change the source of funds only for Dr. Ninfa Cavanos (non-tenure), Assistant Professor, at a salary rate of $\$ 17,000$ for 12 months, from $\$ 16,000$ from General Budget and $\$ 1,000$ from DHEW Grant No. 5 E03-PE-00170-06 to General Budget only, effective February 1, 1972. Funds needed are to come from Unallocated Appropriations - Instructional. (RBC 420)
35. Change the source of funds for Dr. Gerald A. Beathard (non-tenure), Assistant Professor, part-time, at a salaxy of $\$ 10,500$ for 12 months from \$10,000 from General Budget and \$500 from DHEW Grant No. 5E03-00170-06 to $\$ 10,500$ from General Budget, effective February 1, 1972. Funds needed are to come from Unallocated Appropriations - Instructional. Dr. Beathard (non tenure) also serves as Assistant Professor, part-time, at a salary of $\$ 10,500$ for 12 months in the Department of Internal Medicine. Total salary for 12 months, \$21,000. (RBC 429)

## Patholory

36. Change the source of funds only for Dr. John B. Pullex (temure), Professor, at a solary rate of $\$ 25,500$ for 12 monthe, from $\$ 25,000$ from General Budget and $\$ 500$ from DHEW Grant No. 5 E03-PIF-00170-06 to General Budget, effective February 1, 1972. Funds needed are to come from Unallocated Appropriations - Instructiona3. Dr. Fuller also serves as Assistant Medical Director, part-time, without salary, in the School of Allied Health Sciences - Medical Technology. (RBC 431)
37. Change the status of Dr. Elmer V. Danl (non-tenure) from Associate Professor at a salary rate of $\$ 19,000$ ( $\$ 18,000$ from General Budget and $\$ 1,000$ from DHEW Grant NO. 5 E03-PE-00170-06) to Research Associate Professor (non-tenure) at the same salary rate of $\$ 19,000$ for 12 months from General Budget, effective February 1, 1972. Additional funds needed are to come from Unallocated Appropriations - Instructional. (RBC 438)
38. Increase the salary rate of Dr. Ninfa Cavazos (non-tenure), Assistant Professor, from $\$ 17,000$ to $\$ 18,000$ for 12 months, effective March 1, 1972. Additional funds needed are to come from Unallocated Appropriations Instructional. (RBC 469)
39. Increase the salary of Dr. Paul Zaharopoulos (non-tenure), Assistant Professor, from $\$ 18,500$ to $\$ 19,000$ for 12 months, effective March 1, 1972. Additional funds needed are to come from Unallocated Appropriations Instructional. (RBC 485)

Pharmacology
40. Appoint Dr. Frank E. Smith (non-tenure) as Visiting Assistant Professor, part-time, without salary, effective February 1, 1972. (RBC 413)
41. Change the source of funds only for Dr. McChesney Goodall (tenure), Professor, at a salary rate of $\$ 25,000$ for 12 months, from $\$ 12,500$ from General Budget and $\$ 12,500$ from DHEW Grant No. 5 SOI-RR-05427-11 to General Budget only, effective February 1, 1972. Funds needed are to come from Unallocated Appropriations - Instructional. (RBC 422)
42. Change the source of funds only for Dr. Rene R. Kempen (non-tenure), Assistant Professor, at a salary rate of $\$ 14,000$ for 12 months, from \$13,500 from General Budget and \$500 from DHEw Grant NO. 5 E03-PE-00170-06 to General Budget, effective February 1, 1972. Funds needed are to come from Unallocated Appropriations - Instructional. (RBC 433)
43. Change the status of Dr. Gordon L. Johnson (non-tenure), Assistant Professor, from part-time at a salary of $\$ 14,000$ for 12 months to full-time at a salaxy rate of $\$ 15,000$ for 12 months, effective February 1, 1972. Funds needed are to come from Unallocated Appropriations - Instructional. Dr. Johnson also serves as Assistant Director, part-time, without salary, in Interdisciplinary Laboratory. (RBC 440)
44. Change the source of funds for Dr. James H. Pirch, (non-tenure), Assistant Professor, at a salary rate of $\$ 16,000$ for 12 months from $\$ 15,500$ from General Budget and $\$ 500$ from DHEW Grant No. 5 E03-PE-00l70-06 to General Budget only, effective Tebruary 1, 1972. Funds needed are to come from Unallocated Appropriations - Instructional. (RBC 446)

## Pharmacology

45. Change the source of funds only for Dr. Betty J. Williams (non-tenure), Assistant Professor, at a salary rate of $\$ 13,500$ for 12 months from $\$ 13,000$ from General Budget and \$500 from DFEN Grant NO. 5 ROI-PE-00170-06 to General Budget only, effective February 1, 1972. Funds needed are to come from Unallocated Appropriations - Instructional. (RBC 447)
46. Increase the salary rate of Dr. Joe B. Nash (tenure), Associate Professor, from $\$ 19,000$ to $\$ 19,500$ for 12 months, effective March 1, 1972. Additicnal funds needed are to come from Unallocated Appropriations Instructional. (RBC 477)
47. Increase the salary rate of Dr. Rene R. Kempen (non-temure), Assistant Professor, from $\$ 14,000$ to $\$ 14,500$ for 12 months, effective March $1,1972$. Additional funds needed are to come from Unallocated Appropriations Instructional. (RBC 481)
48. Increase the salary rate of Dr. Gordon I. Johnson (non-tenure), Assistant Professor, from $\$ 15,000$ to $\$ 15,500$ for 12 months, effective March 1, 1972. Additional funds needed are to come from Unallocated Appropriations - Instructional. Dr. Johnson also serves as Assistant Director Interdisciplinary Laboratory, part-time, without salary, in Interdisciplinary Laboratory. (RBC 486)
49. Increase the salary rate of Dr. James H. Pirch (non-tenure), Assistant Professor, from $\$ 16,000$ to $\$ 17,000$ for 12 months, effective March $1,1972$. Additional funds needed are to come from Unallocated Appropriations Instructional. (RBC 491)
50. Increase the salary rate of Dr. David E. Potter (non-tenure), Assistant Professor, from $\$ 13,500$ to $\$ 14,000$ for 12 months, effective March 1,1972 . Additional funds needed are to come from Unallocated Appropriations Instructional. (RBC 492)

Physiology
51. Delete the name of Dr. Eric Ogen, Lecturer, part-time, without salary, effective January 31, 1972, the date of his death. (RBC 442)

Preventive Medicine and Communty Health
52. Change the status of Dr. Marcus I. Ross (tenure), Associate Professor, from full-time at a salary rate of $\$ 30,000$ for 12 months to part-time, without salary, effective January 1, 1972. (RBC 434)
53. Change the status of Dr. John J. Delaney (non-tenure), Assistant Professor, from one-half time to full-time at the same salary rate of $\$ 25,000$ for 12 months, effective February 1, 1972. Additional funds needed are to come from DHEW Grant No. 3DO8-ME-00131-02SI. (RBC 471)

## Radiology

54. Increase the salary rate of Dr. Leonard E. Swischuk (tenure), Associate Professor, from $\$ 25,000$ to $\$ 26,000$ for 12 months, effective February 1,1972 . Additional funds needed are to come from Unallocated Appropriations Instructional. (RBC 406)
55. Increase the salary rate of Dr. Melvyn H. Schreiber (tenure), Professor, from $\$ 31,000$ to $\$ 32,000$ for 12 months, effective February 1 , 1972. Additional funds needed are to come from the departmental teaching salaries budget. (RBC 412)

RECOMMENDED AMENDMENTS TO 1971-72 BUDGET - continued

Radiology
56. Appoint Dr. Raleigh F. Johnson, Jr., (non-tenure), as Assistant Professor, at a salary rate of $\$ 18,000$ for 12 months, effective February 8, 1972. Funds needed are to come from Unallocated Appropriations Instructional. (RBC 435)

## Surgery

57. Reappoint Dr. John Q. McGivney (non-tenure) as Clinical Associate Professor, part-time, at a salary of $\$ 400$ for 12 months, effective February 1, 1972. Dr. MoGivney is returning from a Leave of Absence. (RBC 467)
58. Change the source of funds only for Dr. Horst D. Becker (non-tenure), Research Surgeon, at a salary rate of $\$ 10,000$ for 12 months from DHEW Grant No. 5 SOl-RR-05427-11 to General Budget, effective February 1, 1972. Funds needed are to come from Unallocated Appropriations - Instructional. (RBC 436)
59. Increase the salary rate of Dr. Carl E. Schow (tenure), Associate Professor and Chief, from $\$ 27,000$ to $\$ 28,000$ for 12 months, effective February 1, 1972. Additional funds needed are to come from Unallocated Appropriations - Instructional. (RBC 407)
60. Increase the salary rate of Dr. George T. Tindall (tenure), Professor and Chief, from $\$ 30,000$ to $\$ 31,500$ for 12 months, effective February 1 , 1972. Additional funds needed are to come from the departmental teaching salaries budget. (RBC 414)
61. Change the source of funds only for Dr. Ulf B. Hjelmquist (non-tenure), Research Surgeon, at a salary rate of $\$ 10,000$ from DHEW Grant No. 1SOl-FR-05427-10 to General Budget only, effective February 1, 1972. Funds needed are to come from Unallocated Appropriations - Instructional. (RBC 423)
62. Change the status of Dr. John C. Evans (non-tenure), Research Surgeon, from part-time at a salary of $\$ 8,000$ for 12 months to full-time at a salary of $\$ 9,600$ for 12 months, effective February 1, 1972. Funds needed are to come from Unallocated Appropriations - Instructional. (RBC 443)
63. Increase the salary rate of Dr. Kinjiro Iwata (non-tenure, Assistant Professor, from $\$ 20,000$ for 12 months ( $\$ 10,000$ from General Budget and $\$ 10,000$ from USPHS Award - Neurosurgery to $\$ 21,500$ for 12 months ( $\$ 10,000$ from General Budget, $\$ 10,000$ from USPHS Award - Neurosurgery, $\$ 500$ from MSRDP - Neurosurgery and $\$ 1,000$ from DHEW Grant No. 5 POI-NS-O737704), effective February 1, 1972. (RBC 448)
64. Grant a Leave of Absence without salary to Dr. John Q. McGivney (nontenure) Clinical Associate Professor, part-time, at a salary of $\$ 400$ for 12 months, effective December 31, 1971. (RBC 454)
65. Therease the salary of Dr. John M. Thiel (non-tenure), Clinical Assistant Professor, part-time, from $\$ 300$ to $\$ 360$ for 12 months, effective March l, 1972. Additional funds needed are to come from Unallocated Appropriations - Instructional. (RBC 479)

School of Allied Health Sciences
Office of the Dean
66. Appoint Dr. Alice A. O'Donell (non-tenure) as Assistant Professor, without salary, effective January 20, 1972. Dr. O'Donell (non-tenure) also serves as Assistant Professor at a salary rate of $\$ 20,000$ for 12 months in the Department of Preventive Medicine and Community Health and as Instructor, part-time, without salary in the Department of Pediatrics. (RBC 489)

School of Allied Health Sciences -
Physical Therapy
67. Appoint Miss Marie Wessinger (non-tenure) as Adjunct Instructor, part-time, without salary, effective September 1, 1971. (RBC 408)
68. Appoint Mrs. Lennie K. Wilkins (non-tenure) as Adjunct Instructor, part-time, without salary, effective September 1, 1971. (RBC 415)
69. Increase the salary rate of Miss Janice E. Toms (non-tenure), Instructor, from $\$ 10,020(\$ 8,016$ from General Budget and $\$ 2,004$ from Galveston College Health Occupation Program) to $\$ 10,920$ for 12 months ( $\$ 8,016$ from General Budget, $\$ 2,004$ from Galveston College Health Occupation Program, and $\$ 900$ from DHEW Grant No. 44P-30066-6-10), effective March 1, 1972. Miss Toms (non-tenure) also serves as Physical Therapy Instructor, part-time, without salary, in Rehabilitation Clinic Physical Therapy. (RBC 503)
70. Increase the salary rate of Miss Jo A. Tomberlin (non-tenure), Assistant Professor, from $\$ 11,400$ to $\$ 12,400$ for 12 months, effective March 1, 1972. Additional funds needed are to come from DHEW Grant No. 44P-30066-6-10. Miss Tomberlin also serves as Physical Therapy Instructor (non-tenure), part-time, without salary, in Rehabilitation Clinic Physical Therapy. (RBC 504)
71. Increase the salary rate of Miss Rosalie B. Lopopolo (non-tenure), Instructor, from $\$ 8,400$ ( $\$ 4,200$ from General Budget and $\$ 4,200$ from DHEW Grant No. 44P-30066-6-10) to \$9,999 for 12 months ( $\$ 4,200$ from General Budget and \$5,799 from DHEW Grant No. 44P-30066-6-10), effective March 1, 1972. Miss Lopopolo (non-tenure) also serves as Adjunct Instructor, parttime, without salary, in this same department. (RBC 502)

School of Allied Health Sciences -
Associated Health Occupations
72. Appoint Miss Betty R. LaVerne (non-tenure) as Instructor, part-time, without salary, effective February 1, 1972.

University Hospitals
Office of the Vice President
for Hospital services
73. Accept the resignation of Mr. Robert E. Lewis, Assistant Administrator of Hospitals (part-time) at a salary of $\$ 12,375$ for 12 months, effective January 31, 1972. Mr. Lewis is transferring to The Sealy \& Smith Foundation Hospitals. (RBC 450)
74. Accept the resignation of Mr. Lester G. Furry, Director of Patient Finance, Ambulatory Service and Admitting, part-time, at a salary of \$9,750 for 12 months, effective January 31, 1972. (RBC 457)

University Hospitals (cont'd.)
Office of the Vice-President for
Mospital services
75. Appoint Mr. Henry P. Chauvin, Jr., as Director of Patient Finance, one-half time, at a salary of $\$ 7,800$ for 12 months, effective February 1 , 1972. Funds needed are to come from the departmental non-teaching salaries budget. Mr. Chauvin also serves as Director, one-half time, at a salary of $\$ 7,800$ for 12 months in the Office of Patient Finance. Total salary for 12 months, $\$ 15,600$. (RBC 460)
76. Appoint Mr. James H. Jones as Assistant Administrator of Hospitals, part-time, at a salary of $\$ 10,500$ for 12 months, effective February l, 1972. Funds needed are to come from the departmental non-teaching salaries budget. Mr. Jones also serves as Assistant Administrator of Hospitals, part-time, at a salary of $\$ 3,500$ for 12 months in the Office of the Vice President for Hospital Services - The Sealy \& Smith Foundation Hospitals. Total salary for 12 months, $\$ 14,000$. (RBC 472)
77. Accept the resignation of Mr. Thomas M. Keefe, Associate Administrator of Hospitals, part-time, without salary, effective January 31, 1972. (RBC 508)

Mursing Service - Administration
78. Accept the resignation of Mrs. Doris M. Hempel, Area Clinical Nursing Director, at a salary rate of $\$ 12,600$ for 12 months, effective February 29 , 1972. (RBC 500)
79. Accept the resignation of Miss Eleanor L. Balentine, Area Clinical Nursing Director, at a salary rate of $\$ 11,400$ for 12 months, effective March 17, 1972. (RBC 501)

Blood Bank
80. Increase the salary of Mrs. Dorothy L. Williams, Technical Director, part-time, from $\$ 11,340$ to $\$ 11,880$ for 12 months, effective March 1, 1972. Additional funds needed are to come from Unallocated Appropriations Hospitals. Through error, we neglected to correct Mrs. Williams' budgeted title from Assistant Technical Director to Technical Director, effective September 1, 1971. Mrs. Williams also serves as Technical Director, parttime, at a salary of $\$ 1,320$ for 12 months in Blood Bank - The Sealy \& Smith Foundation Hospitals. Total salary for 12 months, $\$ 13,200$. (RBC 510)

Pharmacy
81. Appoint Mr. Michael D. Ellis as Associate Director of Poison Control Center (new position), one-half time, at a salary of $\$ 6,300.00$ for 12 months, effective February 1, 1972. Funds to come from Unallocated Appropriations - Hospitals. (RBC 473)

School Service for Pediatric and
Psychiatric patients
82. Appoint Mrs. Barbara J. Weehunt as School Teacher, part-time, without salary, effective January 24, 1972. (RBC 455)

Renal Transplant Center
83. Accept the resignation of Mr. Henry P. Chauvin, Jr., Financial Administrator, at a salary rate of $\$ 14,400$ for 12 months ( $\$ 7,200$ from General Budget and \$7,200 from DHEW Research Grant), effective January 31, 1972. Mr. Chauvin is transferring to the Office of Patient Finance. (RBC 458)

RECOMMEMDED AMENDMENTS TO 1971-72 BUDGET - continued

Organized Activities
Medical Electronics Service
84. Change the source of funds only for Dr. Norman T. Welford, Director, Biomedical Engineering, at a salary rate of $\$ 20,000$ for 12 months from \$13,000 from General Budget and \$7,000 from DHEW Grant No. ISOl-FR-05427-11 to General Budget, effective February 1, 1972. Funds needed are to come from Unallocated Appropriations - Instructional. Dr. Welford also serves as Assistant Professor - Psychology, part-time, without salary, in the Department of Neurology and Psychiatry. (RBC 437)

The Marine Biomedical Institute
85. Appoint Dr. Bruce H. Peters as Adjunct Member, part-time, without salary, effective February 1, 1972. Dr. Peters also serves as Assistant Professor - Neurology at a salary rate of $\$ 20,000$ for 12 months in the Department of Neurology and Psychiatry. (RBC 499)

Sealy \& Smith Foundation Hospitals
Office of the Vice President for
HospitaI Services
86. Change the status of Mr. Robert E. Lewis from Assistant Administrator of Hospitals, part-time, at a salary of $\$ 4,125$ for 12 months to Associate Administrator of Hospitals, full-time, at a salary rate of $\$ 18,500$ for 12 months, effective February 1, 1972. Additional funds needed are to come from the departmental non-teaching salaries budget. (RBC SS6)
87. Appoint Mr. James H. Jones as Assistant Administrator of Hospitals, part-time, at a salary of $\$ 3,500$ for 12 months, effective February 1 , 1972. Funds needed are to come from the departmental non-teaching salaries budget. Mr. Jones also serves as Assistant Administrator of Hospitals, part-time, at a salary of $\$ 10,500$ for 12 months in the Office of the Vice-President for Hospital Services - University Hospitals. Total salary for 12 months, \$24,000. (RBC SS8)
88. Accept the resignation of Mr. Thomas M. Keefe, Associate Administrator of Hospitals, at a salary rate of $\$ 21,800$ for 12 months, effective January 31, 1972. (RBC"SS9)

Blood Bank
89. Increase the salary of Mrs. Dorothy L. Williams, Technical Director, part-time, from \$1,260 to \$1,320 for 12 months, effective March 1, 1972. Additional funds needed are to come from Unallocated Appropriations - Hospitals. Through error, we neglected to correct Mrs. Williams' budgeted title from Assistant Technical Director to Technical Director, effective September 1, 1971. Mrs. Williams also serves as Technical Director, part-time, at a salary of $\$ 11,880$ for 12 months in Blood Bank - University Hospitals. Total salary for 12 months, $\$ 13,200$. (RBC SSIO)

Chronic Home Dialysis Center
90. Accept the resignation of Dr. James D. Lindley, Assistant Program Director, part-time, at a salary of $\$ 14,400$ for 12 months ( $\$ 4,400$ from Chronic Home Dialysis Center and \$10,000 from DHEW Grant No. HSM-110-71-195), effective January 31, 1972. (RBC 505)

| Transfer of Funds |  |  |
| :---: | :---: | :---: |
| 91. From: | Unallocated Appropriations - General | \$3,374.00 |
| To: | Service Computation Center -- Classified Salaries | \$ 3,374.00 |
| For: | Provide funds for the creation of a new position of Keypunch Operator II at a salary rate of \$5,784 for 12 months, effective February 1, 1972. |  |
| (RBC 465) |  |  |
| 92. From: | Unallocated Appropriations - Hospitals | \$ 1,860.00 |
| To: | Office of In-Service Education: <br> Classified Salaries | \$ 1,860.00 |
| For: | Provide funds for the creation of a new position of Training Specialist I, half-time, at a salary of $\$ 3,720$ for 12 months, effective March 1, 1972. The person appointed to this position will act as Training Supervisor for the Housekeeping Department. |  |
| (RBC 456) |  |  |
| 93. From: | Unallocated Appropriations - Instructjonai Classified | \$ 2,562.00 |
| To: | Interdisciplinary Laboratory - Classiried Salaries | \$2,562.00 |
| For : | Funds needed for the charge in source of funds for a position or Laboratory Technical Assistant I at a salary rate of $\$ 4,392$ for 12 months, effective February I, 1972. |  |
| (RBC 424) |  |  |
| 94. From: | Unallocated Appropriations - Instructional | \$15,000.00 |
| To: | Human Genetics - Maintenance and Operation | \$15,000.00 |
| For: | Funds needed for the continuing operation of the department for the remainder of this fiscal year. |  |
| (RBC 406) |  |  |
| 95. From: | Unallocated Appropriations - Instructional Classified | \$ 3,374.00 |
| To: | Pediatrics - Classified Salaries | \$ 3,374.00 |
| For: | Funds needed for the change in source of funds only for one (I) position of Research Technician at a salary rate of $\$ 5,784$ for 12 months, effective February 1, 1972. |  |
| (RBC 421) |  |  |

(RBC 421)

```
Transfer of Funds (cont'd.)
%. From; Unallocatea Appropriations - Instructional -
    Classified
    $ 5,845.00
    T0: Pediatrics - Classipied Salaries
    For: Funds needed for the change in source of funds
    only of one (1) position of a. Research Associate,
        at 2. salary rate of $10,020 for 12 months, from
        DHPW Grants to General Budget only, effective
        February 1, 1.972.
(RBC 432)
97. From: Unallocated Appropriations - Instructional -
    Classified
    $ 2,562.00
    $2,562.00
    For: Funds needed for the change in source of funds
        for one (1) position of Clerk-Typist I at a
        salery rate of $4,392 for 12 months, effective
        February l, 1972.
(RBC 439)
98. From: Unallocated Appropriations - Hospitals
    $5,107.69
    $ 5,107.69
    $ 5,785.50
    To: Medical Electronics Service - Classiried Salaries
    $5,785.50
    For: Funds needed for the change in source of funds
        for an Fngineering Technsesan III, part-time, at
        a salary of $9,918 for 12 months, effective
        February I, 1972.
(RBC 445)
```

RECOMMENDED AMENDMENTS TO 1971-72 BUDGET - continued

Transfer of Funds (cont'd.)
100. From: Unallocated Appropriations - Instructional
$\$ 3,389.54$
To: Medical Branch Library - Classified Salaries
$\$ \underline{\underline{3,389.54}}$
For: Funds needed for the creation of a new position of Informational Writer I at a salary rate of \$5,784 for 12 months, effective January 31, 1972.
(RBC 404)
101. From: Unallocated Appropriations - Hospital.s \$1,860.00

To: Sealy \& Smith Foundation Hospitals - Office of In-Service Education:

Classified Salaries

For: Funds needed for the creation of a new position of Training Specialist I, half-time, at a salary of $\$ 3,720$ for 12 months, effective March $1,1972$. The person appointed to this position will act as Training Supervisor for the Housekeeping Department.
(RBC SS7)

Sincerely yours,


THE UNLUERSTY Of TRXKS
MEDTA SCHOOL
AT HOUSTOM

April B. Bere

Dr. Charles A. LeMaistre
Chancellor
The University of Texas System
Austin, Texas 78722
Dear Dr. LeMaistre:
The following docket is summitted for your approval and presentation 6 the Board of Regents at the meering in Gusth on Aprit 29. 1972.

