

Biomedical Communications • Clinical Nutrition •
Emergency Medicine Education • Health Care Sciences •
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Physician Assistant Studies • Prosthetics-Orthotics •
Radiation Therapy • Rehabilitation Counseling

THE UNIVERSITY OF TEXAS

C A T A L O G
2010-2013

SOUTHWESTERN SCHOOL OF HEALTH PROFESSIONS



2010-2013

UT SOUTHWESTERN SCHOOL OF HEALTH PROFESSIONS

CATALOG FOR 2010–2013

UT SOUTHWESTERN

THE UNIVERSITY OF TEXAS
SOUTHWESTERN MEDICAL CENTER
AT DALLAS

5323 Harry Hines Blvd., Dallas, TX 75390

www.utsouthwestern.edu

September 2010

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Rule 10701

Rules and Regulations

UT System Board of Regents

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The UT Southwestern School of Health Professions Catalog is available online at www.utsouthwestern.edu/home/education/alliedschool/index.html. It is updated when new information becomes available.

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UT SOUTHWESTERN MEDICAL CENTER

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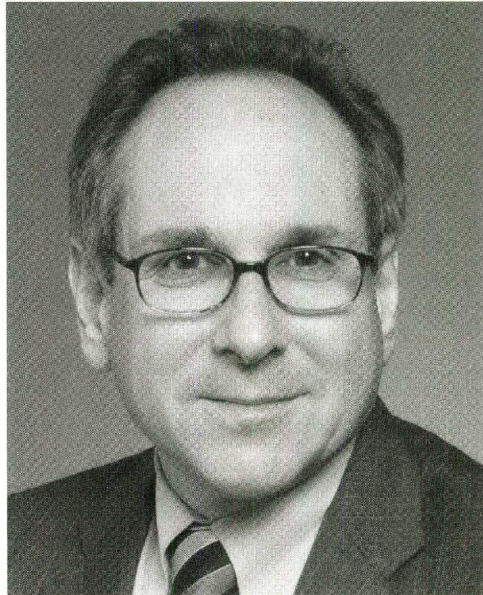
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Raul Caetano, M.D., M.P.H., Ph.D.
Dean, UT Southwestern School of Health Professions

**UT SOUTHWESTERN SCHOOL OF HEALTH
PROFESSIONS**

■ **ACADEMIC ADMINISTRATION**

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Program Director, Radiation Therapy

PURPOSE

UT Southwestern School of Health Professions has several leadership responsibilities within the medical center. Its primary function is the academic preparation of health professionals at various levels: baccalaureate, postbaccalaureate certificate, master's and doctorate. In doing so, its faculty also provides structured preparation for students in clinical settings, offers high-quality patient care or client services, and takes part in ongoing research and professional development.

The major missions of the school are to:

- 1) Prepare health professionals of the highest quality to meet the needs of the health care system in Texas.
- 2) Advance knowledge of the health professions through the development and maintenance of research programs related to health care.
- 3) Consult, provide services and collaborate with other institutions and agencies to meet the health care delivery and health-education needs of the citizens of Texas through interdisciplinary education and promotion of comprehensive health care.
- 4) Contribute to the continued growth and development of the health professions and the reduction of barriers to vertical and horizontal career mobility through the development of continuing education, retraining programs and other appropriate means.

The medical-center setting in which the school is located provides rich resources for achieving these goals. Highly respected basic and medical

scientists are available to present special lectures and to consult and collaborate with members of the faculty. Clinical training facilities at teaching hospitals and affiliated institutions are readily available. In the outstanding academic environment provided by the medical center, the faculty members of the school expand their training through research and service activities.

Since the school's administration and faculty recognize the importance of community service, they work actively to publicize career opportunities in health care, to recruit students of varied backgrounds and all races to prepare for health careers, and to respond to the changing needs of the health care workforce.