CONTRACTS AND AGREEMENTS (OTHER): Approval is respectully requestes for the acceptance of the following contracts and agrements.

1. Lease Contract No. UMH-2410L-Houston, whereby A Houston lock It Pocket agrees to lease 1,200 square feet of space in the A-33, 3 , 35, 36, 37, 38 Building at 4932 Glemont, Houston, Texas, at 16.33 per square foot for a total of $\$ 196.00$ per month, for the period Febramy 15 . 1972 through August 31. 1972. This contract was signed on behalf of The University of Texas Medical School at Houston by E. D. Walker, Depury Chancellor for Administration.
2. Transfer of M. D. Anderson Lease No. UH-2081L-Houston, Whereby the Center Pavilion Hospital leased 8,820 square feet of space on the sth floor of the Center Pavilion Hospital, 1700 Holcombe Blvd. Houston. Texas, at 35 per square foot per month for a total of $\$ 3,087.00$ per month, for the period September 1, 1969 through August 31. 1973. The Houston Medical School assumes the remaining period of this lease. March 1. 1972 through August 31, 1973 . This tramsfer was approved on behalf of The University of Texas Hedical School at Houston by E. D. Walker, Depury Chancellor for Administration.

RECOMMENDED AMENDMEMTS TO THE $1971-72$ BUDGET: Approvel is respectiully requested for the following amendments to the $1971-72$ Budget.

INSTRUCTION AND DEPARTMENTAL RESEARCH - BNALYTIC SCIENEES

## Anatomy

1. Transfer of Funds: (RBC No, 47)

From: Unallocated Appropriations - Instructional Classiffed Salaries
$\$ 3,073.00$
$\$ 3,073,00$
To: Anatomy
Classified Salaries
For: This transfer is requescerb to create a new position of Secretary 1 at a salery rate of $\$ 5.268$ for 12 months, effective February \$, 1972.

RECOMMENDED AMENDMENTS TO THE 1971-72 BUDGET - continued
INSTRUCTION AND DEPARTMENTAL RESEARCH - ANALYTIC SCIENCES - continued
Pharmacology*
2. Appoint Dr. George M. Stancel as Assistant Professor in the Program of Pharmacology at an annual salary of $\$ 17,500$ effective August 15 , 1972. Funds needed are to come from departmental Faculty Salaries. (RBC No. 50)

## Physiology*

3. Appoint Dr. Leonard R. Johnson as Professor in the Program of Physiology at an annual salary of $\$ 25,000$ effective June 1, 1972. Funds needed are to come from Unallocated Appropriations - Instructional. (RBC No. 49)

INSTRUCTION AND DEPARTMENTAL RESEARCH - CLINICAL SCIENCES

## Pathology*

4. Appoint Dr. Hubert J. Van Peenen III as Professor and Director, Program of Pathology, at an annual salary of $\$ 36,000$ effective August 1, 1972. Funds needed are to come from departmental Faculty Salaries. (RBC No. 53)

## Pediatrics*

5. Appoint Dr. Susan S. Skrovan as Assistant Professor in the Program of Pediatrics, half-time, at an annual salary of $\$ 11,500$ effective March 1, 1972. Funds needed are to come from departmental Faculty Salaries. (RBC No. 51)
6. Appoint Dr. Jordan R. Wilbur as Associate Professor in the Program of Pediatrics, without salary, effective January 1, 1972. Dr. Wilbur also serves as Associate Professor and Department Head, Pediatrics, M. D. Anderson Hospital and Tumor Institute. (RBC No. 52)

INSTRUCTION AND DEPARTMENTAL RESEARCH - OTHER INSTRUCTIONAL
Biomedical Communications
7. Transfer of Funds: (RBC No. 48)

From: Unallocated Appropriations - Instructional Classified Salaries
$\$ 16,648.00$
To: Biomedical Communications Classified Salaries
$\$ 16,648.00$
For: This transfer is requested to create the following new positions, effective January 1, 1972:
(1) Medical Illustration Supervisor at a salary rate of $\$ 9,600$ for 12 months.
(2) Photographic Technician II at a salary rate of $\$ 5,520$ for 12 months.
(3) Medical Art Technician I at a salary rate of $\$ 5,268$ for 12 months.
(4) Photography Assistant I at a salary rate of $\$ 4,584$ for 12 months.

[^10]RECOMMENDED AMENDMENTS TO THE 1971-72 PERSONNEL PAY PLAN: Approval is respectfully requested for the following amendments to the 1971-72 Personnel Pay Plan.

| $\begin{array}{r} \text { Code } \\ \text { No. } \end{array}$ |  | Monthly <br> Range | Annual Range |
| :---: | :---: | :---: | :---: |
| 4383 | Electron Microscopy Technician II | 680-835 | 8,160-10,020 |
| 4384 | Electron Microscopy Technician I | 514-650 | 6,168-7,800 |
| 8530 | Medical Art Technician I | 419-565 | 5,028-6,780 |
| 8545 | Audio Visual Equipment Technician III | 592-740 | 7,104-8,880 |
| 8850 | Photography Assistant I | 366-482 | 4,392-5,784 |

These amendments have been approved by E. D. Walker, Deputy Chancellor for Administration.


## THE TNTVERSTY OF TEXAS <br> DENTAL BRANCH <br> at Houston

Maxch 22, 1972

Dr. Charles A. LeMaistre, Chancellor
The University of Texas System
Austin, Texas 78712
Dear Doctor LeMaistre:
The following docket is submitted for your approval and presentation to the Board of Regents at the meeting in Austin, Texas on April 29, 1972.

AWARDING OF DEGREES AND CERTIFICATES: Eligible members of the Postgracuate School of Dentistry and of the Senior Class of the School of Dentistry have been approved for the awarding of degrees to properly certified candidates, and eligible members of the Postgraduate School of Dentistry, the School of Dental Hygiene and the Dental Assisting Program have been approved for the awarding of certificates to properiy certified candidates.

FACULTY (WITHOUT SALARY AND WITHOUT TENURE): I recommend your approval of the following addition to the Faculty, without salary and without tenure.

1. Addition: Dr. Manuel De la Rosa R, as Clinical Assistant Professor in the Dental Science Institute, effective April 1, 1972.

CONTRACTS AND GRANTS (FEDERAL): The following grant has been negotiated by the Associate Dean for Business Affairs and has been signed by the Dean upon recommendation of the Grant Director, and approved by the Comptroliex and the Chancellor. I recomend your approval and ratification of the signatures.

1. Extension of U.S.P.H.S. Research Grant 5 ROI DE-02400-06, without additional funds, for the period March 1, 1972, through August 31, 1972, entitled "Reaction of Cells to Contact with The Tooth Suxface." This project is directed by Dr. A. Cecil Taylor, Professor in the Department of Anatomy (Dental Anatomy and Histology) and Member of the Dental Science Institute,

Recormended Amendments to the 1971-72 Budget:
Physiology (Pharmacology)

1. Appointment: Mr. Nils L. Bengtson as Research Technician II at an annual salary of $\$ 7,440.00$, effective February 15, 1972; transfer $\$ 4,040.66$ from Unallocated Other Salaries. (RBC-68)

## Restorative Dentistry (Unit Restorations)

2. Appointment: Dx. Charles E. Sensiba (non-tenure) as Assistant Professor at an amual salary of $\$ 16,000,00$, effective July 1 , 1972; transfer $\$ 2,666.66$ from Unallocated Faculty Salaries, (RBC-69)

## Dental Science Institute

3. Change in Source of Funds: Miss Catherine Shea, Research Technician III at an annual salary of $\$ 8,160.00$, from Dental Science Institute ( $50 \% \mathrm{~T}$ ) and U.S.P.H.S. Grant NAS-9-11118 ( $50 \%$ T.), effective February 1, 1972; $\$ 2,380.00$ available in budgeted position and transfer $\$ 2,380.00$ from Unallocated Other Salaries to the Dental Science Institute. (RBC-67)

Respectfully submitted,


THE UNIVERSITY OF TEXAS
M. D. ANDERSON HOSPITAL AND TUMOR INSTITUTE AT HOUSTON

April 3, 1972

Dr. Charles A. LeMaistre
Chancellor
The University of Texas
Austin, Texas 78712
Dear Doctor LeMaistre:
The following docket is submitted for your approval and presentation to the Board of Regents at its meeting in Austin, Texas on April 29, 1972:

GIFTS: I recommend acceptance of the following gifts and that the appreciation of the Board be sent to the donor by the Secretary.

## Donor

1. Mr. William A. Cook

President
George Alfred Cook Research Memorial Fund
925 S. Curry Pike
Box 489
Bloomington, Indiana 47401
2. The Kelsey and Leary Foundation Mr. Thomas D. Anderson,

Chairman
6624 Fannin
Houston, Texas 77025
3. Mr. Charles I. Pechenik 950 South Duke Street York, Pennsylvania 17403
4. Houston Endowment, Inc. Attn: Mr. J. H. Creekmore
P. O. Box 52338

Houston, Texas 77052
5. Lippman Associates

Attn: Mr. Leo A. Lippman
3939 Meadows Drive
Indianapolis, Indiana 46205

Purpose
For Use by the Section of Experimental Radiology, Department of Diagnostic Radiology

Amount
$\$ 5,000.00^{*}$

For research project "The $\$ 8,359.00$ Natural History of Esophageal Carcinoma in Populations with Disparate Prevalence of the Disease"

For use in Dr. Raymond $\$ 34,965.37$ Alexanian's Myeloma Research Program

Expansion of Hospital $\$ 1,000,000.00^{*}$ Facilities

For purchase of an
$\$ 75,000.00$
Electron Microscope
Equipment

* No Letter of Transmittal Received


GOVERNMENT CONTRACTS AND GRANTS: The following Contracts, Grants and Amendments have been negotiated by the Business Manager, and have been signed by the President upon recommendation of the Contract Director, and the Business Manager, and approved by the Comptroller and Deputy Chancellor for Administration. I recommend your approval and ratification of signatures.

1. Grant No. 3 R10 CAl0042-05S2 CCI by which the National Cancer Institute provides supplemental funds for the project "Protected Environment and Cancer Chemotherapy". Direct costs in the amount of $\$ 78,294$ plus appropriate indirect costs are awarded for the period June 1, 1971 through May 31, 1972. This grant is under the direction of Dr. Gerald P. Bodey.
2. Grant No. 5 T01 CA05232-02 CAN by which the National Cancer Institute provides funds for the project "Research Training in Pathology" for the period July 1, 1972 through June 30, 1974. The amount of $\$ 34,344$ is awarded for the period July 1, 1972 through June 30, 1973. This grant is under the direction of Dr. William 0. Russell.
3. Grant No. 1 RO1 CAl 2687-01 PTHB by which the National Cancer Institute provides funds for the project "Cytogenetic and Ultrastructural Studies in Leukemia" for the period January 1,1972 through December 31, 1974. Direct costs in the amount of $\$ 101,442$ plus appropriate indirect costs are awarded for the period January 1,1972 through December 31, 1972. This grant is under the direction of Dr. Jose M. Trujillo.
4. Grant No. 5 RO1 CA11788-03 SSS by which the National Cancer Institute provides funds for the project "Biochemical Pharmacology of Carcinostatic Drugs" for the period May 1, 1972 through April 30, 1974. Direct costs in the amount of $\$ 31,920$ plus appropriate indirect costs are awarded for the period May 1, 1972 through April 30, 1973. This grant is under the direction of Dr. Gerald A. LePage.
5. Grant No. GB-20612, Amendment No. 1 by which the National Science Foundation provides additional funds for the project "Kinetics of Open Biological Systems: Control and Oscillations" for the period February 1, 1970 through February 28, 1973 in the amount of $\$ 1,900$ for a total grant award of $\$ 25,700$. This grant is under the direction of Dr. Charles F. Walter.
6. Contract No. PH-43-NCI-E-65-604, Modification No. 13 by which the National Institutes of Health provides funds for the project "Studies on the Relationships of Viruses to Human Leukemias, Lymphomas, and Selected Solid Tumors" for the period February 1, 1972 through January 31,1973 in the amount of $\$ 611,058$. This contract is under the direction of Dr. Leon Dmochowski.
7. Grant No. 5 R10 CAl2014-03 CCI by which the National Cancer Institute provides funds for the project "Southwest Cancer Chemotherapy Study Group Statistical". Direct costs in the amount of $\$ 116,472$ plus appropriate indirect costs are awarded for the period January 1 , 1972 through December 31, 1972. This grant is under the direction of Dr. Edmund A. Gehan.
8. Grant No. 5 RO1 AMO9155-08 HEM by which the National Institute of Arthritis and Metabolic Diseases provides funds for the project "Bone Marrow Kinetics" for the period April 1, 1972 through March 31, 1974 . Direct costs in the amount of $\$ 21,857$ plus appropriate indirect costs are awarded for the period April l, 1972 through March 31, 1973. This grant is under the direction of Dr. Raymond Alexanian.
9. Grant No. 5 ROI CAO4464-14 PC by which the National Cancer Institute provides funds for the project "Biosynthesis and Role of Deoxynucleotides" for the period April 1, 1972 through March 31, 1974. Direct costs in the amount of $\$ 39,746$ plus appropriate indirect costs are awarded for the period April 1, 1972 through March 31, 1973. This grant is under the direction of Dr. E. Colleen Moore.

CONTRACTS AND AGREEMENTS, NONGOVERNMENI SPONSORED, INCLUDING RESEARCH GRANTS AS DISTINGUISHABLE FROM GIFTS:

GRANTS: The following grants have been accepted on behalf of The University of Texas M. D. Anderson Hospital and Tumor Institute at Houston by the President. I recommend approval and ratification of signatures.

1. Grant No. 918 by which The Kelsey and Leary Foundation provides funds for the project "Family Study of Solid (Medullary) Carcinoma of the Thyroid" for the period February 14, 1972 through February 13, 1973 in the amount of $\$ 7,247$. This grant is under the direction of Dr. C. Stratton Hill.
2. Grant No. G-315 by which The Robert A. Welch Foundation provides funds for the project "Specific Interactions Between Repair Enzymes and Deoxyribonucleic Acid" for the period May 1, 1972 through April 30, 1973 in the amount of $\$ 15,000$. This grant is under the direction of Dr. Roger Roy Hewitt.
3. Grant No. G-415 by which The Robert A. Welch Foundation provides funds for the project "The Structure of Tyrosine transfer-Ribonucleic Acid from Normal and Regenerating Pat Liver" for the period May 1, 1972 through April 30, 1973 in the amount of $\$ 12,000$. This grant is under the direction of Dr. J. Thomas Tidwell.
4. Grant No. G-290 by which The Robert A. Welch Foundation provides funds for the project "Chemical Basis for Specificity in the Association of Nuclear Proteins with DNA" for the period May 1,1972 through April 30, 1974. The amount of $\$ 12,000$ is awarded for each of the two years. This grant is under the direction of Dr. Allen T. Ansevin.
5. Grant No. G-487 by which The Robert A. Welsh Foundation provides funds for the project "Intercistronic Regions in Messenger Ribonucleic Acid" for the period May 1,1972 through April 30, 1974 . The amount of $\$ 12,000$ is awarded for each of the two years. This grant is under the direction of Dr. James N. Baptist.
6. Grant No. G-517 by which The Robert A. Welch Foundation provides funds for the project "Nicotinamide-Adenine Dinucleotide: Intramolecular Interactions, Interactions with Water, and Binding to Dehydrogenase" for the period May 1, 1972 through April 30, 1974. The amount of $\$ 12,000$ is awarded for each of the two years. This grant is under the direction of Dr. Charles Walter.

INTERAGENCY CONTRACTS:


Correction. Interagency Contract No. IAC( $72-73$ ) - 376 which was reported as Docket Item No. 1, Page No. A-3 for the March 16,1972 Board of Regents Meeting was incorrect in that The University of Texas Dental Branch is the Receiving Agency for this contract.


BUSINESS CONTRACTS: The following contract has been negotiated by the Business Manager and has been approved by the System Comptroller and the Deputy Chancellor for Administration and the State Board of Control. I recommend your approval and ratification of signatures:

1. Lease Agreement with Elgee Associates for 38,000 square feet warehouse space for storage space to be shared by The University of Texas M. D. Anderson Hospital, Houston Medical School and Dental School. Rental payment for this space is at the rate of $\$ .11$ cents per square foot per month effective March 1 , 1972 through August 31, 1975.

BUDGET CHANGES: The following amendments to the 1971-72 budget are written on the basis of "budget rates" rather than the "freeze rates" resulting from the President's Executive Order. For the duration of the wage-price freeze, while reported amendments to the budget are based on budget rates, all payrolls have been processed in compliance with the rules, regulations, and guidelines issued under authority of the Executive Order.

1971-72
General Administration (Business Office, Payroll)

1. Appointment. Barbara E. Davidson, Accounting Clerk II, payable at the rate of $\$ 5,520.00$ per annum effective February 14, 1972. The source of funds for this position is the Reserve for Classified Salaries Account. (RBC 125)

## General Administration (Personnel)

2. Appointment. Barbara L. Moran, Secretary II, payable at the rate of $\$ 6,168.00$ per annum effective December 13, 1971. The source of funds is the Reserve for Classified Salaries Account. (RBC 128)
3. Appointment. Janet M. Sartor, Clerk I, payable at the rate of $\$ 4,200.00$ per annum effective September 1, 1971. The source of funds is the Reserve for Classified Salaries Account. (RBC 131)

## Medical Staff (Radiotherapy)

4. Change in Status. Jesus Caderao, Ph.D., from Assistant Radiotherapist and Instructor in Radiotherapy payable at the rate of $\$ 25,000.00$ per annum to Project Investigator in Radiotherapy payable at the rate of $\$ 20,000.00$ per annum from National Institutes of Health Grant NIH-5-P02-CA-10006 effective February 1, 1972. There is no change in source of funds for Dr. Caderao. (RBC 136)

## Research (Biochemistry)

5. Change in Title. Yasuski Nakagawa, Ph.D., from Research Associate to Assistant Biochemist and Assistant Professor of Biochemistry (Without Tenure) payable at the rate of $\$ 10,500.00$ per annum from National Institutes of Health Grant 5-RO1-CA-1785, effective January 1, 1972. There is no change in salary for Dr. Nakagawa. (RBC 132)

Research (Experimental Medicine)
6. Appointment. Martha Roe, Secretary I, payable at the rate of $\$ 5,520.00$ per annum effective November 14, 1971. The source of funds is the Reserve for Classified Salaries Account. (RBC 129)

Research (Experimental Surgery)
7. Increase in Salary. Sam C. Barranco, Ph.D., Assistant Biologist, Section of Experimental Surgery and Assistant Professor of Surgery (Biology), (Without Tenure) from the rate of $\$ 15,000.00$ per annum to the rate of $\$ 16,000.00$ per annum effective March 1, 1972. The source of funds is the Reserve for Professional Salaries Account. (RBC 137)

Research (Virology)
8. Appointment. Donald L. Evans, Ph.D., Assistant Virologist and Assistant Professor of Virology (Without Tenure) payable at the rate of $\$ 13,500.00$ per annum from Public Health Service Contract PH-43-65-604 effective February 1, 1972. (RBC 126)
9. Appointment. William A. Newton, M. D., Assistant Virologist and Assistant Professor of Virology (Without Tenure) payable at the rate of $\$ 15,000.00$ per annum from Public Health Service Contract PH-43-65-604, effective February 1, 1972. (RBC 127)

Patient Care Activities (Inhalation Therapy)
10. Change in Title and Increase in Salary. Raul A. Rowe, from Acting Chief Inhalation Therapist, payable at $\$ 11,100.00$ per annum to Chief Inhalation Therapist payable at $\$ 13,000.00$ per annum effective February 1, 1972. The source of funds for this increase is the Reserve for Professional Salaries Account. (RBC 123)

## Patient Care Activities (Clinical Pathology Service)

11. Appointment. Felipe Duran, Jr. Assistant Chief Medical Technologist, payable at the rate of $\$ 9,600.00$ per annum from Clinical Pathology Services (General Funds), effective March 1, 1972. The source of funds for this appointment is the Reserve for Classified Salaries Account. (RBC 139)
12. Appointment. Eleanor Y. Phillips, Secretary III, payable at the rate of $\$ 6,780.00$ per annum from Clinical Pathology Services, effective February 24 , 1972. The source of funds for this appointment is the Reserve for Classified Salaries Account. (RBC 140)

Patient Care Activities (Nursing Service)
13. Appointment. Mary L. Guidry, Nurse Supervisor, payable at the rate of $\$ 12,000.00$ per annum effective September 1, 1971. The source of funds is the Reserve for Classified Salaries Account. (RBC 130)

General Services (Development Office)
14. Extension of Appointment. Diane Elizabeth Heiges, Special Assistant to the University Cancer Foundation, payable at the rate of $\$ 10,000.00$ per annum from Various Donors for University Cancer Foundation, effective for the period March 1, 1972 through May 31, 1972. Reference Regents Budget Change 66 (71-72). (RBC 138)

## General Services (Medical Communications)

15. Appointment. Ken Wiedower, Supervisor Motion Picture and Television, payable at the rate of $\$ 12,000.00$ per annum effective March 1, 1972. The source of funds for this appointment is the Reserve for Professional Salaries Account. (RBC 141)

General Services (Police Department)
16. Appointment. Harry R. Lawrence, Patrolman, University Police, payable at the rate of $\$ 8,160.00$ per annum effective February I, 1972. The source of funds for this new position is the Reserve for Classified Salaries Account. (RBC 124)

Anderson Mayfair
17. Appointment. Jesse J. James, Kitchen Manager, payable at the rate of $\$ 10,000.00$ per annum effective February 1, 1972. (RBC 133)
18. Appointment. Harry P. Kohrke, Relief Dining Room Manager, payable at the thirty per cent rate of \$3,798.00 effective February 1, 1972. (RBC 134)
19. Appointment. Lawna F. Butcher, Dining Room Manager, payable at the rate of $\$ 9,000.00$ per annum effective February 1, 1972. (RBC 135)

## ENVIRONMENTAL SCIENCE PARK

20. Transfer of Funds. Transfer funds in the amount of $\$ 1,000.00$ from the Reserve for Maintenance and Operation Account to establish a Travel Fund appropriation for the fiscal year 1971-72. (RBC 6)

QUARTERLY REPORT OF GIFTS OF LESS THAN $\$ 5,000.00$
The quarterly report of gifts of less than $\$ 5,000.00$ for the period ending February 29, 1972 has been filed with the Office of the Board of Regents where it is available for reference.

## AMENDMENT TO CLASSIFIED PERSONNEL PAY PLAN:

It is recommended that the following addition to the Classified Personnel Pay Plan for The University of Texas Units at Houston be approved effective March l., 1972. This change has been approved by the System Personnel Director and the Deputy Chancellor for Administration:

CODE

TITLE
Volunteer Coordinator

SALARY RANGE
\$514-680

R. Lee Clark, M. D.

President

THE UNIVERSITY OF TEXAB
GRADUATE SCHOOL O BIOMEDICAL SCIENCEG AT HOUGYON division of graduate grudies

April 3, 1972

Dr. Charles A. LeMaistre
Chancellor
The University of Texas
Austin, Texas 78712

Dear Doctor LeMaistre:

The following docket is submitted for your approval and presentation to the Board of Regents at its meeting in Austin, Texas on April 29, 1972:

GIFTS: I recommend acceptance of the following gift for the Division of Communicative Disorders and that the appreciation of the Board be sent to the donor by the Secretary.

| Donor | Purpose | Amount |
| :--- | :--- | :--- |
| Houston Alumnae Kappa Alpha For the Video Taping <br> Theta  | $\$ 8,000.00$ |  |
| of Normal Children Fund |  |  |

Mrs. Pat Green, President
5470 Tilbury
Houston, Texas 77027

BUDGET CHANGES: The following amendments to the 1971-72 budget are written on the basis of "budget rates" rather than the "freeze rates" resulting from the President's Executive Order. For the duration of the wage-price freeze, while reported amendments to the budget are based on budget rates, all payrolls are processed in compliance with the rules, regulations, and guidelines issued under authority of the Executive Order.

## 1971-72

Educational and General

1. Change in Source of Funds and Status. Thomas A. Decker, Ph.D., Assistant Professor (Without Tenure), from the eight per cent time rate of $\$ 1,500.00$ per annum from Educational and General (General Funds) and the forty-two per cent time rate of $\$ 7,950.00$ per annum from NASA Contract NGR-44-012-099 to the one hundred per cent rate of $\$ 18,900.00$ per annum from Educational and General (General Funds) for the period January 1, 1972 through February 17, 1972. Source of funds for this change is the Reserve for Professional Salaries Account. (Rev. RBC 14)
2. Appointment. Vivian K. Leitner, Research Associate, payable at the twenty per cent rate of $\$ 2,400.00$ per annum from Educational and General (General Funds) effective January 1,1972 . The source of funds is the Reserve for Professional Salaries Account. (RBC 17)
3. Increase in Salary, James P. Preslock, Ph.D., Assistant Professor (Without Tenure), from the rate of $\$ 13,500.00$ per annum to the rate of $\$ 14,500.00$ per annum effective February 1, 1972. The source of funds for this increase is the Reserve for Professional Salaries Account. (RBC 18)
4. Leave Without Pay. Vivian K. Leitner, Research Associate, payable at the twenty per cent rate of $\$ 2,400.00$ per annum for the period February 7 , 1972 to April 28, 1972. (RBC 20)

## DIVISION OF COMMUNICATIVE DISORDERS

5. Change in Source of Salary. Tina E. Bangs, Phi., Acting Director, from the rate of $\$ 2,500.00$ per annum from Office of the Director (General Funds), the rate of $\$ 2,500.00$ per annum from Speech and Hearing Service (Designated Funds), and the rate of $\$ 20,000.00$ per annum from Grant OEG-9-530312-4651 to the rate of $\$ 5,000.00$ per annum from Office of the Director (General Funds) and the rate of $\$ 20,000.00$ per annum from Grant OEG-9-530312-4651, effective January 1, 1972. The source of funds for this change is the Reserve for Prom fessional Salaries Account. (RBC 16)

## DIVISION OF CONTINUING EDUCATION

6. Appointment. Sidney Schnur, M. D., Professor of Cardiology (Without Tenure), payable at the twenty-five per cent rate of $\$ 7,500.00$ per annum effective September 1, 1971. The source of funds is the vacant Professor of Cardiology position. (RBC 19)

## QUARTERLY REPORT OF GIFTS OF LESS THAN $\$ 5,000.00$

The quarterly report of gifts of less than $\$ 5,000.00$ for all divisions for the period ending February 29, 1972 has been filed with the Office of the Board of Regents where it is available for reference.

## Dear Doctor LeMaistre:

The following docket is submitted for your approval and presentation to the Board of Regents at its meeting in Austin, Texas on April 29, 1972:

GOVERNMENT CONTRACTS AND GRANTS: The following contracts, grants, and amendments have been negotiated by the Business Manager, and have been signed by the Dean upon recommendation of the Principal Investigator, and the Business Menager, and approved by the Comptroller and Deputy Chancellor for Administra-f tion. I recommend your approval and ratification of signatures.

1. Contract No. NAS 9-11522 by which the National Aeronautics and Space Administration extends the grant period for the project "Public Health Application of Environmental Data Gathered by Remote Sensing" through February 3, 1972, without additional funds. This contract is under the direction of Dr. John E. Scanlon.
2. Grant No. 5 TOI HSOOO67-02 HST by which the Public Health Service provides funds for the project "Biostatistics" for the period July 1 , 1972 through June 30 , 1976. The amount of $\$ 69,866$ is awarded for the period July 1,1972 through June 30, 1973. This grant is under the direction of Dr. Richard D. Remington.
3. Grant Mo. 5 AO4 AH00050-03 PHR by which the Public Health Service provides funds for the project "Special Purpose Traineeship Grant" for the period September 1 , 1972 through August 31, 1976. The amount of $\$ 29,053$ is awarded for the period September 1, 1972 through August 31, 1973. This grant is under the direction of Dr. David W. Martin.

INTERAGENCY CONTRACTS: The following interagency contracts have been negotiated by the Business Manager and have been signed by the Dean upon recommendation of the Business Manager and approved by the State Board of Control, where applicable, and the Comptroller and Deputy Chancellor for Administration. I recommend your approval and ratification of signatures:

1. Interagency Contract No. IAC(72-73)-398 between The University of Texas School of Public Health at Houston, Performing Agency, and the Texas Water Development Board, Receiving Agency, to conduct Ecological Studies of Matagorda, San Antonio, Aransas-Copano and Corpus Christi Bay Systems, for the periad January l, 1972 through August 31, 1972, in the amount not to exceed $\$ 22,500$. This contract is under the direction of Dr. Ernst M. Davis.
2. Interagency Contract between The University of Texas School of Public Health at Houston, Receiving Agency, and the University of Houston, KUHT Film Productions, Performing Agency, for production of a film for the project "Early Prevention of Individual Violence", during the period March 6, 1972 through May 30, 1972 , in the amount not to exceed $\$ 11,996$. Source of funds for this production is a grant from the Moody Foundation.

BUDGET CHANGES: The following amendments to the 1971-72 budget are written on the basis of "budget rates" rather than the "freeze rates" resulting from the President's Executive Order. For the duration of the wage-price freeze, while reported amendments to the budget have been based on budget rates, all payrolls have been processed in compliance with the rules, regulations, and guidelines issued under authority of the Executive Order.

1. Appointment. Ruth M. Crane, Senior Clerk, payable at the rate of $\$ 5,268.00$ per annum, effective March 6, 1972. The source of funds for this appointment is the Reserve for Classified Salaries Account. (RBC 76)

General Expense (Library Services)
2. Appointment. Pamela J. Poffinbarger, Clerk Typist II, payable at the rate of $\$ 4,800.00$ per annum, effective February 17, 1972. The source of funds is the Reserve for Classified Salaries. (RBC 77)

## Teaching, Service and Research (Chronic Diseases)

3. Increase in Salary. Marion Primomo, Coordinator, from the fifty per cent rate of $\$ 12,500.00$ per annum to the fifty per cent rate of $\$ 13,188.00$ per annum payable from Regional Medical Program RM-00007-04, Project 1016, effective January 1, 1972. (RBC 64)
4. Increase in Salary. Martin J. Green, Research Associate, from the fifty per cent rate of $\$ 7,500.00$ per annum to the fifty per cent rate of $\$ 7,913.00$ per annum payable from Regional Medical Program RM-00007-04, Project 1016, effective January 1, 1972. (RBC 66)

## Teaching, Service and Research (Health Services Administration)

5. Appointment. Elliot $0^{\prime}$ Brian Smith, Assistant Research Biometrician, payable at the rate of $\$ 14,300.00$ per annum from National Institutes of Health Contract 71-2442, effective February 7, 1972. (RBC 72)
6. Increase in Salary. Cornelius Askew, Ph.D., (Without Tenure) Assistant Professor of Epidemiology, from the rate of $\$ 16,000.00$ per annum to the rate of $\$ 17,200.00$ per annum, effective March 1, 1972. The source of funds for this increase is the Reserve for Professional Salaries Account. (RBC 74)

Teaching, Service and Research (International Health)
7. Increase in Salary. Milton P. Siegel, Professor of International Health, (Without Tenure) from the rate of $\$ 25,000.00$ per annum to the rate of $\$ 26,200.00$ per annum effective February 1, 1972. The source of funds for this increase is the Reserve for Professional Salaries Accounts. (RBC 69)

Teaching, Service and Research (Institute of Environmental Health)
8. Increase in Salary. Michael H. Smolensky, Ph.D., Assistant Professor of Environmental Physiology (Without Tenure), from the rate of $\$ 15,000.00$ per annum to the rate of $\$ 16,200.00$ per annum, effective February 1,1972 . The source of funds for this increase is the Reserve for Professional Salaries Account. (RBC 70)
9. Increase in Salary. Valliant C. Baird, Ph.D., Professor of Occupational Medicine (Without Tenure), from the thirty-three per cent rate of $\$ 9,000.00$ per annum to the thirty-three per cent rate of $\$ 9,500.00$ per annum effective February 1, 1972. The source of funds for this increase is the Reserve for Professional Salaries Account. (RBC 65)
10. Increase in Salary. Leslie A. Chambers, Ph.D., Professor of Environmental Health (With Tenure), from the rate of $\$ 32,000.00$ per annum to the rate of $\$ 33,000$ per annum, effective February 1, 1972. The source of funds for this increase is the Reserve for Professional Salaries Account. (RBC 71)
11. Change in Source of Salary. Darwin A. Labarthe, M. D., Associate Professor of Epidemiology (Without Tenure), from the rate of $\$ 23,500.00$ per annum to the rate of $\$ 21,150.00$ per annum payable from the Institute of Environmental Health (General Funds) and the rate of $\$ 2,350.00$ ner annum from Regional Medical Program Grant NIH-2-G03-RM-00007, Project 1016, effective February 1, 1972. (RBC 73)

## Teaching, Service and Research (Infectious Diseases)

12. Increase in Salary. Bartholomew P. Hsi, Ph.D., Associate Professor of Biometry (Without Tenure), from the rate of $\$ 22,000.00$ per annum to the rate of $\$ 23,500.00$ per annum, effective February 1,1972 . The source of funds is the Reserve for Professional Salaries Account. (RBC 67)

Teaching, Service and Research (Population Studies)
13. Increase in Salary. Carl S. Hacker, Ph.D., Assistant Professor of Medical Zoology (Without Tenure), from the rate of $\$ 15,000.00$ per annum to the rate of $\$ 16,200.00$ per annum effective March 1, 1972. The source of funds for this increase is the Reserve for Professional Salaries Account. (RBC 75)

Teaching, Service and Research (Urban Health)
14. Increase in Salary, Arthur S. Littell, Ph.D., Professor of Biometry (Without Tenure), from the rate of $\$ 27,500.00$ per annum to the rate of $\$ 28,700.00$ per annum effective February 1, 1972. The source of funds for this increase is the Reserve for Professional Salaries Account. (RBC 68)
15. Change in Source of Funds. Ronald K. Baba, Teaching Associate, at the rate of $\$ 9,000.00$ per annum from Comprehensive Health Planning Training Grant PHS 75504-01-70 Department of Health Services Administration to the Department of Urban Health (General Funds) effective September 1, 1971. The source of funds for this transfer is the vacant Assistant Professor of Urban Health position. (RBC 79)

ADJUNCT FACULTY APPOINTMENTS: The following Aajunct Faculty appointment without salary and without tenure has been recommended by the Dean and approved by the Chancellor.

1. Mr. Howarà L. Kusnetz, B.A., M.Sc., B.S.E., Adjunct Associate Professor of Occupational Health

## QUARTERLY REPORT OF GIFTS OF LESS THAN $\$ 5,000.00$

The quarterly report of gifts of less than $\$ 5,000.00$ for the period ending February 29, 1972 has been filed with the Office of the Board of Regents where it is available $\hat{\mathrm{a}}$ or reference.

SCHOOL OF PUBLIC HEALTH CATALOGUE: In accordance with the recommendation of the Facuity and the Dean of the School of Public Health, it is requested that the following revisions in the School of Public Health Catalogue be approved for the academic year 1972-73. These revisions have been approved by the Chancellor.


## THE UNIVERSITY OF TEXAS SCHOOL OF PUBLIC HEALTH at houston

Changes to be included in the 1972-73 School of Public Health Catalogue.

Revision of THE ACADEMIC CALENDAR, 1972-73 as follows:

| (1) | Sept. 25-29 | Registration for Fall Quarter |
| :---: | :---: | :---: |
|  | Oct. 2 | Instruction begins |
|  | Oct. 9 | Recess (Columbus Day) |
|  | Oct. 23 | Recess (Veterans Day) |
|  | Nov. 23-24 | Recess (Thanksgiving) |
|  | Dec. 8 | Instruction Ends |
|  | Dec. 11-15 | Evaluation period/Registration for Winter Quarter for continuing students |
|  | Dec. 16-Jan. 2 | Recess (Christmas and New Year's) |
|  | Dec. 28-29 | Registration for Winter Quarter for new students |
|  | Jan. 3 | Instruction begins |
|  | March 9 | Instruction ends |
|  | March 12-16 | Evaluation period/Registration for Spring Quarter for continuing students |
|  | March 17-25 | Recess |
|  | March 21-22 | Registration for Spring Quarter for new students |
|  | March 26 | Instruction begins |
|  | May 28 | Recess (Memorial Day) |
|  | June 1 | Instruction ends |
|  | June 4-8 | Evaluation period |
|  | June 9-24 | Recess |
|  | June 25-29 | Registration for Summer Quarter |
|  | July 2 | Instruction begins |
|  | July 4 | Recess (Independence Day) |
|  | Sept. 3 | Recess (Labor Day) |
|  | Sept. 7 | Instruction ends |
|  | Sept. 10-14 | Evaluation period |
|  | Sept. 15-23 | Recess |
|  | Sept. 24-28 | Registration for Fall Quarter |
|  | Oct. 1 | Instruction begins |

Revision of TABLE OF CONTENTS as follows:
(2) The Academic Calendar i

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For further information write:
Office of the Registrar
The University of Texas at Houston
School of Public Health
P.O. Box 20186

Houston, Texas 77025
(3) Addition to listing of SCHOOL OF PUBLIC HEALTH ADMINISTRATION as follows:

Reuel A. Stallones, M.D., M.P.H., Dean
Robert Oseasohn, B.S., M.D., Associate Dean
Richard D. Remington, M.A., M.P.H., Ph.D., Associate Dean
Morris R. Loden, B. B.A., Assistant to the Dean
Mrs. W. Jean Pyle, Registrar
Mrs. Stephanie Normann, B.A., M.S.L.S., Librarian
(4) Delete from FACULTY listing the following:

Ronald K. Baba, Teaching Associate in Community Health; B.A., Univ. of So. California, 1967; M. Arch., Univ. of So. California, 1969.

Judy Ann Bean, Teaching Associate in Biometry; A.B., Murray State College, 1963; M.P.H., Univ. of Michigan, 1965.

Patricia A. Buffler, Assistant Professor of Epidemiology; B.S., Catholic Univ. of America, 1960; M.P.H., Univ. of California, Berkeley, 1965.

Michael Cardin, Teaching Associate in Health Services; B.A., Univ. of So. California, 1967; J.D., Univ. of So. California, 1970.

Irina Cechova, Research Assistant; M.S., Univ. of Moscow, 1960.
Virginia C. Kennedy, Teaching Associate in Community Health; B.A., Oberlin College, 1965; M.A., Vanderbilt Univ., 1967.

Edward P. Michalewicz, Teaching Associate in Community Health; B.S., Wisconsin State Univ., 1958; M.S., So. Dakota State Univ., 1960; M.P.H., Univ. of Minnesota, 1966.

Dwayne M. Reed, Associate Professor of Epidemiology; A.B., Univ. of California, Berkeley, 1960; M.P.H., Univ. of California, Berkeley, 1962; Ph.D., Univ. of California, Berkeley, 1969.

Daniel J. Schneider, Associate Professor of Community Health; B.A., Chico State College, 1954; M.D., Univ。 of California at Los Angeles, 1958; M.P.H., Univ. of California, Berkeley, 1967.