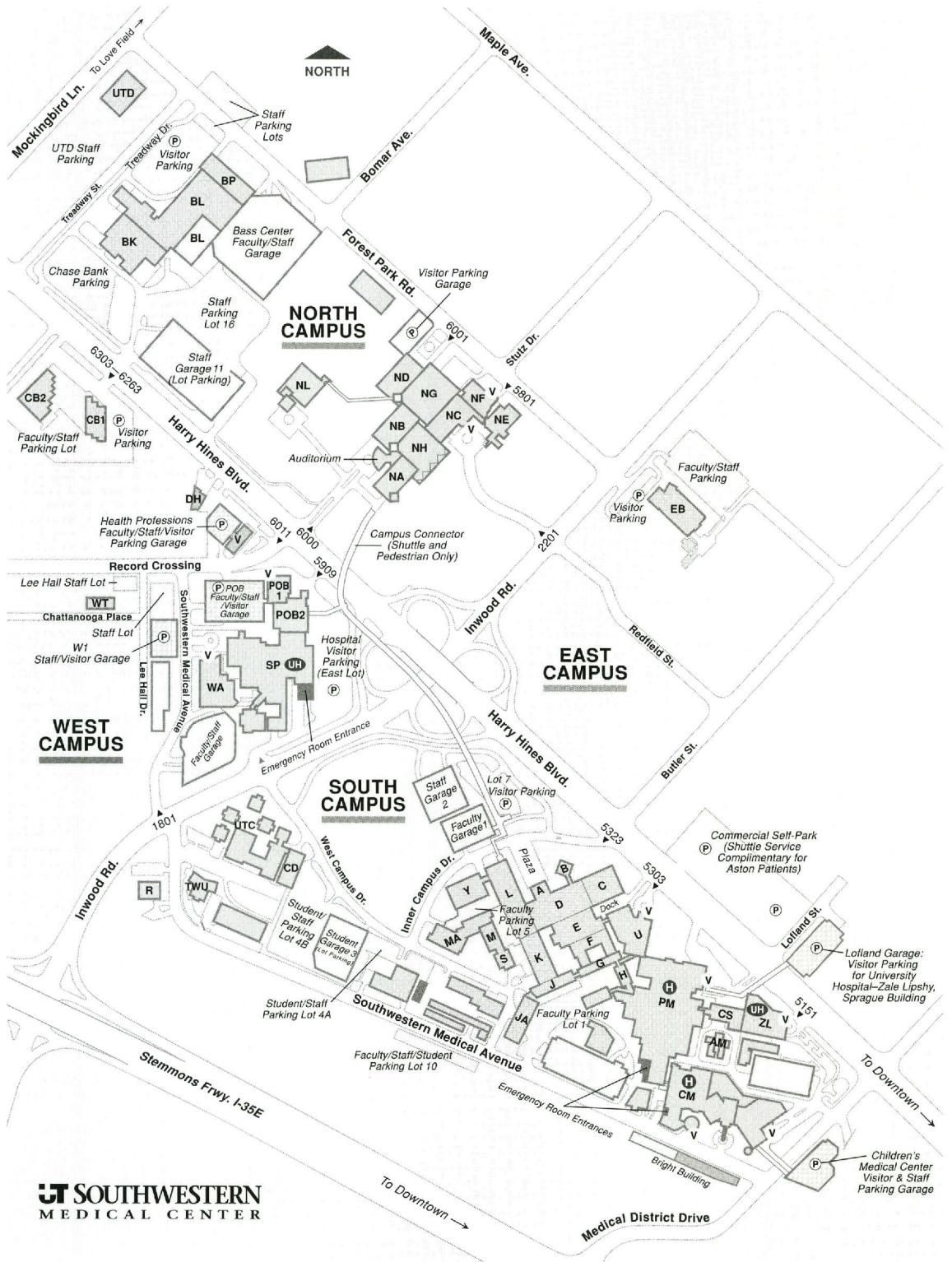
While the school seeks to provide the most suitable environment for learning, it cannot guarantee any individual's progress or opportunities for employment.

ACADEMIC CALENDAR

The academic year at UT Southwestern School of Health Professions consists of three sessions. Most commonly, clinical work is accomplished during the summer term, but some programs also schedule class work during that period.

The fall semester begins the third or fourth Monday in August. The spring semester begins the first or second Monday in January. The summer term begins the third or fourth Monday or Tuesday in May. Because of their diversity, not all programs operate on the same calendar schedule, and the student is urged to become familiar with the dates for his or her program. Commencement is held in December.

The Office of the Registrar publishes a detailed calendar each August. The student is urged to refer to it for current information.