Jane L. Valentine, Teaching Associate in Environmental Health; B.S., Tennessee A\&I State Univ., 1967; M.S., Univ. of Wisconsin, 1969.
(5) Add to FACULTY listing the following:

Stephen W. Bennett, Associate Professor of Epidemiology; B.A., Stanford Univ., 1957; M.D., Stanford Univ., 1961; M.P.H. \& T. M., Tulane Univ., 1963; Dr.P.H., Tulane Univ., 1967.

Benjamin S. Bradshaw, Associate Professor of Demography; B.A., The Univ. of Texas, 1956; M.A., The Univ. of Texas, 1960; Ph.D., Brown Univ,, 1968.

Stuart W. Hinds, Associate Professor of Health Services Administration; M.R.C.S., L.R.C.P. (London \& England), 1939; M.B., B.S., Univ. of London, 1940 ; D.T.M.E.H. (London), 1946; M.D., (Tropical Med.), Univ. of London, 1946; M.D. (Internal Med.), Univ. of London, 1947; M.R.C.P. (London), 1947.

Hardy Loe, Jr., Associate Professor of Community Health; M.D., The Univ. of Texas, Galveston, 1955; M.P.H., Univ. of California, Berkeley, 1967

Owen F. McCrory, Assistant Professor of Health Economics; B.A., Univ. of Bridgeport, 1966.

John A. Napier, Associate Research Biometrician; B.A., Southwestern Oklahoma State College, 1958.

Robert Oseasohn, Professor of Epidemiology; B.S., Tufts College, 1943; M.D., Long Island College of Medicine, 1947.

Marjorie N. Rush, Assistant Professor of Urban Health; B.A., Univ. of Lowa, 1963; M.A., Univ. of Iowa, 1964.

William J. Schull, Professor of Medical Genetics; A.B., Univ. of Alabama, 1945; M.A., Columbia Univ., 1946; M.D., Univ. of Michigan, 1957.

Milton P. Siege1, Professor of International Health.
Clarence Skrovan, Associate Professor of Community Health; B.A., Catholic Univ. of America, 1958; M.D., The Univ. of Texas, Galveston, 1964; M.P.H., The Johns Hopkins Univ., 1966.

James H. Steele, Professor of Environmental Health; D.V.M., Michigan State Univ., 1941; M.P.H., Harvard Univ., 1942.
(6) Delete from ADJUNCT FACULTY listing the following:

Loyall D. Farragut, M.D., M.P.H., Adjunct Professor of Public Health Administration; Chief Health Officer, Harris County, Texas.

Hardy Loe, Jr., M.D., Adjunct Associate Professor of Community Health; Assistant Director, Houston Dept. of Public Health.
(7) Add to ADJUNCT FACULTY listing the following:

Walter P. Abbott, Ph.D., Adjunct Associate Professor of Environmental Health; Assistant Director and Senior Marine Biologist, Gulf Coast Research Laboratory.

Allan H. Levy, M.D., Adjunct Professor of Biomathematics; Director, Computer Science Program, Baylor College of Medicine; Professor, Virology and Epidemiology, Baylor College of Medicine.

Robert M. Thrall, Ph.D., Adjunct Professor of Biomathematics, Professor of Mathematical Sciences, Rice University.

## THE UNIVERSITY OF TEXAS

SCHOOL OF PUBLIC HEALTH AT HOUSTON
(8) Change TUITION AND FEES section to read as follows:

Each student who registers for a full-time program is required to pay a registration and tuition fee of $\$ 33$ per quarter if he is a resident of Texas, $\$ 320$ per quarter if he is a U.S. nonresident, or $\$ 133$ per quarter if he is a foreign national.

In general, residence in Texas for a person over twenty-one years of age is established if he has been employed within the State for a period of at least twelve months prior to registration in The University. Residence within the State primarily for the purpose of education does not entitle the student to reclassification. (The statute defining Texas residence includes a number of specific exemptions and any case should be evaluated if serious doubt exists.)

Texas residents must pay $\$ 33$ per quarter for either a part-time or full-time program. A U.S. non-resident student who enrolls for a part-time program must pay registration and tuition fees reduced proportionately. The minimum quarterly fee for a nonresident is $\$ 80$.

If a student is enrolled solely for completion of the thesis or dissertation, the quarterly registration fee is $\$ 8$ for Texas residents and $\$ 33$ per quarter for all other students.

## LATE REGISTRATION FEE

A late registration fee (\$5) will be assessed if registration is filed seven days or more after the first day of instruction.
(9) Delete from TUITION AND FEES section the following:

Refund of Registration and Tuition Fee for Students who Withdraw
Any student who withdraws officially before the completion of the fourth week of a term shall be entitled to a refund of the registration and tuition fee according to the following schedule:
Withdrawing During Texas Residents Non-Residents

| First Week | $\$ 15.00$ | $\$ 105.00$ |
| :--- | ---: | ---: |
| Second Week | 15.00 | 90.00 |
| Third Week | 12.00 | 60.00 |
| Fourth Week | 6.00 | 30.00 |

## Laboratory Fees

A fee is charged for each laboratory course. In general the fee is $\$ 6.00$ per course, but will not exceed $\$ 8.00$ in any one term.
(10) Add section on STUDENT FINANCIAL ASSISTANCE as follows:

This School is granted traineeship funds from the U.S. Public Health Service and other sources. However, only limited funds are available, and the competition for them is quite severe. Traineeships are awarded according to merit and need. Applicants who desire a traineeship should so indicate on the application form. Each application indicating this request will be reviewed and considered for financial assistance. Iraineeships are usually allocated during the month of July for the following academic year. Each applicant will be notified of action on his request at the earliest possible date.

The traineeships start at a base of approximately $\$ 2,400$ per year, prorated over the calendar year and increase according to prior education, experience, and number of dependents. Trainees must be United States citizens, or foreign nationals having in their possession a visa permitting permanent residence in the United States. Traineeships consist of a monthly stipend plus an allowance for tuition and fees. They may be granted to fulltime students only. Trainees are expected to perform only such work as would be an integral part of their training programs.

Some students find part-time employment in the various research programs of the school.
(11) Add a section on HOUSING to read as follows:

The School of Public Health has no housing for students.
The Texas Medical Center maintains in Favrot Hall efficiency apartments for occupancy by two people. Reservations for space in Favrot Hall are usually made quite far in advance. Rental is approximately $\$ 60$ per person per month. Applications can be obtained through the Office of the Registrar, The University of Texas School of Public Health.

Near the Medical Center are numerous apartment complexes with varying facilities and rates. A few apartments are within walking distance and some are on or near bus lines. Students usually have no difficulty finding suitable housing.

Paragraph 2, lst sentence delete word "is".
Paragraph 3, lst sentence substitute the word "activity" for "entity" and "number" for "series".

Add paragraphs 4 through 10.
The revised section on ACADEMIC PROGRAMS, GENERAL Section to read as follows:

Four courses comprise a full program of study. Usually a course consists of a combination of discussion periods, directed reading, and individual study and inquiry. In all courses grading is on a pass/fail basis.

To fulfill their responsibilities in teaching, research, and service, the faculty of the School depend heavily upon the community, looking upon it as a living laboratory. This constitutes a major resource for the students, affording them an opportunity to observe, to consider, and to evaluate problems and programs that exist in fact as well as in theory.

In this School, public health is regarded as an interdisciplinary activity characterized by a number of important problems, e.g., population growth, preservation of an environment consistent with human survival, and improved organization and gvailability of health services to all segments of society. We believe that an interdisciplinary, problem-centered field requires an academic structure serving that fundamental idea. For that reason, the basic organizational unit of the School is the teaching-research unit, a group of faculty members and graduate students who, with supporting technical and clerical personnel, work together as a learning community investigating an important area of public health concern. This modular structure serves to bring teaching and research together physically and organizationally, as well as conceptually, under a common umbrella, learning. We believe this encourages development of student and faculty capabilities and initiative; promotes studies that are comprehensive, yet not superficial; encourages close, cooperative relations between faculty and students; and enhances communications between persons with different disciplinary backgrounds.

Since much of a student's program is conducted in close cooperation with a faculty advisor, each prospective applicant should consider carefully the structure of the school and indicate in his application as definitely as possible where he believes his interests would best be served.

A student may fulfill the requirements for M.P.H. or Dr.P.H. degrees in any of the Teaching-Research Programs. Each is planned to contain the requisite breadth of faculty interests and skills to serve the needs of students interested in community health practice. The faculties in each discipline are responsible for M.S. and Ph.D. programs. These are given in community health sciences, but the disciplines identify selected areas of concentration within the broader field.

Faculty assignments within the matrix are neither permanent nor mutually exclusive. Where faculty interests extend beyond these boundaries, the boundaries are considered not to exist. This arrangement was developed for and serves well the teaching and research activities within the School, but is not suited for administrative functions. These are managed by four standing committees of students and faculty.

The Academic Affairs Committee deals with curricula, courses, problems that arise between faculty and students, and similar concerns.

The Admissions Committee reviews applications for admission.
The Committee on Planning, Development and Research is concerned with long range planning, relations between the School and other institutions, and review of proposed research programs.

The Operations Committee handles day to day problems of allocation of space and resources.
(13) Add THE UNIVERSITY OF TEXAS SCHOOL OF PUBLIC HEALTH MODULES MATRIX as shown below:

THE UNIVERSITY OF TEXAS SCHOOL OF PUBLIC HEALTH MODULES MATRIX

| DISCIPLINES | PROBLEM ORIENTED TEACHING-RESEARCH PROGRAMS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Health Services | Urban Health | Population Studies | Environmental Health | International Health | Disease Control |
| Administrative Sciences | Loe | $\frac{\text { Atkisson }}{\text { Cardin }}$ | Sterner* | Baird | Sicgel | Escutia |
| Behavioral Sciences | Gebhardt Justice McCrory | Baba Martin* Rush | Bradshaw Roberts |  | Walker |  |
|  <br> Physical <br> Sciences | Hinds Skrovan* | Heideman | Hacker Schull | Cechova <br> Chambers <br> Davis, Eitzen <br> Gesell, Pier <br> Severs, Smolensky <br> Steele, Valentine |  | Boyd <br> Hayes <br> Kokernot <br> Scanlon |
| Biometry | Forthofer Glasser Hemphill | Littell | Frankowski | Downs | Hawkins | Bean <br> Hsi <br> Napier <br> Remington* |
| Epidemiology | Askew Oseasohn Sakellarides | Stallones |  | Bennett | Silberberg | Labarthe* Schulman |

N.B. The persons whose names are underlined are designated as Module Convencrs, to provide an explicit mechandsm for communications within the modules. The persons whose names are marked by an asterisk are the Discipline Conveners.

THE TEACHING-RESEARCH UNITS
(14) Delete the CHRONIC DISEASE CONTROL unit as follows:

CHRONIC DISEASE CONTROL

The Problem: Chronic Diseases are major causes of death and disability. For many of them the basic knowledge on which control measures might be based is lacking.

The Staff
Judy Ann Bean
Patricia A. Buffler
Richard D. Remington
Major Research Activities
Coronary Artery Disease
Hypertension
Cerebral Vascular Disease
Cancer
Drug Abuse and Alcoholism
Community Mental Health
(15) Delete the INFECTIOUS DISEASES CONTROL unit as follows:

INFECTIOUS DISEASES CONTROL

The Problem: Despite the great success that has attended infectious disease control activities, serious problems remain. To understand them and develop ways to deal with them require the efforts of microbiologists, entomologists, parasitologists, epidemiologists, and people who are experts in disease control programs.

The Staff

Kenneth Boyd
Virgilio Escutia
Jack Hayes
Bartholomew Hsi
Robert Kokernot

Major Research Activities
Arthopod-Borne Viruses
Parasitic Diseases
Laboratory Methods
Bioassay
(16) Add the DISEASE CONTROL unit as follows:

DISEASE CONTROL
The Problem: A central concern of organizations concerned with public health is, and will continue to be, the problem of control of human disease. In the more developed nations, including the United States, chronic diseases are major causes of death and disability. For many or most of these diseases the basic knowledge on which control measures might be based is lacking. Further, despite the great successes that have attended infectious disease control activities in the last century, serious problems remain even
in the more industrialized societies；and elsewhere，particularly， in the tropics，infectious diseases are the major cause of human morbidity and mortality．To understand disease processes and to develop ways to deal with them require the efforts of microbiologists， entomologists，parasitologists，epidemiologists，and others，acting not as individual experts but as participants in an integrated， cooperative effort．

## The Staff：

Judy A．Bean
Kenneth R．Boyd
Virgilio Escutia
Jack Hayes
Bartholomew P．Hsi
Robert H．Kokernot
Darwin R．Labarthe
John A．Napier
Richard D．Remington
John E．Scanlon
Diane E．Schulman
Major Research Activities：
Anthropod－Borne Viruses
Bioassay
Cancer
Cerebral Vascular Disease
Community Mental Health
Coronary Artery Disease
Hypertension
Laboratory Methods
Mosquito Bionomics
Parasitic Diseases
（17）Change ENVIRONMENTAL HEALTH Unit Staff Listing as follows：
The Staff：
Valliant C．Baird
Stephen W．Bennett
Irina Cechova
Leslie A．Chambers
Ernst M．Davis
Thomas D．Downs
Harold E．Eitzen
Thomas F．Gese11
Stanley M．Pier
Richard K．Severs
Michael H．Smolensky
James H．Steele
Jane L．Valentine
（18）Delete the following names from the ENVIRONMENTAL HEALTH Unit Staff Listing：

Darwin R．Labarthe
James $\dot{H}$ ．Sterner
(19) Change the HEALTH SERVICES Unit to read as follows: HEALTH SERVICES

The Problem: The organization, financing, and availability of health services provide the central emphasis of this module. Issues include planning, administration, monitoring, and evaluation of current and alternative community health care systems and their components.

The Staff:
Cornelius Askew, Jr.
Ronald N. Forthofer
Jay H. Glasser
Fay M. Hemphill
Stuart W. Hinds
D. Blair Justice

Hardy Loe, Jr.
Owen F. McCrory
Robert Oseasohn
Clarence Skrovan
Major Research Areas:

Community Health Services
Comprehensive Health Planning
Health Manpower
Management Principles
Personal Health Service Systems
Quantitative Methods in Health Services Research
Violence
(20) Delete the following names from the HEALTH SERVICES Unit Staff Listing:

Virginia C. Kennedy
Edward P. Michalewicz
Daniel J. Schneider
George M. Walker, Jr.
(21) Amend the title of INTERNATIONAL AND ETHNIC STUDIES as follows:

INTERNATIONAL HEALTH AND ETHNIC STUDIES
(22) Delete the word "optimal" from sentence two (2), paragraph one (1) of the INTERNATIONAL HEALTH AND ETHNIC STUDIES Unit.
(23) Delete the following from the last sentence in paragraph one (1) of the INTERNATIONAL HEALTH AND ETHNIC STUDIES Unit.
"as is understanding of the ecology and dynamics of disease systems (such as malaria and yellow fever) which are important in some parts of the world although not in the United States."
(24) Change the INTERNATIONAL HEALTH AND ETHNIC STUDIES Unit Staff Listing as follows:

The Staff:
C. Morton Hawkins

Milton P. Siegel
Yaal Silberberg
George M. Walker, Jr.
(25) Delete the following names from the INTERNATIONAL HEALTH AND ETHNIC STUDIES Unit Staff Listing:

Dwayne Reed
John Scanlon
(26) Change the POPULATION STUDIES Unit Staff Listing as follows:

The Staff:
Benjamin S. Bradshaw
Ralph F. Frankowski
Carl S. Hacker
Eun Sul Lee
Robert E. Roberts
William J. Schull
James H. Sterner
(27) Change the URBAN HEALTH Unit, The Problem as follows:

URBAN HEALTH
The Problem: Urbanization and the rapid growth of large and densely populated metropolitan communities have established the need to examine the influence of urban and metropolitan habitats on human health. Thus, urban health is concerned with the interactions between man and the urban ecosystems, and with development and management of these interactions so as to promote human health.

## The Staff:

Arthur A. Atkisson
Ronald K. Baba
Michael Cardin
M. Lawrence Heideman

Arthur S. Littell
David W. Martin
Marjorie N. Rush
Reue1 A. Stallones
Major Research Activities;
Health Service Systems
Management of Urban Environments
Urban Design
(28) Change the section DEGREE PROGRAMS, paragraph one, sentence three from:
"Only by this approach can the interrelations between the varied components be perceived and understood."
to:
"Only by this approach can the interrelations among the numerous components be perceived and understood."
(29) Change section DEGREE PROGRAMS, paragraph one, sentence four from:
"Thus, although teaching and research may be directed toward a fraction of the total system, the concept must be preserved that this fractionation is artificial and is effected only for convenience in attacking a problem."
to:
"Even though teaching and research must be directed toward only a fraction of the total system, the concept must be preserved that this fractionation is artificial and is effected only for convenience in attacking a problem."
(30) Change MASTER OF PUBLIC HEALTH (M.P.H.) section as follows:

MASTER OF PUBLIC HEALTH
The Master of Public Health (M.P.H.) degree is the basic professional degree in the field. It is required for many supervisory and managerial positions in public health and is recommended for many others.
(31) Add to MASTER OF PUBLIC HEALTH after DEGREE REQUIREMENTS the following sentence:
"Each student will be affiliated with one of the teaching-research units listed on pages 18 through 22 and will ordinarily do most of his work with that unit."
(32) Delete from MASTER OF PUBLIC HEALTH (M.P.H) the following:

A number of fields of concentration will be offered:

Comprehensive Health Planning
Health Services Administration
International Health
Occupational Health
Urban Health
(33) Change DOCTOR OF PUBLIC HEALTH, ADMISSION REQUIREMENTS, first sentence as follows:

Prior master's degree or equivalent preparation, and
(34) Add to DOCTOR OF PUBLIC HEALTH degree section the following:

A number of fields of concentration are offered:
Disease Control
Comprehensive Health Planning
Environmental Health
Health Services Administration
International Health
Occupational Health
Urban Health
(35) Change DOCTOR OF PUBLIC HEALTH (Dr.P.H.), ADVISORY COMMITTEE paragraph as follows:

ADVISORY COMMITTEE
"A committee of at least three members of the regular faculty, including a principal advisor, will be appointed at the time a student enters the Dr.P.H. program to advise the candidate in preparation for the qualifying examination and to administer the examination."
(36) Change DOCTOR OF PUBLIC HEALTH (Dr.P.H.), THESIS COMMITTEE paragraph as follows:

## THESIS COMMITTEE

"A committee of at least three members of the regular faculty, including a principal advisor, will be appointed to guide the candidate's research. The thesis requirement will be fulfilled after a successful, open oral defense of the dissertation, signature of the thesis by all members of the thesis committee, and filing of the signed copy in the Dean's Office.
(37) Change MASTER OF SCIENCE (M.S.) section on "A number of fields of concentration will be offered" as follows:

A number of fields of concentration will be offered:

## Biometry

Environmental Health
Epidemiology
Medical Ecology
(38) Delete the following from the MASTER OF SCIENCE (M.S.) section on "A number of fields of concentration will be offered"

Computer Sciences
Entomology
Microbiology
Parasitology
Population Studies
Social Sciences
(39) Delete from DOCTOR OF PHILOSOPHY, paragraph one, sentence two the words "various aspects". The sentence to read as follows:
"Curricula leading to this degree will be offered in the health sciences related to community health."
(40) Add to DOCTOR OF PHILOSOPHY program after DEGREE REQUIREMENTS Section the following:

A number of fields of concentration are offered:

Behavioral Sciences
Biometry
Environmental Health
Epidemiology
Medical Ecology
(41) Change DOCTOR OF PHILOSOPHY, ADVISORY COMMITTEE as follows: ADVISORY COMMITTEE
"A committee of at least three members of the regular faculty, including a principal advisor and representation from faculty members in the minor fields of concentration, will be appointed at the time a student enters the Ph.D. program to advise the candidate and to administer the examination."
(42) Change DOCTOR OF PHILOSOPHY, THESIS COMMITTEE as follows:

THESIS COMMITTEE
"A committee of at least three members of the regular faculty, including a principal advisor and representation from the faculty in the minor fields of concentration, will be appointed to guide the candidate's research. The thesis requirement will be fulfilled after a successful, open oral defense of the dissertation, signature of the thesis by all members of the thesis committee, and filing of the signed copy in the Dean's Office."
(43) Add section entitled OTHER SPECIAL PROGRAMS as follows:

OTHER SPECIAL PROGRAMS

A cooperative program has been developed with the Schools of Architecture of The Jniversity of Texas at Austin and Rice University. Candidates for the Master of Architecture degree in these schools may pursue programs in cooperation with the School of Public Health that emphasize health facilities planning and health concerns in urban and environmental design.
(44) Medical students whose curricula allow sufficient electives may arrange to fulfill the requirements for a master's degree in the School of Public Health within the time allotted for the medical degree program.
(45) Delete from ELIGIBILITY FOR ADMISSION Section, paragraph three, sentence two the following:
"for this reason"
(46) Add to ELIGIBILITY FOR ADMISSION Section, paragraph three, sentence two the following:
"by reason of inappropriate background."
The sentence should read as follows:
"Insofar as possible, any applicant refused admission by reason of inappropriate background will be advised as to the nature of the deficiencies and how they may be remedied."

Delete from all courses the parenthetical notation as shown below：
＂（F），（W），（Sp）＂

Delete course number PH 538 as follows：

| PH 538 SPECIAL TOPICS IN MEDICAL ENTOMOLOGY | The Faculty in |
| ---: | :--- |
|  | Infectious |
|  | Disease Control |

Topics will vary from quarter to quarter，to provide intensive study of selected arthropod－borne diseases of public health importance，such as malaria，filariasis and dengue．Work will involve group discussions and laboratory sessions as appropriate． Additional topics may include the genetics，ecology，and biology of selected groups of arthropods of public health importance．May be repeated for credit．

Delete course number PH 539 as follows：
PH 539 INDIVIDUAL STUDY IN MEDICAL ENTOMOLOGY The Faculty in Infectious Disease Control

May be repeated for credit．

Delete course number PH 578 as follows：
PH 578 SPECIAL TOPIC IN PARASITOLOGY Hacker
May be repeated for credit．

Delete course number PH 579 as follows：

PH 579 INDIVIDUAL STUDY IN PARASITOLOGY Hacker
May be repeated for credit．

Change course number PH 100 as follows：
PH 100 THE BASES OF COMMUNITY HEALTH The Faculty
The core program is equivalent to two regular courses and will be given in the fall quarter．All master＇s degree candidates are expected to enroll in this program unless specifically exempted． The program is designed to express the commonality of the many facets of community health，and to present an integrated view of the biological，physical，and cultural bases of health－related concerns．One－third of the program will be devoted to the biology and culture of human populations，one－third to methods of measurements，and one－third to community health programs．

```
Change course number PH lll as follows:
PH 111 HEALTH SERVICES ADMINISTRATTON Walker, Loe
Systems for provision of health services, studied from the viewpoint
of administrative theory and practice and organizational behavior.
Change course number PH 1l2 as follows:
PH 112 HEALTH SERVICES ADMINISTRATION Walker, Loe
Continuation of PH 111.
Change course number PH 121 as follows:
PH 121 COMPREHENSIVE HEALTH PLANNING The Faculty in
Health Services
A series of dialogues and discussions to introduce students to a)
the body of knowledge, skills, and methods utilized in the planning
process and b) the strategies active in the field today.
Change course number PH 122 as follows:
PH 122 COMPREHENSIVE HEALTH PLANNING The Faculty in
Health Services
Continuation of PH 121.
Change course number PH 151 as follows:
PH 151 ENVIRONMENTAL HEALTH/OCCUPATIONAL HEALTH Sterner
Special consideration in the administration of health services
provided for groups selected by occupation.
Change course number PH 198 as follows:
PH 198 SPECIAL TOPICS IN COMMUNITY HEALTH The Faculty in
Health Services
Topics will vary from quarter to quarter to provide intensive study
of special aspects of comunity health. May be repeated for credit.
Change course number PH 199 as follows:
PH 199 INDIVIDUAL STUDY IN COMMUNITY HEALTH The Faculty in
Health Services
```

May be repeated for credit.

Change course number PH 211 as follows:

| PH 211 BTOMETRY | The Faculty in Biometry |
| :---: | :---: |
| This course is the basic course in biometry. Topice will include |  |
| the construction of graphs and tabulation of data, descriptive statistical procedures, elementary concepts in probability, estima- |  |
|  |  |
| tion, inference, hypothesis testing, and measures of association. This course will be offered within each module and applications of |  |
|  |  |
| methods will be directed at the content area of each module. |  |
| Change course number PH 212 as follows: |  |
| PH 212 BIOMETRY | The Faculty in Biometry |
| This course is a continuation of PH 211. Topics include data analysis, correlation analysis, regression analysis (simple linear, multiple, and stepwise), the analysis of variance (general one- |  |
| factor, two-factor, latin square, factorial designs, and orthogonal |  |
| comparisons of marginal means), the analysis of covariance, and distribution-free and nonparametric methods. |  |
| Change course number PH 298 as follows: |  |
| PH 298 SPECIAL TOPICS IN BIOMETRY | The Faculty in Biometry |
| Topics will vary from quarter to quarter to provide intensive study of selected theory and methods. May be repeated for credit. |  |
| Change course number PH 511 as follows: |  |
| PH 511 PUBLIC HEALTH MICROBIOLOGY | Escutia |
| Laboratory approaches in the diagnosis, control, and treatment of infectious diseases of man. The course will consist of lectures and laboratory dealing with the diagnostic procedures used in a |  |
| public health laboratory, with emphasis in bacteriology and |  |
| syphilis serology. |  |
| Change course number PH 512 as follows: |  |
| PH 512 PUBLIC HEALTH LABORATORY ADMINISTRATION | Escutia |
| The organization and function of the laboratory in public healthpractice. The course will focus on the administrative concernsand application of some managerial tools to the public health |  |
| laboratory. |  |

Change course number PH 532 as follows:

PH 532 MEDICAL ENTOMOLOGY Scanlon, Hacker
Methods used in laboratory and field investigations of arthropodborne diseases.

Change course number PH 611 as follows:

PH 611 INTRODUCTION TO INTERNATTONAL HEALTH The Faculty in International Health

An examination of the role of the World Health Organization, the Pan American Health Organization, national, and private agencies in the administration and provision of health care on a worldwide basis. An examination of the regulations governing health relations among the countries of the world.

Change course number P 698 as follows:

PH 698 SPECIAL TOPICS IN INTERNATIONAL HEALTH The Faculty in International Health

Topics will vaxy from quarter to quarter, to provide intensive study of selected problems related to international health. May be repeated for credit.

Add course number PH 152 as follows:

PH 152 ENVIRONMENTAL HEALTH/OCCUPATIONAL HEALTH Sterner
Continuation of PH 151.

Add course number PH 161 as follows:
PH 161 POWER STRUCTURES AND COMMUNITY HEALTH Justice
An examination, with case histories, of how plans and ideas get converted into public programs, policy, and action, and the roles played by various power structures. Particular attention will be paid to health-related issues.

Add course number PH 220 as follows:
PH 220 SURVEY SAMPLING Litte 11
Probability and nonprobability sampling, simple random, stratified, cluster, and multistage sampling; ratio and regression estimation; optimal allocation; nonsampling and nonresponse errors; specific health surveys as examples.

Add course number PH 225 as follows:

PH 225 DISTRIBUTION-FREE METHODS* HSi
Computational procedures and theoretical considerations of various distribution-free (nonparametric) methods, properties of distribution functions, Kolmogorov-Smirnov tests, run tests, rank sum tests, nonparametric analysis of variance, rank correlation, contingency tables, distribution-free confidence intervals.

Add course number PH 230 as follows:
PH 230 BTOASSAY HSi
Statistical inference and experimental design for Poisson variables in counting of microorganisms or radioactivity, mixed poisson distributions, serial dilutions, direct and indirect assays, quantal assays tests on response time.

Add course number PH 241 as follows:

PH 241 DEMOGRAPHY I Roberts, Lee
Introduction to basic concepts, substantive research, and research techniques in the field of population studies. Topics will include demographic data sources, collection and processing of demographic data, measures of the demographic processes (births, deaths 2 migration), analysis of determinants and consequences of population change, an examination of U. S. and international population patterns and trends.

Add course number PH 242 as follows:

PH 242 DEMOGRAPHY II $\quad$ Roberts, Lee, Frankowski

Advanced analytic techniques in demographic research with special reference to current population problems and policy issues. Topics include reproduction process, life table, stationary and stable population, population estimates and projections, and methods of estimation for areas which do not have well-developed statistical reporting systems.

Add course number PH 251 as follows:
PH 251 BIOMETRIC METHODS I Remington
The first of a three quarter sequence of courses in biometric theory and methods, primarily for students specializing in biometry. Probability; discrete and continuous random variables and their distributions; expected values and moments; computer programming, computation, and applications. Students are advised not to register for less than the full three quarters of this sequence.

Add course number PH 252 as follows:

## PH 252 BIOMETRIC METHODS II <br> Remington

A continuation of PH 251. Point estimation, interval estimation, hypothesis testing, matrices, the multivariate normal distribution, computation and applications.

Add course number PH 253 as follows:

## PH 253 BIOME TRIC METHODS III <br> Remington

A continuation of PH 252. Regression and correlation, contingency table analysis, analysis of variance and covariance, order statistics, distribution-free methods.

Add course number PH 261 as follows:

## PH 261 LINEAR MODELS* <br> Downs

Mathematical and statistical preliminaries; quadratic forms, least squares, the Gauss-Markov theorem, geometric interpretations; the general linear hypothesis, estimation, reliability of estimators, tests of hypotheses; computing techniques and applications. Students will carry out computational techniques on an electronic computer.

Add course number PH 262 as follows:
PH 262 LINEAR MODELS II*
Downs
A continuation of PH 261. Fitting of polynomials and Fourier Series to sets of data; regression analysis; analysis of variance: fixed, mixed, and random models -- their applications and interpretations; analysis of covariance; application of linear techniques to nonlinear models; computation and applications.

Add course number PH 265 as follows:
PH 265 QUANTITATIVE METHODS IN HEALTH SERVICES $\quad \frac{\text { Glasser } 2}{\text { Forthofer }}$

Statistical methods primarily of use to the analysis of health service data will be presented. This includes a review of wellknown biometric techniques and additionally the use of principal components, cluster analysis, and categorical data analysis. The material will be presented in the context of current health service research projects. Individual projects using the data resources of the Kaiser-Utilization or similar data sources will be required.

Add course number PH 271 as follows:
PH 271 MULTIVARIATE ANALYSIS I Frankowski, Downs
Designed to introduce the student to the theory and application of multivariate statistical analysis. Geometric development, generalized matrix inverse, spectral decomposition, multivariate nomal distribution, correlation, maximum likelihood estimation, general linear model, computation and applications.

Add course number PH 272 as follows:
PH 272 MULTIVARIATE ANALYSIS II Frankowski, Downs
A continuation of PH 271. Wishart distribution, generalization of univariate statistical procedures, discrimination and classification, computation and applications.

Add course number PH 273 as follows:
PH 273 MULTIVARIATE ANALYSIS III
Frankowski, Downs
A continuation of PH 272. Computer applications, multivariate analysis of variance, principal component analysis, and canonical correlation theory.

Add course number PH 275 as follows:
PH 275 STOCHASTIC LIFE TABLE THEORY Frankowski
An introduction to the development of life table analysis as an application of stochastic processes. Theory and application of complete and abridged life tables, competing risk models, analytical procedures for medical follow-up studies.

Add course number PH 281 as follows:
$\frac{\text { PH } 281 \text { ANALYSIS OF VARTANCE AND FACTORIAL }}{\text { EXPERIMENTS I* }}$ Frankowski
A two term sequence designed primarily for students specializing in biometry. Matrix calculus; noncentral distributions; consideration of several mathematical bases underlying the analysis of variance: Cochran's Theorem, geometric approach, randomization theory; factorial structure of units and treatments; applications. Students are advised not to register for only one term of the sequence.

Add course number PH 282 as follows:


Add course number PH 711 as follows:
$\frac{\text { PH } 711 \text { SOCIAL AND BEHAVIORAL ASPECTS OF COMMUNITY }}{\text { HEALTH }} \frac{\text { The Faculty in }}{\frac{\text { Behavioral }}{\frac{\text { Science }}{}}}$

This course is designed to provide the student with basic theoretical concepts and substantive findings of social-behavioral science in the context of commuity health. These include basic theories and research from fields of sociology, social psychology, psychology, economics, political science, geography, anthropology, and related fields of social-behavioral science.

Add course number PH 798 as follows:
PH 798 SPECIAL TOPICS IN BEHAVIORAL SCIENCE $\quad \frac{\text { The Faculty in }}{\frac{\text { Behavioral }}{\text { Science }}}$

Topics will vary from quarter to quarter, to provide intensive study of selected social-behavioral science topics or specific methods of analysis in the field of public health. PH 798 is intended for students with either a major or minor in socialbehavioral science and may be repeated for credit.

Add course number PH 799 as follows:
PH 799 INDIVIDUAL STUDY IN BEHAVIORAL SCIENCE $\quad \frac{\text { The Faculty in }}{\frac{\text { Behavioral }}{\text { Science }}}$

May be repeated for credit.

Add course number PH 811 as follows:

PH 811 HEALTH AND URBAN ECOLOGY I The Faculty in Urban Health

Characteristics of the urban ecosystem with emphasis on the urban factors of possible relevance to health outcomes. Examination of the sources of information concerning urban factors, the origin and growth of cities, and the health significance of the several scholarly perspectives of the city, including those which view the city separately as: 1) a demographic-spatial phenomenon, 2) a system of artifacts and specialized land uses, 3) a physical phenomenon, 4) an economic phenomenon, 5) an institutional phenomenon, 6) a set of service delivery systems, and 7) an arena for intergroup and interpersonal conflict.

Add course number PH 812 as follows:


Add course number PH 821 as follows:

PY 821 HEALTH ASPECTS OF URBAN DESTGN III Heideman, Baba

```
Implications of homocentric, health-related determinants to urban
design processes and decisions, particularly planning and programming
health facilities: planning and policy processes which take place
both prior and subsequent to the award of architectual commission
for design of health facilities.. The development of health care
programs and the physical facilities required by these programs,
budgetary and financial processes associated with physical facility
decisions, and functional analysis of health facilities.
Add course number PH 898 as follows:
PH }898\mathrm{ SPECIAL TOPICS IN URBAN HEALTH The Faculty in
Urban Health
Topics will vary from quarter to quarter, to provide intensive study
of selected problems related to urban health. May be repeated for
credit.
Add course number PH 899 as follows:
PH 899 INDIVIDUAL STUDY IN URBAN HEALTH The Faculty in
    Urban Health
```

May be repeated for credit.
*The asterisk shown after the courses means that they will not be offered in the $1972-73$ academic year.


THE UNIVERSITY OF TEXAS NURSING SCHOOL (SYSTEM-WIDE)
Austin - El Paso - Fort Worth - Galveston - Houston - San Antonio

March 28, 1972

Chancellor Charles A. LeMaistre
The University of Texas System
Austin, Texas

Dear Chancellor LeMaistre:

The following docket is submitted for your approval and presentation to the Board of Regents at its meeting in Austin on April 29, 1972:

RECOMMENDED AMENDMENTS TO THE 1971-72 BUDGET

Undergraduate Nursing School at El Paso

Transfer of Funds

1. Amount of Transfer - $\$ 3,000$

To: Travel

From: Planning and development of new student programs and facilities

To provide funds for travel for the remainder of the year.
(RBC\# N-77)
Undergraduate Nursing School in Tarrant County

1. Change the status of Myrna Rae Pickard (tenure) from Acting Associate Dean and Assistant Professor, at a salary rate of $\$ 14,200$ for 12 months, to Associate Dean and Professor, at a salary rate of $\$ 18,200$ for 12 months, effective February 1, 1972. Source of Funds: Planning for Fort Worth Nursing School. (RBC\#N-80)
2. Appoint Frances Arlene Jarrett (non-tenure) as Assistant Instructor, at a salary rate of $\$ 8,500$ for 9 months, effective January 1, 1972. Source of Funds: Planning for Fort Worth Nursing School. (RBC\#N-67)

Clinical Nursing School at Galveston

1. Appoint Enid Katherine Anderson (non-tenure) as Assistant Instructor, at a salary rate of $\$ 7,500$ for 9 months, effective January 16, 1972. Source of Funds: Teaching Salaries - Clinical Nursing School at Galveston. (RBC\# N-74)

Undergraduate Nursing School at Austin

1. Accept the resignation of Elizabeth Jones (non-tenure) as Assistant Professor, at a salary rate of $\$ 12,000$ for 9 months, effective February 29, 1972. (RBC\# N-81)

Houston Nursing School

1. Appoint Elizabeth Jones (tenure) as Associate Dean and Professor, at a salary rate of $\$ 24,000$ for 12 months, effective March 1, 1972. Source of Funds: Planning for Houston Nursing School. (RBC\# N-82)
2. Appoint Barbara Sue Sims (non-tenure) as Instructor, at a salary rate of $\$ 11,500$ for 9 months, effective January $16,1972$. Source of Funds: Planning for Houston Nursing School. (RBC\# N-75)

Sincerely yours,


Marilyn D. Willman
Dean

## LAND AND INVESTMENT REPORT

Meeting of April 29, 1972
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## LAND AND INVESTMENT REPORT

For Month Ended February 29, 1972

## 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 February, 1972. The Associate Deputy Chancellor for Investments, Trusts and Lands recommends approval by the Board of Regents of these transactions.

## COMPARISON SUMMARY OF ASSETS

|  | BOOK VALUE <br> SECURITY | BOOK YIELD <br> DEBT SECURITIES: | $8 / 31 / 71$ |  | $8 / 31 / 71$ |
| :--- | :---: | :---: | :---: | :---: | :---: |

U. S. Government Obligations--

| U.S. Treasury Bonds | \$107,723,291.67 | 4.26\% | \$106,537,727.60 | 4.30\% |
| :---: | :---: | :---: | :---: | :---: |
| Government Agencies | 5,438,875.36 | 6.81 | 21,304,685.27 | 6.95 |
| FHA Mortgages | 15,622,444.51 | 6.83 | 16,261,778.71 | 6.86 |
| TOTAL-U.S. Government |  |  |  |  |
| Obligations | 128,784,611.54 | 4.68 | 144,104,191.58 | 4.98 |
| Corporate Bonds | 234,360,279.62 | 4.91 | 234, 866,281.93 | 4.93 |
| TOTAL-DEBT |  |  |  |  |
| SECURITIES | 363,144,891.16 | 4.83 | 378,970,473.51 | 4.95 |

EQUITY SECURITIES:

| Convertible Debentures | $14,933,307.87$ | 4.97 | $13,910,856.79$ | 5.15 |
| :--- | ---: | :--- | ---: | :--- | :--- |
| Conv. Preferred Stocks | $15,848,192.03$ | 4.16 | $15,848,192.03$ | 4.16 |
| Common Stocks | $\underline{184,688,881.95}$ | $\underline{4.30}$ | $\underline{194,931,904.54}$ | $\underline{4.28}$ |
| TOTAL-EQUITY <br> SECURITIES | $\underline{215,470,381.85}$ | $\underline{4.34}$ | $\underline{224,690,953.36}$ | $\underline{4.33}$ |
| TOTAL-LONG TERM <br> INVESTMENTS | $\underline{578,615,273.01}$ | $\underline{4.65}$ | $\underline{603,661,426.87}$ | $\underline{4.72}$ |

CASH \& EQUIVALENT:

| Commercial Paper | 15,750,000.00 | $\underline{5.45}$ | 7,840,000.00 | 4.82 |
| :---: | :---: | :---: | :---: | :---: |
| Investment Transactions-- |  |  |  |  |
| Accounts Receivable | -0- |  | 369,007.15 |  |
| Accounts Payable | -0- |  | 2,391.20 |  |
| Cash | 483,744.55 |  | 765,698.68 |  |
| TOTAL-CASH \& |  |  |  |  |
| EQUIVALENT | 16,233,744.55 |  | 8,977,097.03 |  |
| TOTAL-SECURITIES, CAS | ASH |  |  |  |
| \& EQUIVALENT | \$594, 849,017.56 | 4.67\% | \$612,638,523.90 | 4.71\% |

$$
\text { L \& | Report - } 2
$$

SUMMARY OF TRANSACTIONS
February 29, 1972

| Februr | Cost |  | Current Yield |
| :---: | :---: | :---: | :---: |
| Purchases: |  |  |  |
| U.S. Government Agency Obligations: |  |  |  |
| GNMA Various Pools | \$4,561, 860.18 |  | 6.94\% |
| Corporate Bonds | 298,293.52 |  | 7.36 |
| Common Stocks and Warrants | 1,831,910.00 |  | 3.94 |
| TOTAL LONG TERM PURCHASES | \$6,692,063.70 |  | 6.16\% |
|  | Proceeds | $\begin{aligned} & \text { Gain } \\ & \text { or } \\ & \text { (Loss) } \end{aligned}$ | Current Yield |
| Sales: |  |  |  |
| U.S. Government Agency Obligations: |  |  |  |
| GNMA Principal Payments | \$ 42,828.11 | (\$ 1,958.86) | 6.68\% |
| FHA Mortgages | 47,302.39 | -0- | 6.86 |
| Corporate Bonds | 872,000.00 | 9,964.63 | 7.58 |
| Common Stocks | 1,834,669.98 | $(\underline{389,605.82)}$ | 5.05 |
| TOTAL LONG TERM SALES | \$2,796,800.48 | (\$381,600.05) | 5.90\% |

## BOND EXCHANGES

|  | Increase In |
| :--- | :--- |
| Par Exchanged | Annual Income |
| $\$ 9,647,000.00$ | $\$ 15,107.71$ |

PERMANENT UNIVERSITY FUND BOOK VALUE
January 31, 1972 Balance
$\$ 611,301,513.01$
Additions (February, 1972)
Realized Net Gain (Loss) on Security Transactions (\$ $381,600.05$ )
From General Land Office
1,718,610.94
$1,337,010.89$
February 29, 1972 Balance
$\$ 612,638,523.90$

| Par Value or No. Shares | Description | Price | Total Cost | Current Yield |
| :---: | :---: | :---: | :---: | :---: |
|  | U.S. GOVERNMENT A GENCY OBLIC | ATIONS |  |  |
| \$1,000,000.00 | GNMA, Pool \# $832,6-1 / 2 \%$, due 1/15/02 | 95.50 | \$ 955,000.00 | 6.95\% |
| 1,850,000.00 | GNMA, Pool \#1252, 6-1/2\%, due 1/15/02 | 95.50 | 1,766,750.00 | 6.95 |
| 1,921,786.09 | GNMA, Pool \#1003, 6-1/2\%, due 2/15/02 | 95.75 | 1,840,110.18 | 6.93 |
|  | TOTAL - U. S. Government Agency Obligations |  | 4,561,860.18 | 6.94 |
|  | CORPORATE BONDS: |  |  |  |
| 30,000.00 | Appalachian Power Co., Ist Mtge., $4 \%$, due 5/1/88 | 66.782 | 20,034.60 | 7.60 |
| 15,000.00 | Baltimore Gas \& Electric Co., SF Debs., 4-5/8\%, due 8/1/90 | 71.50 | 10,725.00 | 7.50 |
| 5,000.00 | Baltimore Gas \& Electric Co., 1st Ref. Mrge. SF, 4-3/8\%, due 7/15/92 | 70.033 | 3,501.65 | 7.20 |
| 7,000.00 | Carolina Power \& Light Co., Ist Mige., 4-1/2\%, due 7/1/94 | 66.89 | 4,682.30 | 7.60 |
| 50,000.00 | Consolidated Natural Gas Co., Debs., 4-3/4\%, due 9/1/90 | 74.95 | 37,475.00 | 7.22 |
| 10,000.00 | Consumers Power Co., Ist Mtge., $4-5 / 8 \%$, due $12 / 1 / 90$ | 72.888 | 7,288.80 | 7.30 |
| 33,000.00 | Consumers Power Co., SF Debs., $4-5 / 8 \%$, due $9 / 1 / 94$ | 69.75 | 23,017.50 | 7.406 |
| 25,000.00 | Dallas Power \& Light Co., 1st Mige., 4-1/4\%, due 12/1/86 | 71.875 | 17,968.75 | 7.40 |
| 25,000.00 | Diamond State Telephone Co., Debs., 4-3/4\%, due 4/1/94 | 71.79 | 17,947.50 | 7.35 |
| 37,000.00 | Georgia Power Co., Ist Mtge., $4-1 / 2 \%$, due $11 / 1 / 93$ | 69.734 | 25,801.58 | 7.30 |
| 6,000.00 | Georgia Power Co., Ist Mige., $4-7 / 8 \%$, due 9/1/95 | 71.597 | 4,295.82 | 7.45 |
| 2,000.00 | Indiana Bell Telephone Co., Debs., $4-3 / 4 \%$, due $10 / 1 / 05$ | 68.625 | 1,372.50 | 7.25 |
| 20,000.00 | Kansas City Power \& Light Co., Ist Mtge., 4-3/4\%, due 10/1/95 | 70.62 | 14,124.00 | 7.40 |
| 1,000.00 | Kentucky Power Co., lst Mtge., 5-1/8\%, due 1/1/96 | 73.35 | 733.50 | 7.55 |
| 25,000.00 | Mississippi Power \& Light Co., Ist Mtge. , 4-5/8\%, due 3/1/95 | 68.28 | 17,070.00 | 7.551 |
| 4,000.00 | New England Telephone \& Telegraph Co., Debs. , 4\%, due 4/1/93 | 65.498 | 2,619.92 | 7.20 |
| 7,000.00 | New England Telephone \& Telegraph Co., Debs., 4-5/8\%, due 4/1/99 | 69.00 | 4,830.00 | 7.25 |

## INVESTMENTS ACQUIRED <br> (Continued)

| Par Value or No. Shares | Description | Price | Total Cost | Current Yield |
| :---: | :---: | :---: | :---: | :---: |
|  | CORPORATE BONDS: (Continued) |  |  |  |
| \$ 25,000.00 | Northern Indiana Public Service Co., 1st Mtge., 4-1/2\%, due 4/15/93 | 70.125 | \$ 17,531.25 | 7.30\% |
| 5,000.00 | Northern States Power Co. (Minn.), lst Mige., 4\%, due 7/1/88 | 68.74 | 3,437.00 | 7.30 |
| 20,000.00 | Pacific Telephone \& Telegraph Co., Debs. , 3-1/8\%, due 11/15/89 | 61.002 | 12,200.40 | 7.00 |
| 30,000.00 | Pennsylvania Power \& Light Co., lst Matge., 4-5/8\%, due 12/1/91 | 70.98 | 21,294.00 | 7.45 |
| 30,000.00 | Philadelphia Electric Co., Ist \& Ref. Mige., 3-3/4\%, due 5/1/88 | 66.236 | 19,870.80 | 7.35 |
| 15,000.00 | Utah Power \& Light Co., Ist Mtge., $4-5 / 8 \%$, due 8/1/94 | 69.811 | 10,471.65 | 7.40 |
|  | TOTAL - Corporate Bonds |  | 298,293.52 | 7.36 |
|  | COMMON STOCK: |  |  |  |
| 5,667 Shares | Commonwealth Edison Co. | 35.00 | 198,345.00 | 4.89 |
| 10,000 | International Paper Co. | 34.216 | 342,160.00 | 4.38 |
| 42,000 | McGraw-Hill, Inc. | 18.50 | 777,000.00 | 3.24 |
| 10,000 | Union Carbide Corporation | 45.7735 | 457,735.00 | 4.37 |
|  | TOTAL - Common Stock |  | 1,775,240.00 | 3.94 |
|  | WARRANTS: |  |  |  |
| 5,667 | Commonwealth Edison Co. | 10.00 | 56,670.00 | -0- |
|  | TOTAL - LONG TERM INVESTMENTS |  | 6,692,063.70 | 6.16 |
| \$9,647,000.00 | BONDS EXCHANGED IN: <br> See Bond Exchange Schedule for Detail |  | 9,010,353,73 | 4.82 |
| 1,000,000.00 | COMMERCIAL PAPER: |  |  |  |
|  | Ford Motor Credit Company | 100.00 | 1,000,000.00 | 3.00 |
|  | TOTAL - ALL INVESTMENTS ACQUIRED |  | \$16,702,417.43 | 5.25\% |

## INVESTMENTS DISPOSED OF



## PERMANENT UNIVERSITY FUND

| SUMMARY OF BOND EXCHANGES <br> February, 1972 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Exchanges | Par Value Exchanged | Issue Exchanged | $\qquad$ | Principal Takeout or (Payup) Required | Tncrease in Annual Income* |
| Corporate Bonds for Corporate Bonds | \$7,497,000 | \$ 7,300,003.12 | \$ 6,794,876.25 | \$505,126.87 | \$ $14,516.64$ |
| ग. S. Treasuries for <br> U. S. Treasuries | 2,000,000 | 2,032,077.46 | 2,047,077,46 | ( 15,000.00) | 491.05 |
| Corporate Bonds for <br> U. S. Govt. Obligations | 150,000 | 155,834.52 | 168,400.02 | ( 12,365.50) | 94.02 |
| Total - All Exchanges (February, 1972) | \$ 9,647,000 | \$9,487,915.10 | \$ 9,010,353.73 | \$477,561.37 | \$ 15,101.71 |

*Total income improvement includes income from investment of takeout on exchanges at current market yields.

## $\frac{\text { BOND EXCHANGES }}{(\text { February } 1972 \text { ) }}$

|  | $\frac{\text { BOND EXCHANGES }}{\text { (February, 1972) }}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | DESCRIPTION |  | BOOK VALUE |  |  | $\begin{array}{r} \mathrm{BOOK} \\ Y \mathrm{IELD} \\ \hline \end{array}$ |  |
| $\frac{\text { PAR }}{\text { VALUE }}$ | $\frac{\text { ISSUE }}{\text { EXCHANGED }}$ | $\frac{\text { ISSUE }}{\text { RECEIVED }}$ | $\frac{\text { ISSUE }}{\text { EXCHANGED }}$ |  | $\frac{\text { ISSUE }}{\text { RECEIVED }}$ | $\frac{\text { IN- }}{\text { CREASE }}$ | $E \frac{\frac{B O O K}{\text { YIELD }}}{}$ |
|  | Corporate Bonds for Corporate Bonds |  |  |  |  |  |  |
| 62,000 | Pacific Tel. \& Tel. Co. Debs., 6\%, due 11/1/2002 | Mountain States Tel. \& Te1. Co. \$ Debs., 2-5/8\%, due 5/15/86 | 62,749.00 | \$ | 46,033.18 | $-.71 \%$ | $\begin{aligned} & \% .20 \% \\ & 202.93^{*} \end{aligned}$ |
| 165,000 | New England Power Co. <br> lst Mtge., 4-5/8\%, due 11/1/91 | Niagara Mohawk Power Corp. Gen. Mtge., $4-1 / 2 \%$, due $11 / 1 / 91$ | 158,311.85 |  | 153,875.00 | $\$^{.09} 22$ | $\begin{gathered} 5.04 \\ 229.44 \end{gathered}$ |
| 35,000 | Ditto | Utah Power \& Light Co. <br> lst Mtge., $4-5 / 8 \%$, due $8 / 1 / 94$ | 33,581.30 |  | 32,528.15 | $\stackrel{S}{21}^{21}$ | $\begin{aligned} & 5.16 \\ & 89.90 \end{aligned}$ |
| 200,000 | ```Chesapeake & Potomac Tel. Co. of Maryland Debs., 4-1/8%, due 12/1/93``` | ```Chesapeake & Potomac Tel. Co. of Maryland Debs., 4-1/8%, due 12/1/93``` | 186,313. 22 |  | 185,461.22 | ${ }^{.04}$ | $94.46$ |
| 100,000 | Ditto | Illinois Bell Tel. Co, <br> lst Mtge., 3-1/4\%, due 7/15/95 | 93,156.61 |  | $81,759.61$ | $\begin{array}{ll} -.10 \\ \$ & 18 \end{array}$ | $189.48$ |
| 45,000 | Ditto | New Jersey Bell Tel. Co. Debs., 2-3/4\%, due 3/15/90 | 41,920.48 |  | 36,507.43 | $-.37$ | $79.24$ |
| 30,000 | Ditto | Michigan Bell Te1. Co. Debs., $4-5 / 8 \%$, due $8 / 1 / 96$ | 27,946.99 |  | 28,894.99 | ${ }_{\$}^{.26}$ | $\begin{gathered} 4.88 \\ 52.57 \end{gathered}$ |
| 27,000 | Ditto | Southern Bell Tel. \& Tel. Co. Debs., $4-3 / 8 \%$, due $3 / 1 / 98$ | 25,152.28 |  | 25,090.18 | $\$ .24$ | $\begin{aligned} & 4.86 \\ & 61.69 \end{aligned}$ |
| 26,000 | Ditto | Northern States Power Co. (Minn.) Ist Mtge., 4-3/8\%, due 9/1/93 | $24,220.72$ |  | 24,429.24 | ${ }_{\$}^{.21}$ | $\begin{gathered} 4.83 \\ 46.33 \end{gathered}$ |
| 25,000 | Ditto | Illinois Power Co. <br> lst Mtge., $4-1 / 4 \%$, due $1 / 1 / 93$ | 23,289.15 |  | 23,293.15 | ${ }_{\$}^{.15}$ | $\begin{aligned} & 4.77 \\ & 34.84 \end{aligned}$ |

[^11]
## BOND EXCHANGES

(February, 1972)





$$
\frac{\text { BOND EXCHANGES }}{(\text { February, } 1972)}
$$

| $\frac{\text { BOND EXCHANGES }}{(\text { February, 1972 })}$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | DESCRIPTION |  |  | BOOK VALUE |  |  | $\frac{B O O K}{Y I E L D}$ | NEN |
| $\frac{\mathrm{PAR}}{\text { VALUE }}$ | $\frac{\text { ISSUE }}{\text { EXCHANGED }}$ | $\frac{\text { ISSUE }}{\text { RECEIVED }}$ |  | $\frac{\text { ISSUE }}{\text { EXCHANGED }}$ |  | $\frac{\text { ISSUE }}{\text { RECETVED }}$ | $\frac{\text { IN- }}{\text { CREASE }}$ | $E \quad \frac{B O O K}{Y I E L D}$ |
|  | Corporate Bonds for Corporate Bonds |  |  |  |  |  |  |  |
| 45,000 | Philadelphia Elec. Power Co. SF Debs., 4-1/2\%, due 3/1/95 | $\begin{aligned} & \text { Public Service Elec. \& Gas Co. } \\ & \text { lst \& Ref. Mtge., } 4-3 / 4 \% \text {, } \\ & \text { due } 9 / 1 / 95 \end{aligned}$ | \$ | 44,802.08 | \$ | 45,549.08 | $\$ .13 \%$ | $\begin{gathered} 4.66 \% \\ 40.77 \% \end{gathered}$ |
| 25,000 | Ditto | Alabama Power Co. <br> 1st Mtge., $4-5 / 8 \%$, due $5 / 1 / 94$ |  | 24,890.04 |  | 24,720.04 | $\$^{.18}$ | $\begin{array}{r} 4.71 \\ 48.69 \end{array}$ |
| 21,000 | Ditto | Carolina Power \& Light Co. 1st Mtge., $4-1 / 2 \%$, due $7 / 1 / 94$ |  | 20,907.64 |  | 20,464.54 | ${ }_{\$}^{.23}$ | $\begin{aligned} & 4.70 \\ & 45.73 \end{aligned}$ |
| 100,000 | ```Delaware Power & Light Co. lst Mtge. & Collateral Trust, due 6/1/88``` | Georgia Power Co. <br> 1st Mtge., 4-1/2\%, due 11/1/93 |  | 94,894.94 |  | 96,210.94 | $\$^{.46} 4$ | $\begin{aligned} & 4.78 \\ & 407.30 \end{aligned}$ |
| 200,000 | Public Service Co. of Okla. Ist Mtge., $4-1 / 4 \%$, due $2 / 1 / 87$ | Georgia Power Co. <br> 1st Mtge., 4-5/8\%, due 10/1/91 |  | 198,025.43 |  | 196,161.43 | $\$^{.44} 9$ | $\begin{aligned} & 4.78 \\ & 912.70 \end{aligned}$ |
| 63,000 | Ditto | Georgia Power Co. <br> 1st Mtge., 4-1/2\%, due 11/1/93 |  | 62,378.01 |  | $60,152.85$ | $\$^{.50} 3$ | $\begin{gathered} 4.84 \\ 359.95 \end{gathered}$ |
| 200,000 | Virginia Elec. \& Power Co. 1st \& Ref. Mtge., 3-7/8\%, due $6 / 1 / 88$ | Carolina Power \& Light Co. 1st Mtge., $4-1 / 2 \%$, due $11 / 1 / 91$ |  | 177,125.07 |  | 179,777.07 | $\$^{.45} 7$ | $753.04^{5.34}$ |
| 14,000 | Ditto | Kentucky Power Co. 1st Mtge., $5-1 / 8 \%$, due $1 / 1 / 96$ |  | 12,398.75 |  | 13,140.47 | $\$ .70$ | $\begin{aligned} & 5.59 \\ & 76.33^{5} \end{aligned}$ |
| 200,000 | ```Chesapeake & Potomac Te1. Co. (Washington, D. C.) Debs., 5-5/8%, due 7/1/2006``` | Southwestern Bell Tel. Co. Debs., $5-3 / 8 \%$, due $6 / 1 / 2006$ |  | 204,175.01 |  | 196,617.01 | $-.01$ | $248.10^{5.48}$ |
| 335,000 | Chesapeake \& Potomac Tel. Co. of Maryland | Commonwealth Edison Co. <br> SF Debs., 4-5/8\%, due 1/1/2009 |  | 334,192.79 |  | 280,056.79 | $\begin{aligned} & -.20 \\ & \$ \quad 1,0 \end{aligned}$ | $, 062.14^{5.69}$ |


|  |  |  | BOND EXCHANGES (February, 1972) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | DESCR | PTION |  | BOOK |  |  | $\frac{\text { BOOK }}{Y I E L D}$ | NEW |
|  | $\frac{\text { PAR }}{\text { VALUE }}$ | $\frac{\text { ISSUE }}{\text { EXCHANGED }}$ | $\frac{\text { ISSUE }}{\text { RECEIVED }}$ |  | $\frac{\text { ISSUE }}{\text { EXCHANGED }}$ |  | ISSUE | $\frac{\operatorname{IN}-}{\text { CREASE }}$ | $E \frac{\frac{B O O K}{\text { YOLD }}}{}$ |
|  |  |  | Corporate Bonds for Corporate |  |  |  |  |  |  |
|  | \$ 100,000 | Chesapeake \& Potomac Tel. Co. of Maryland <br> Debs., $5-7 / 8 \%$, due $6 / 1 / 2004$ | Public Service Co. of Colorado 1st Mtge., $4-1 / 2 \%$, due $6 / 1 / 94$ | \$ | 99,759.04 | \$ | 84,591.04 | $\begin{aligned} & -.16 \% \\ & \$ \end{aligned}$ | $\begin{aligned} & 5.73 \% \\ & 364.20 \end{aligned}$ |
|  | 100,000 | Ditto | Northwestern Bell Tel. Co. Debs., 6-1/4\%, due $1 / 1 / 2007$ |  | 99,759.04 |  | 102,269.04 | $.^{.20} 1$ | $\begin{gathered} 6.09 \\ 176.67 \end{gathered}$ |
| 5 $\infty$ | 50,000 | Ditto | Southwestern Bell Tel. Co. Debs., $5-3 / 8 \%$, due $6 / 1 / 2006$ |  | 49,879.52 |  | 45,874.52 | $\$ .05$ | $\begin{gathered} 5.94 \\ 67.40 \end{gathered}$ |
| $\begin{aligned} & \mathbb{T} \\ & \stackrel{\mathbb{N}}{0} \\ & \underline{O} \end{aligned}$ | 40,000 | Pacific Tel. \& Te1. Co. Debs., $4-3 / 8 \%$, due $8 / 15 / 88$ | Consumers Power Co. <br> lst Mtge., 4-5/8\%, due 12/1/90 |  | 35,704.89 |  | 35,505.29 | $\$^{.23}$ | $\begin{aligned} & 5.60 \\ & 84.92 \end{aligned}$ |
| $\stackrel{1}{\square}$ | 40,000 | Pacific Gas \& Electric Co. 1st \& Ref. Mtge., 4-1/2\%, due $6 / 1 / 90$ | Baltimore Gas \& Electric Co. 1st Ref. Mtge. SF, 4-3/8\%, due 7/15/92 |  | 38,044.41 |  | 36,614.41 | $\$ .14$ | $\begin{aligned} & 5.04 \\ & 81.29 \end{aligned}$ |
|  | 125,000 | ```Chesapeake & Potomac Tel. Co. (Washington, D. C.) Debs., 5-5/8%, due 7/1/2006``` | American Tel. \& Tel. Co. Debs., $5-1 / 8 \%$, due $4 / 1 / 2001$ |  | 127,609.38 |  | 120,835.63 | $-.14$ | $\begin{aligned} & 5.35 \\ & 65.94 \end{aligned}$ |
|  | 100,000 | Dayton Power \& Light Co. lst Mtge., $5-5 / 8 \%$, due $5 / 1 / 97$ | Pacific Tel. \& Tel. Co. Debs., $5-1 / 8 \%$, due $2 / 1 / 93$ |  | 102,167.80 |  | 97,603.80 | $-.15$ | $\begin{aligned} & 5.32 \\ & 18.58 \end{aligned}$ |
|  | 50,000 | Ditto | ```Pacific Gas & Electric Co. lst & Ref. Mtge., 4-1/2%, due 12/1/96``` |  | 51,083.90 |  | 44,652.90 | $-.19$ | $144.05^{5.28}$ |
|  | 25,000 | Ditto | Chesapeake \& Potomac Tel. Co. (Washington, D. C.) <br> Debs., 5-5/8\%, due 7/1/2006 |  | 25,541.95 |  | 25,110.95 | ${ }_{\$}^{.27}$ | $\begin{aligned} & 5.60 \\ & 39.24 \end{aligned}$ |
|  | 25,000 | Ditto | Duquesne Light Co. <br> lst Mtge., 4-1/4\%, due 3/1/89 |  | 25,541.95 |  | 22,605.95 | $-.37$ | $\begin{aligned} & 5.10 \\ & 19.81^{5} \end{aligned}$ |



|  |  |  | $\frac{\text { BOND EXCHAGGES }}{\text { (Febratary, } 1972}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | PTION | B00K | ALUE | $\frac{\text { BOOK }}{\text { YIELD }}$ NES |
|  | $\frac{\text { PAR }}{\text { VALUE }}$ | $\frac{\text { ISSUE }}{\text { EXCHANGED }}$ | $\frac{\text { ISSUE }}{\text { RECEIVED }}$ | $\frac{\text { ISSUE }}{\text { EXCHANGED }}$ | $\frac{\text { ISSUE }}{\text { RECEIVED }}$ | $\frac{\text { BAN }}{\text { CRBASE }} \frac{\text { BIELD }}{}$ |
|  |  |  | S. Treasuries for U. S. |  |  |  |
|  | \$ 1,000,000 | U. S. Treasury Bonds $4-1 / 8 \%$, due $5 / 15 / 94-89$ | U. S. Treasury Bonds $4-1 / 4 \%$, dae $8 / 15 / 92-87$ | \$ 1,016,038.73 | \$ 1,023,538.73 | $\hat{S}^{.04 \%} 266.00^{4}$ |
|  | 1,000,000 | Ditto | Ditto | 1,016,038.73 | 1,023,538.73 | $\begin{aligned} & .04 \quad \begin{array}{l} 4.04 \\ \hline \\ \hline \end{array}{ }^{225.05} \\ & \hline \end{aligned}$ |
|  | \$2,000,000 | Total Exchange of $U$. | ```ries for U. S. Treasuries 972)``` | \$2,032,077.46 | \$ 2,047,077.46 | $\frac{491.05}{\substack{\text { (Total. Income } \\ \text { Improvement) }}}$ |



YALUE $\quad$ ISSUE

## UNIT $\quad \operatorname{CoS} T \quad$ TOTAL

## U. S. Government Obligations

$\$ 1,850,000.00$ GNMA, PooI 非 $252,6-1 / 2 \%$, due $I / 15 / 02$
1,921,786,09 GNMA, POOI 徘1033, 6-1/2\%, due $2 / 15 / 2002$
1,000,000.00 GNMA, Pool. \#832, 6-1/2\%, due 1/15/2002
4,771,786.09

Total U. S. Government Obligations

| 15,000 | Utah Power \& Light Co., 1st Mtge., 4-5/8\%, due 8/1/94 | 69.811 | 10,471.65 | 7.40 |
| :---: | :---: | :---: | :---: | :---: |
| 50,000 | Consolidated Natural Gas Co., Debs., 4-3/4\%, due 9/1/90 | 74.95 | 37,475.00 | 7.22 |
| 25,000 | Dallas Power \& Light Co., 1st Mtge., $4-1 / 4 \%$, due $12 / 1 / 86$ | 71.875 | 17,968.75 | 7.40 |
| 4,000 | New England Tel. \& Tel. Co., Debs., 4\%, due 4/1/93 | 65.498 | 2,619.92 | 7.20 |
| 6,000 | Georgia Power Co., 1st Mtge., $4-7 / 8 \%$ due 9/1/95 | 71.597 | 4,295.82 | 7.45 |
| 5,000 | Northern States Power Co. (Minn.), lst Mtge., 4\%, due 7/1/88 | 68.74 | 3,437.00 | 7.30 |
| 7,000 | New England Tel. \& Tel. Co., Debs., 4-5/8\%, due 4/1/99 | 69.00 | 4,830.00 | 7.25 |
| 2,000 | Indiana Bell TeI. Co., Debs., 4-3/4\%, due 10/1/2005 | 68.625 | 1,372.50 | 7.25 |
| 7,000 | Carolina Power \& Light Co., lst Mtge., 4-1/2\%, due 7/1/94 | 66.89 | 4,682.30 | 7.60 |
| 25,000 | Mississippi Power \& Light Co., 1st Mtge., $4-5 / 8 \%$, | 68.28 | 17,070.00 | 7.551 |

$\$ 95.50$
95.75
95.50

| $\$ 1,766,750.00$ |
| ---: |
| $1,840,110.18$ |
| $-955,000.00$ |
| $4,561,860.18$ |

$4,561,860.18$

## Corporate Bonds

## BOND PURCHASES <br> (February, 1972)

|  | PAR |  | $\operatorname{cost}$ |  |  | YIELD |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | VALUE | ISSUE | UNIT |  | TOTAL |  |
|  | Corporate Bonds (Continued) |  |  |  |  |  |
| \$ | 30,000 | Appalachian Power Co., lst Mtge., $4 \%$, due 5/1/88 | \$ 66.782 | \$ | 20,034.60 | 7.60\% |
|  | 33,000 | Consumers Power Co., SF Debs., 4-5/8\%, due 9/1/94 | 69.75 |  | $23,017.50$ | 7.406 |
|  | 25,000 | Diamond State Tel. Co., Debs., 4-3/4\%, due 4/1/94 | 71.79 |  | 17,947.50 | 7.35 |
|  | 37,000 | Georgia Power Co., 1st Mtge., 4-1/2\%, due 11/1/93 | 69.734 |  | $25,801.58$ | 7.30 |
|  | 20,000 | Kansas City Power \& Light Co., lst Mtge., 4-3/4\%, due $10 / 1 / 95$ | 70.62 |  | 14,124.00 | 7.40 |
|  | 30,000 | Pennsylvania Power \& Light Co., lst Mtge., 4-5/8\%, due 12/1/91 | 70.98 |  | $21,294.00$ | 7.45 |
|  | 30,000 | Philadelphia Electric Co., 1st \& Ref. Mtge., 3-3/4\%, due 5/1/88 | 66.236 |  | 19,870.80 | 7.35 |
|  | 1,000 | Kentucky Power Co., lst Mtge., 5-1/8\%, due $1 / 1 / 96$ | 73.35 |  | 733.50 | 7.55 |
|  | 5,000 | ```Baltimore Gas & Electric Co., 1st Ref. Mrge. SF, 4-3/8%, due 7/15/92``` | 70.033 |  | 3,501.65 | 7.20 |
|  | 10,000 | Consumers Power Co., lst Mtge., 4-5/8\%, due 12/1/90 | 72.888 |  | 7,288.80 | 7.30 |
|  | 25,000 | Northern Indiana public Service Co., 1st Mtge., $4 m 1 / 2 \%$, due 4/15/93 | 70.125 |  | 17,531.25 | 7.30 |
|  | 15,000 | Baltimore Gas \& Electric Co., SF Debs., 4-5/8\%, due 8/1/90 | 71.50 |  | 10,725.00 | 7.50 |
|  | 20,000 | Pacific Tel. \& Tel. Co., Debs., 3-1/8\%, due 11/15/89 | 61.002 |  | 12,200.40 | 7.00 |
|  | 427,000 | Total Corporate Bonds |  |  | 298,293.52 | 7.36 |
|  | 5,198,786.09 | TOTAL BONDS PURCHASED |  | \$ | 860,153.70 | $6.97 \%$ |

$\frac{\text { PAR }}{\underline{\text { VALUE }}}$
$\$ 16,376,89$

FHA，Insured Note，5－3／4\％，due 6／29／2001
829.25 GNMA，Pool $⿰ ⿰ 三 丨 ⿰ 丨 三 一 152, ~ 8 \%, ~ d u e ~ 2 / 15 / 2001 ~$

868．31 GNMA，Poo1 \＃1105，6－1／2\％，due 1／15／2002
858．14 GNMA，Pool $⿰ ⿰ 三 丨 ⿰ 丨 三 ⿻ ⿻ 一 𠃋 十 一 1306, ~ 6-1 / 2 \%, ~ d u e ~ 1 / 15 / 2002 ~$
5，444．05 GNMA，Pool \＃114， $8 \%$ ，due $1 / 15 / 2001$
666．02 GNMA，Poo1 \＃236，8\％，due 1／15／2001
7，127．26 GNMA，Pool $\$ 905,6-1 / 2 \%$ ，due $7 / 15 / 2001$
GNMA，Pool $⿰ ⿰ 三 丨 ⿰ 丨 三 一 1029, ~ 6-1 / 2 \%, ~ d u e ~ 12 / 15 / 2001 ~$
GNMA，Pool \＃650，8\％，due 4／15／2001
GNMA，Pool $⿰ ⿰ 三 丨 ⿰ 丨 三 一$ 92， $8 \%$ ，due $2 / 15 / 2001$
GNMA，Pool 非852，6－1／2\％，due 1／15／2002

Total U．S．Government Obligations
$\$ 16,376.89$
829.25

6，028．84
868.31
858.14

5，444．05
666.02

7，127．26
443.24

1，492．62
1，013．77
710.44
969.28

42，828．11

## Corporate Bonds

20，000．00 Dow Chemical Company，Notes， $4-1 / 2 \%$ ，due $1 / 15 / 90$
20，000．00
852，000．00
872，000．00
Total Corporate Bonds
$\$ 914,828.11$

PROFIT OR（LOSS）

| （\＄ | 443．81） | 5．56\％ |
| :---: | :---: | :---: |
| （ | 186．91） | 8.00 |
| （ | 493．16） | 8.00 |
|  | 32.21 | 6.50 |
|  | 37.54 | 6.50 |
| $($ | 1，269．01） | 8.00 |
| （ | 97．24） | 8.00 |
|  | 425.50 | 6.50 |
|  | 28.68 | 6.50 |
| （ | 50．15） | 8.00 |
| （ | 16．32） | 8.00 |
|  | 30.19 | 6.50 |
|  | 43.62 | $\underline{6.50}$ |
| （ | 1，958．86） | 6.68 |


| Permanent <br> Fund | Available <br> Fund |
| :---: | :---: |

## RECEIPTS:

| From General Land Office | \$1,718,610.94 |  |
| :---: | :---: | :---: |
| From Disposition of Securities: |  |  |
| U.S. Government Agency Obligations | 42,828.11 |  |
| FHA Mortgages | 47,302.39 |  |
| Corporate Bonds | 872,000.00 |  |
| Common Stock | 1,834,669.98 |  |
| Commercial Paper | 2,600,000.00 |  |
| Bond Exchanges - Net Receipts | 477,561.37 |  |
| Interest Collected: |  |  |
| U.S. Bonds |  | \$1,765,822.42 |
| U.S. Government Agency Obligations |  | 142,301.43 |
| FHA Mortgages |  | 103,044.62 |
| Corporate Bonds |  | 951,456.37 |
| Convertible Debentures |  | 111,590.00 |
| Commercial Paper |  | 84,290.86 |
| Dividends Collected: |  |  |
| Common \& Preferred Stock |  | 494,770.99 |
| Amortization of Premium | 50,195.39 |  |
| Accounts Receivable Collected | 210,512.87 |  |
| TOTAL RECEIPTS | 7,853,681.05 | 3,653,276.69 |
| Cash on Hand, 2/1/72 | 1,072,221.52 | -0- |
| TOTAL RECEIPTS AND CASH | \$8,925,902.57 | \$3,653,276.69 |


|  | Permanent Fund | Available Fund |
| :---: | :---: | :---: |
| DISBURSEMENTS: |  |  |
| Securities Acquired: |  |  |
| U.S. Government Agency Obligations | \$4,561,860.18 |  |
| Corporate Bonds | 298,293.52 |  |
| Common Stock | 1,775,240.00 |  |
| Warrants | 56,670.00 |  |
| Commercial Paper | 1,000,000.00 |  |
| Amortization of Discount | 96,741.84 |  |
| Cash payments made in February on <br> Security Transactions with <br> Settlement in March $2,391.20$ |  |  |
| To Clear Out Available Fund |  | \$3,653,276.69 |
| TOTAL DISBURSEMENTS | 7,791,196.74 | 3,653,276.69 |
| CASH AND RECEIVABLES 2-29-72 |  |  |
| Accounts Receivable | 369,007.15 |  |
| Cash | 765,698.68 |  |
| Total Cash and Receivables | 1,134,705.83 |  |
| TOTAL DISBURSEMENTS, CASH AND RECEIVABLES 2-29-72 | \$8,925,902.57 | \$ -0- |

## TRUST AND SPECIAL FUNDS - INVESTMENT MATTERS.--

REPORT OF SECURITIES TRANSACTIONS. - The following securities transactions have been made for the Trust and Special Funds in February, 1972. The Associate Deputy Chancellor for Investments, Trusts and Lands recommends approval by the Board of Regents of these transactions.

## INVESTMENTS ACQUIRED



## INVESTMENTS ACQUIRED <br> (Continued)



## ITEMS DISPOSED OF

(Continued)

| Par Value | Description and Fund | Principal Proceeds | Profit or (Loss) | Yield |
| :---: | :---: | :---: | :---: | :---: |
|  | U.S. GOVERNMENT AGENCY OBL | GATIONS: | inued) |  |
| \$ 77.33 | U.T. System - General Tuition Revenue Bonds, Series 1971Reserve Fund | \$ 77.33 | \$ 3.87 | 6.50\% |
| 935.03 | U.T. Austin - Dormitory Revenue Bond Fund, Series 1954 Reserve Fund | 935.03 | 16.32) | 8.00 |
| 83.49 | U.T. Austin - Dormitory Revenue Bond Fund, Series 1956 Reserve Fund | 83.49 | 4.24) | 8.00 |
| 1,010.26 | U.T. Austin - Student Housing Revenue Bonds of 1963 Reserve Fund | 1,010.26 | .88) | 8.00 |
| 5,363.46 | U.T. Austin - Housing System Revenue Bonds, Series 1967 Reserve Fund | 5,363.46 | 264.18 | 7.97 |
| 28,844.11 | U.T. Austin - Building Revenue Bonds, Series 1969 - Utility Plant - Student Fee Revenue Bonds Reserve Fund | 28,844. 11 | ( 1,934.78) | 8.00 |
| 541.41 | U.T. Austin - Combined Fee Revenue Bonds, Series 1970 \& 1971 - Reserve Fund | 541.41 | 19.97 | 6.88 |
| 193.64 | U.T. Austin - Stiudent Union Revenue Bonds, Series 1958 Reserve Fund | 193.64 | -0- | 8.00 |
| 1,835.42 | U.T. Galveston - Dormitory Revenue Bonds, Series 1955 - Reserve Fund | d 1,835.42 | . 10 | 7.87 |
| 25.19 | U.T. El Paso - Siudent Housing Revenue Bonds of 1961 - Reserve Fund | 25.19 | . 77 | 6.50 |
| 4,936.75 | U.T. El Paso - Building Revenue Bonds, Series 1969, Reserve Fund | 4,936.75 | 107.47 | 7.90 |
| 642.16 | U.T. El Paso - Student Union Building Revenue Bonds, Series $A$ and B, 1967 - Reserve Fund | 642.16 | ( 1.78) | 8.00 |
| 68.28 | U.T. El Paso - Combined Fee Revenue Bonds, Series 1970 \& 1971 Reserve Fund | ue $68.28$ | 2.77 | 7.24 |
| 531.21 | U.T. Arlington - Housing System Rev Bonds - Series 1963 - Reserve Fund | venue $531.21$ | 1.39 | 7.92 |
| 619.64 | U.T. Arlington - Student Center Fee Bonds - Series 1960 - Reserve Fund | 619.64 | -0- | 8.00 |

## ITEMS DISPOSED OF

(Continued)

| Par Value | Description and Fund | Principal <br> Proceeds | Profit or (Loss) | Yield |
| :---: | :---: | :---: | :---: | :---: |
|  | U.S. GOVERNMENT A GENCY OB | IGATIONS: | tinued) |  |
| 639.01$2,297.58$68.36 | U.T. Arlingion - Gymnasium Fee Bonds - Series 1961 - Reserve Fund | \$ 639.01 | \$ -0- | 8.00\% |
|  | U.T. Arlingtion - Student Fee Revenue Bonds - Series 1964, Series 1966, and Series 1968 Reserve Fund | 2,297.58 | 140.61 | 7.97 |
|  | U.T. Arlington - Combined Fee Revenue Bonds, Series 1971 and 1971A - Reserve Fund | 68.36 | 3.39 | 6.50 |
|  | TOTAL - U.S. Government Agency Obligations | 57,570.41 | $(1,488.13)$ | 7.92\% |
|  | CORPORATE BONDS: <br> See Bond Sales Schedule for Detail |  |  |  |
| $\begin{array}{r} 370,000.00 \\ 41,000.00 \end{array}$ | Common Trust Fund | 369,320.60 | 18,405.16 | 7.51\% |
|  | Winedale Stagecoach Inn- <br> Varner Acreage | 33,989.41 | 3,719.21 | 7.10 |
| 24,000.00 | Texas Student Publications Reserve - Facilities \& Contingencies | 18,443.78 | ( 6, 124.22) | 7.17 |
|  | TOTAL - Corporate Bonds | 421,753.79 | 16,000.15 | 7.46\% |
|  | CORPORATE STOCKS: <br> See Stock Sales Schedule for Detail |  |  |  |
|  | Common Trust Fund Hogg Foundation: W.C. Hogg | 127,137.50 | ( $34,122.94$ ) | 5.02\% |
|  | Estate Fund | 43,487.50 | 9,667.68 | 4.40 |
|  | Hogg Foundation: Varner Properties | 24,675.00 | 3,796.38 | 3.98 |
|  | Winedale Stagecoach $\operatorname{lnn}$ Varner Acreage | 9,712.50 | ( 9,398.49) | 6.80 |
|  | Josephine Clardy Fox Estate Fund - UTEP | 24,658.00 | 1,656.87 | 5.69 |
|  | The Robertson Poth Foundation | 64,148.46 | 1,855.07 | 3.89 |
|  | The Libbie Moody Thompson Memorial Trust - GMB | 90,000.00 | 7,500.00 | 4.22 |
|  | TOTAL - Corporate Stocks | 383,818.96 | ( 19,045.43) | 4.59\% |
|  | TOTAL - LONG TERM |  |  |  |
|  | INVESTMENTS SOLD | \$863,143.16 | (\$4,533.41) |  |

## ITEMS DISPOSED OF

(Continued)


*Total Income Improvement, including income from investment of takeout (payup) on exchange.


## STOCK SALES

| $\frac{\text { NO. OF }}{\text { SHARES SOLD }}$ | ISSUE |
| :--- | :---: |
| 2,100 Shs. | American Can Company Common |
| $1,300 "$ | Owens-I1linois, Inc. Common |


| NET SALES PROCEEDS | PROFIT OR (LOSS) | YIELD |
| :---: | :---: | :---: |
| \$ 67,987.50 | (\$ 36,429.88) | 6.80\% |
| 59,150.00 | 2,306.94 | 2.97 |
| \$127,137.50 | (\$34,122.94) | 5.02\% |

# THE UNIVERSITY OF TEXAS SYSTEM COMMON TRUST FUND 

|  | $\frac{\mathrm{PAR}}{\mathrm{VALUE}}$ |  | ISSUE | $\operatorname{Cost}$ |  |  | YTETD |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | UNIT |  | TOTAL |  |
|  | \$ | 80,000 |  | Arkansas Power \& Light Co., 1st Mtge., 5-3/4\%, due 3/1/96 | \$ 80.64 | \$ | 64,512.00 | 7. $50 \%$ |
|  |  | 30,000 | Duquesne Light Co., list Mtge., 3-1/2\%, due $4 / 1 / 86$ | 66.202 |  | 19,860.60 | 7.40 |
|  |  | 100,000 | Georgia Power Co., 1st Mtge., $5-1 / 4 \%$, due $6 / 1 / 87$ | 81.70 |  | 81,700.00 | 7.25 |
| $\Gamma$ |  | 58,000 | Niagara Mohawk Power Corp., Gen. Mtge., 3-5/8\%, due 5/1/86 | 66.47 |  | 38,552.60 | 7.50 |
| $\begin{aligned} & \text { - } \\ & 0 \\ & 0 \\ & 0 \\ & 7 \end{aligned}$ | \$ | 107,000 | Pacific Gas \& Electric Co., 1st \& Ref. Mtge., 5\%, due 6/1/89 | 78.026 |  | 83,487.71 | 7.25 |
|  |  | 50,000 | Pacıfic Tel, \& Tel. Co., Debs., 4-5/8\%, due 5/1/2000 | 68.64 |  | 34,320.00 | 7.25 |
| $\stackrel{1}{6}$ |  | 25,000 | Southern Electric Generating Co., 1st Mtge., 5-1/4\%, Series 1960, due 6/1/92 | 76.734 |  | 19,183.50 | 7.50 |
|  |  | 122,000 | Commonwealth Edison Co., SF Debs., $3-7 / 8 \%$, due $1 / 1 / 2008$ | 57.882 |  | 70,616.04 | 7.15 |
|  | \$ | 572,000 |  |  | \$ | 412,232.45 | $\underline{7.31 \%}$ |



## HOGG FOUNDATION: W. C. HOGG ESTATE FUND (February, 1972)

BOND SALES AND MATURITIES


## STOCK SALES

| $\frac{\text { NO. OF }}{\text { SHARES SOLD }}$ | $\underline{\text { ISSUE }}$ |
| :---: | :---: |
| 500 Shs. | American Can Company Common |
| 600 Shs. | Owens-IIlinois, Inc. Common |

NET SALES PROCEEDS
$\$ 16,187.50$
$27,300.00$
$\$ 43,487.50$

| PROFIT OR (LOSS) | YIELD |
| :---: | :---: |
| 117.84 | 6.80\% |
| 9,549.84 | 2.97 |
| \$ 9,667.68 | 4.40\% |

BOND PURCHASES

| HOGG FOUNDATION: W. C. HOGG ESTATE FUND |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BOND PURCHASES |  |  |  |  |  |  |  |
|  | PAR |  | Cost |  |  |  | YTELD |
|  | VALUE | ISSUE |  | UNIT |  | TOTAL |  |
| \$ | 27,000 | Alabama Power Co., Ist Mtge., 4-7/8\%, due 5/1/89 |  | 74.45 | \$ | 20,101. 50 | 7.55\% |
|  | 6,000 | Georgia Power Co., Ist Mtge., $5-1 / 4 \%$, due $6 / 1 / 87$ |  | 81.70 |  | 4,902.00 | 7.25 |
|  | 25,000 | Commonwealth Edison Co., Ist Mtge., 4-5/8\%, due 3/1/90 |  | 73.83 |  | 18,457.50 | 7.25 |
|  | 25,000 | Philadelphia Electric Co., 1st \& Ref. Mtge., 4-1/2\%, due 5/1/94 |  | 69.03 |  | 17,257.50 | 7.35 |
|  | 75,000 | Idaho Power Co., 1st Mtge., 4-3/4\%, due 11/15/87 |  | 75.223 |  | 56,417.25 | 7.45 |
|  | 25,000 | Utah Power \& Light Co., 1st Mtge., 4-1/2\%, due 6/1/92 |  | 68.984 |  | 17,246.00 | 7.50 |
|  | 140,000 | Tampa Electric Co., 1st Mtge., 4-1/2\%, due 5/1/93 |  | 70.031 |  | 98,043.70 | 7.30 |
|  | 25,000 | Florida Power Corp., lst Mtge., 3-7/8\%, due 7/1/86 |  | 69.508 |  | 17,377.00 | 7.35 |
|  | 50,000 | Niagara Mohawk Power Corp., Gen. Mtge., $4-5 / 8 \%$, due 12/1/94 |  | 68.014 |  | 34,007.00 | 7.60 |
| \$ | 398,000 |  |  |  | \$ | 283,809.45 | 7.40\% |

## STOCK PURCHASES

$\frac{\text { NO. OF SHS. }}{\text { PURCHASED }}$

190 Shs.
190
Warrants

## ISSUE

Commonwealth Edison Company Common
Commonwealth Edison Company Warrants
(Subscription Offer to purchase Common Stock at $\$ 30.00$ per share)

| $\operatorname{COST}$ |  |  | YIELD |
| :---: | :---: | :---: | :---: |
| UNIT |  | TOTAL |  |
| \$ 35.00 | \$ | 6,650.00 | 6.29\% |
| 10.00 |  | 1,900.00 | -0- |
|  | \$ | 8,550.00 | 6.29\% |


|  |  | DESCRIPTION |  | BOOK VALUE |  |  |  | $\frac{\mathrm{BOOK}}{\mathrm{YIELD}}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\mathrm{PAR}}{\text { VALUE }}$ | $\frac{\text { ISSUE }}{\text { EXCHANGED }}$ | $\frac{\text { ISSUE }}{\text { RECEIVED }}$ |  | $\frac{\text { ISSUE }}{\text { EXCHANGED }}$ |  | $\frac{\text { ISSUE }}{\text { RECEIVED }}$ | $\frac{\text { IN }}{\text { CREASE }}$ | $\frac{\frac{A D N}{B O O K}}{\mathrm{YIELD}}$ |
| \$ | 75,000 | Mountain States Tel.\& Tel.Co. Debs., $4-1 / 2 \%$, due $6 / 1 / 2002$ | Mountain States Tel.\& Tel.Co. Debs., $4-1 / 2 \%$, due $6 / 1 / 2002$ | \$ | 74,388.78 | \$ | 74,202.78 | $\$ .02 \%$ | $\begin{gathered} 4.57 \% \\ 19.40 \% \end{gathered}$ |
|  | 10,000 | New Jersey Bell Te1. Co. Debs., 5-7/8\%, due 12/1/2006 | Ditto |  | 9,687.54 |  | 7,792.94 | $.02$ | $\begin{aligned} & 6.11 \\ & 58.56 \\ & \hline \end{aligned}$ |
| \$ | 85,000 |  |  | \$ | 84,076.32 | \$ | 81,995.72 |  | 77.96 |

## BOND SALES AND MATURITIES



BOND PURCHASES


## STOCK PURCHASES



| $\operatorname{CosT}$ |  |  | YIELD |
| :---: | :---: | :---: | :---: |
| UNIT |  | TOTAL |  |
| \$ 35.00 | \$ | 3,115.00 | 6.29\% |
| 10.00 |  | 890.00 | -0- |
|  | \$ | 4,005.00 | 6.29\% |

STOCK SALES

NO. OF
SHARES SOLD
200 Shs. American Can Company Common
400 Shs. Owens-IIlinois, Inc. Common

| NET SALES PROCEEDS | PROFIT OR (LOSS) | YIELD |
| :---: | :---: | :---: |
| 6,475.00 | (\$ 1,821.12) | 6.80\% |
| 18,200.00 | 5,617.50 | 2.97 |
| \$ 24,675.00 | \$ 3,796.38 | $3.98 \%$ |

## WINEDALE STAGECOACH INN - VARNER ACREAGE

 (February, 1972)| BOND PURCHASES |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\frac{\text { PAR }}{\frac{\text { ALUE }}{}}$ |  | ISSUE | $\operatorname{COST}$ |  |  |  | YIELD |
|  |  |  | UNIT |  | TOTAL |  |
| \$ | 34,000 |  | Northern Illinois Gas Co., lst Mtge., 5\%, due 6/1/84 | \$ | 81.15 | \$ | 27,591.00 | 7.35\% |
|  | 24,000 | Florida Power Corp., 1st Mtge., 3-5/8\%, due 11/1/83 |  | 71.375 |  | 17,130.00 | 7.30 |
| \$ | 58,000 |  |  |  | \$ | 44,721.00 | 7.33\% |



## NO.

300 Shs.
216 Shs. First National City Corporation Common
460 Shs. Johns-Manville Corporation Common
180 Shs. North American Rockwell Corporation Conmon
200 Shs. Otis Elevator Company Common
250 Shs. The Western Union Telegraph Company Common
net Sales procerds
$\$ \quad 9,712.50$
$10,206.00$
17,744.50
6,345.00
7,921.71
$12,218.75$
$\$ 64,148.46$

PROFIT OR (LOSS) $6.80 \%$

STOCK PURCHASES

| $\frac{\text { NO. OF SHS. }}{\text { PURCHASED }}$ | ISSUE |
| :--- | :--- |
| 200 Shs. | Chemical New York Corporation Common |
| 30 Shs. | International Business Machines Corporation Capital |
| 300 Shs. | International Paper Company Common |
| 400 Shs. | Oklahoma Gas \& Electric Company Common |
| 200 Shs. | Texas Utilities Company Common |
| 200 Sns. | United States Eicelity and Guaranty Company Capital |


| $\operatorname{COST}$ |  |  | YIELD |
| :---: | :---: | :---: | :---: |
| UNIT |  | TOTAL |  |
| \$ 53.125 | \$ | 10,625.00 | 5.42\% |
| 370.416 |  | 11,112.50 | 1.46 |
| 34.125 |  | 10,237.50 | 4.40 |
| 25.875 |  | 10,350.00 | 4.95 |
| 58.00 |  | 11,600.00 | 3.45 |
| 42.475 |  | 8,495.00 | 5.18 |
|  | S | 62,420.00 | 4.07\% |


$\frac{\text { NO. OF }}{\text { SHARES SOID }}$

## ISSUE

NET SALES PROCEEDS
PROFIT OR (LOSS)

|  |  | $\frac{\mathrm{PAR}}{\mathrm{VALUE}}$ | ISSUE | PROCEEDS |  | PROFIT OR (LOSS) |  | YIELD |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | 5,000 | ```Pennsylvania Electric Co., lst Mtge., 4-5/8%, due 10/1/94``` |  | 3,444.20 | (\$ | 1,661.80) | 7.50\% |
|  |  | 5,000 | American Tel. \& Tel. Co., Debs., 4-3/4\%, due 6/1/98 |  | 3,653.60 | $($ | 1,396.40) | 7.00 |
|  |  | 5,000 | ```General Motors Acceptance Corp., Debs., 4-5/8%, due 6/15/86``` |  | 3,856.50 | ( | 1,207.50) | 7.20 |
| $\Gamma$ |  | 4,000 | Pacific Gas \& Electric Co., lst \& Ref. Mtge., 5\%, due $6 / 1 / 91$ |  | 3,087.08 | ( | 1,082.92) | 7.20 |
| 8 |  | 5,000 | Pacific Te1. \& Tel. Co., Debs., 5-1/8\%, due $8 / 1 / 80$ |  | 4,402.40 | ( | 775.60) | 7.00 |
| 10 <br> 0 <br> 8 | \$ | 24,000 |  |  | 18,443.78 | (\$ | 6,124.22) | 7.17\% |

## BOND SALES AND MATURITIES <br> (February, 1972)

## RESERVE FOR POSSIBLE FIRE LOSSES - TEMPORARY STUDENT HOUSING UNITS



## BOND SALES AND MATURITIES

PAR

ISSUE PROCEEDS
PROFIT OR (LOSS)
YIELD
STUDENT PROPERTY DEPOSIT SCHOLARSHIP FUND


## STUDENT PROPERTY DEPOSTT SCHOLARSHIP FUND - TEMPORARY



## U. T. SYSTEM - GENERAL TUITION REVENUE BONDS, SERIES 1971 - INTEREST AND SINKING FUND



## BOND SALES AND MATURITIES

|  | $\frac{\text { PAR }}{\text { VALUE }}$ |  |  | ISSUE |  | PROCEEDS | PROF | OR（LOSS） | YIELD |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | U．T．AUSTIN－DORMITORY REVENUE BOND FUND，SERIES 1954 －RESERVE FUND |  |  |  |  |  |  |  |  |
| \＄ | 658.37 | GNMA，P | Pool \＃1 | \＃184，8\％，due 4／1／2001 | \＄ | 658.37 | \＄ | －0－ | 8．00\％ |
|  | 276.66 | GNMA，P | Pool \＃ | \＃548， $8 \%$ ，due 4／15／2001 |  | 276.66 | （ | 16．32） | 8.00 |
| S | 935.03 |  |  |  | \＄ | 935.03 | （\＄ | 16．32） | 8．00\％ |
|  | U．T．AUSTIN－DORMITORY REVENUE BONDS FUND，SERIES 1956 －RESERVE FUND |  |  |  |  |  |  |  |  |
| \＄ | 56.92 | GNMA，P | Pool \＃ | \＃548，8\％，due 4／15／2001 | \＄ | 56.92 | （\＄ | 3．36） | 8．00\％ |
|  | 26.57 | GNMA，P | Pool $⿰ ⿰ 三 丨 ⿰ 丨 三 一$ | \＄650， $8 \%$ ，due 2／15／2001 |  | 26.57 |  | ．88） | 8.00 |
| \＄ | 83.49 |  |  |  | \＄ | 83.49 | （\＄ | 4．24） | 8．00\％ |
| U．T．AUSTIN－STUDENT HOUSING REVENUE BONDS OF 1963 －RESERVE FUND |  |  |  |  |  |  |  |  |  |
| \＄ | 983.69 | GNMA，P | Pool ${ }^{1}$ | \＄184，8\％，due 4／1／2001 | \＄ | 983.69 | \＄ | －0－ | 8．00\％ |
|  | 26.57 | GNMA，P | Pool \＃ | \＃650，8\％，due 2／15／2001 |  | 26.57 |  | ．88） | 8.00 |
| \＄ | 1，010．26 |  |  |  |  | 1，010．26 | （\＄ | ． 88 ） | 8．00\％ |

## BOND SALES AND MATURITIES <br> (February, 1972)



## $\frac{\text { BOND SALES AND MATURITIES }}{(\text { February, } 1972)}$

|  | $\frac{\text { PAR }}{\text { VALUE }}$ |  |  | ISSUE |  | PROCEEDS | Prof | OR (LOSS) | YIELD |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | U. T. AUSTIN - COMBINED FEE REVENUE BONDS, SERIES 1970 \& 1971- RESERVE FUND |  |  |  |  |  |  |  |  |
| \$ | 135.55 | GNMA, P | Pool \#1 | \#184, 8\%, due 4/1/2001 | \$ | 135.55 | \$ | -0- | 8.00\% |
|  | 405.86 | GNMA, | Pool | \#1029, $6-1 / 2 \%$, due 12/15/2001 |  | 405.86 |  | 19.97 | 6.50 |
| \$ | 541.41 |  |  |  | \$ | 541.41 | \$ | 19.97 | 6.88\% |
|  |  |  |  | U. T. AUSTIN - STUDENT UNTON |  | IES 1958 - |  |  |  |
| \$ | 193.64 | GNMA, | Pool \$1 | \#184, 8\%, due 4/1/2001 | \$ | 193.64 | \$ | -0- | 8.00\% |
|  |  |  |  | U. T. GALVESTON - DORMITORY R | RI | ES 1955- |  |  |  |
| \$ | 1,673.04 | GNMA, P | Pool \# | \#184, 8\%, due 4/1/2001 | \$ | 1,673.04 | \$ | -0- | 8.00\% |
|  | 162.38 | GNMA, | Pool \# | \#852, 6-1/2\%, due 1/15/2002 |  | 162.38 |  | . 10 | 6.50 |
| \$ | 1,835.42 |  |  |  |  | 1,835.42 | \$ | $\underline{.10}$ | 7.87\% |

U. T. EL PASO - STUDENT HOUSING REVENUE BONDS OF 1961 - RESERVE FUND

S 25.19 GMA, Pool $\# 852,6-1 / 2 \%$, due $1 / 15 / 2002 \quad \$ \quad 25.19 \quad \$ \quad .77$
$\$ \quad 4,040.68$

ISSUE
U. T. EL PASO - BUILDING REVENUE BONDS, SEREES 1969, RESERVE FUND


| 573.17 |
| ---: |
| 10.02 |
| 312.88 |
| $\$ \quad 4,936.75$ |

GNMA, Pool $\# 121,8 \%$, due $11 / 15 / 2000$
GNMA, Pool $\# 184,8 \%$, due $4 / 1 / 2001$
GNMA, Pool $\# 920,8 \%$, due $9 / 15 / 2001$
GNMA, Pool $\# 1029,6-1 / 2 \%$, due $12 / 15 / 2001$

| $\$ 4,040.68$ | $\$$ | 87.20 |
| ---: | ---: | ---: |
| 573.17 | $-0-$ |  |
| 10.02 | .25 |  |
| 312.88 | 20.02 |  |
| $\$ 4,936.75$ | $\$ \quad 107.47$ |  |

U. T. EL PASO - STUDENT UNION BUILDING REYENUE BONDS, SERIES A AND B, 1967 - RESERVE FUND

| $\$ 11.90$ |
| ---: |
|  |


| \$ | 611.90 | \$ | -0- | 8.00\% |
| :---: | :---: | :---: | :---: | :---: |
|  | 30.26 | ( | 1.78) | 8.00 |
| S | 642.16 | (\$ | 1.78) | 8.00\% |

U. T. EL PASO - COMBINED FEE REVENUE BONDS, SERTES $1970 \& 1971$ - RESERVE FUND


## PAR

ISSUE
PROCEEDS
PROFIT OR（LOSS）
YIELD
U．T．ARLINGTON－HOUSING SYSTEM REVENUE BONDS－SERIES 1963 －RESERVE EUND
\＄ 503.46 GNMA，Pool \＃184，8\％，due $4 / 1 / 2001$

| $\$ 03.46$ | $\$$ | $-0-$ | $8.00 \%$ |
| :--- | ---: | :--- | :--- |
|  | 27.75 |  | 1.39 |
|  | 531.21 |  |  |

U．T．ARLINGTON－STUDENT CENTER FEE BONDS，SERIES 1960 －RESERVE FUND


GNMA，Pool $\# 184,8 \%$ ，due $4 / 1 / 2001$
$\$ \quad 619.64$ $\qquad$ 8．00\％

U．T．ARLINGTON－GYMNASIUM FEE BONDS－SERIES 1961 －RESERVE FUND
$\$ \quad 639.01$
$\$ \quad 639.01 \quad \$ \quad-0-$

U．T．ARLINGTON－STUDENT FEE REVENUE BONDS－SERIES 1964，SERIES 1966，AND SERIES 1968－RESERVE FUND
$\$ 2,121.97$ GNMA，Pool \＃121，8\％，due 11／15／2000

| $\$ 2,121.97$ | $\$$ | 145.8 |
| ---: | ---: | ---: |
| 125.36 |  | $7.39)$ |

8．00\％
125.36 GNMA，Pool $⿰ 548,8 \%$ ，due $4 / 15 / 2001$
12.36 （ 7．39）
8.00
50.25
GNMA，Pool $⿰ ⿰ 三 丨 ⿰ 丨 三 一 ⿻ 一 ㇉$ 852， $6-1 / 2 \%$ ，due $1 / 15 / 2002$
50.25
$\$ \quad 2,297.58$
$\$ \quad 140.61$

U．T．ARLINGTON－COMBINED FEE REVENUE BONDS，SERIES 1971\＆1971A－RESERVE FUND

| \＄ | 39.67 | GNMA，Pool $⿰ ⿰ 三 丨 ⿰ 丨 三 ⿻ ⿻ 一 𠃋 十$ | \＄ | 39.67 | \＄ | 1.98 | 6．50\％ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 28.69 | GNMA，Pool \＄1029，6－1／2\％，due 12／15／2001 |  | 28.69 |  | 1.41 | 6.50 |
| \＄ | 68.36 |  | \＄ | 68.36 | \＄ | 3.39 | 6．50\％ |


[^0]:    7. Sidney Monas, Chairman of the Department of Slavic Languages, March 15, 1972 to March 18, 1972, to Dallas, Texas, to attend the annual meeting of the International Research and Exchanges Board; and to particpate in the Fifth National Convention of the American Association for the Advancement of Slavic Studies. Expenses in the approximate amount of $\$ 103$ to be paid from Miscellaneous Administrative expenses.
[^1]:    Block II, Materials Engineering and Chemistry

    Courses selected in this block provide a broader background in the chemistry and physical properties of materials essential to the chemical and related industries.
    *Ch.E. 355, Introduction to Polymer Engineering.
    Ch.E. 362I, Advanced Thermodynamics.
    Ch.E. 365, Water Treatment Engineering: Corrosion.
    M.E. 360K, Physical Metallurgy.
    M.E. 361 M , Thermodynamics of Materials.
    M.E. 370 K , Structure and Properties of Materials.

[^2]:    Block VII, Engineering Specialties and Preparation for Non-Engineering Professional School
    Special block programs may be arranged to emphasize interdisciplinary areas such as biomedical engineering, ocean engineering, and nuclear engineering. This option program can also be utilized as preparation for further professional training in medicine,

[^3]:    Block II, Environmental Health Engineering

    The Environmental Health Engineering Block provides a balanced

[^4]:    Block VIII, Surveying and Photogrammetry

    This block is satisfactory preparation for performance in surveying and mapping agencies, both government and private, and is acceptable in lieu of four years of experience required for eligiblity to take the examination to become a Registered Public Surveyor in Texas.

[^5]:    Block III, Mechanical and Energy
    Systems (continued)
    M.E. 374L, Design of Thermal Systems.
    M.E. 369L, Engineering Computational Methods.

[^6]:    Appointment
    Lecturer（Spring 1972，Only）
    18．Wilson Harris（Non－tenure）$\quad 1 / 16-5 / 31 \quad 100 \quad 9 \quad 16,000$

    Sources of Funds： Departmental Faculty Salaries and transfers from Ethnic Studies Faculty Salaries and Teaching Assistants accounts． （RBC非1834，1287，1291）

[^7]:    Appointment
    Lecturer
    56．Nick P．Woodward（Non－tenure） $1 / 16-5 / 31 \quad 33$－－－
    （RBC非 1778）

[^8]:    To：Aerospace Engineering and Engineering Mechanics－Engineering Mechanics Division－Teaching Assistants

    From：Aerospace Engineering and Engineering Mechanics－Engineering Mechanics Division－Wages（\＄473）

    Aerospace Engineering and Engineering Mechanics－Teaching Assistants（\＄100）
    Reallocation of funds within the College of Engineering to provide support where needed．（RBC非 1841，1875）

[^9]:    INSTRUCTOR

[^10]:    *Faculty appointments do not carry tenure for the first two years.

[^11]:    *Total Income Improvement, including income from investment of takeout (payup) on exchange.