UT SOUTHWESTERN
MEDICAL CENTER

CAMPUS MAP

■ **NORTH CAMPUS**

Paul M. Bass Administrative and Clinical Center Concourse (food court, postal center)	BL
Bass Center Tower 1	BP
Bass Center Tower 2	BL
Biomedical Research Building	NL
Chase Bank Building	BK
Bill and Rita Clements Advanced Medical Imaging Building	NE
Nancy B. and Jake L. Hamon Biomedical Research Building	NA
W.A. Monty & Tex Moncrief Radiation Oncology Building	NF
T. Boone Pickens Biomedical Building (North Campus commons, Conference Center, university store)	ND
C. Vincent Prothro Plaza and Gardens	NH
Seay Biomedical Building	NC
Simmons Biomedical Research Building	NB

■ **WEST CAMPUS**

Auxiliary Building	DH
Clinical Building 1	CB1
Clinical Building 2	CB2
Environmental Health and Safety Building	WT
Outpatient Building	WA
Professional Office Building 1	
POB1	
Professional Office Building 2	
POB2	
UT Southwestern University Hospital - St. Paul and Emergency Room	SP
UT Southwestern School of Health Professions Building	V

■ **EAST CAMPUS**

BioCenter at Southwestern Medical District	EB
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■ **SOUTH CAMPUS**

James W. Aston Ambulatory Care Center	U
Callier Child Development Center	CD
Edward H. Cary Building	F
Children's Medical Center Dallas	CM
Dan Danciger Research Building	H
Fred F. Florence Bioinformation Center	E
Tom and Lula Gooch Auditorium (food court, store and postal center below)	C
Cecil H. and Ida Green Biomedical Research Building	Y
Cecil H. and Ida Green Science Building	L
Karl Hoblitzelle Clinical Science Building	G
Philip R. Jonsson Basic Science Research Building	K
Laboratory Research and Support Building	JA
Eugene McDermott Academic Administration Building	B
Eugene McDermott Plaza (lecture halls below)	D
Algur H. Meadows Diagnostic Imaging Center	AM
Harry S. Moss Clinical Science Building	J
Parkland Memorial Hospital	PM
Police Station	S
Skillern Building	M
Charles Cameron Sprague Clinical Science Building	CS
Transplant Services Building	R
UT Southwestern University Hospital - Zale Lipshy	ZL
Visitor Information Center	A
Bryan Williams, M.D. Student Center	MA

GENERAL INFORMATION • biomedical communications • clinical nutrition • emergency medicine education • health care sciences • medical laboratory sciences • physical therapy • physician assistant studies • prosthetics-orthotics • radiation therapy • rehabilitation counseling



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THE UNIVERSITY OF TEXAS
Southwestern Medical
AT DALLAS

UT SOUTHWESTERN MEDICAL CENTER

UT Southwestern Medical Center ranks among the top academic medical centers in the world. Its faculty members, who are responsible for a broad array of groundbreaking biomedical research advances, are respected for their dedication to teaching. UT Southwestern's physicians provide patients with the highest quality care through the medical center's outpatient clinics and affiliated hospitals.

Since its formation in 1943, UT Southwestern has grown from a small wartime medical college into a multifaceted academic institution nationally recognized for its excellence in educating physicians, biomedical scientists and health care personnel.

Under the leadership of the late Dr. Edward H. Cary and Karl Hoblitzelle, a group of prominent Dallasites organized Southwestern Medical Foundation in 1939 to promote medical education and research in Dallas and the region. When Baylor University elected to move its school of medicine from Dallas to Houston in 1943, the foundation formally established Southwestern Medical College as the 68th medical school in the United States.

When a new state medical school was proposed after World War II, leaders of Southwestern Medical Foundation offered the college's equipment, library and certain restricted funds to The University of Texas, provided the university would locate its new medical branch in Dallas. The Board of Regents accepted this offer from the foundation, and in 1949 the college became Southwestern Medical School of The University of Texas. In 1954 the name was changed to The University of Texas Southwestern Medical School. The present campus site on Harry Hines Boulevard was occupied in 1955 upon the completion of the Edward H. Cary Building. This placed the medical school next to the newly built Parkland Memorial Hospital.

In November 1972 the name and scope of the medical school were changed with its reorganization into The University of Texas Health Science Center at Dallas. In approving the concept of a health science center, the Board of Regents

provided for the continued growth of coordinated but separate medical, graduate and undergraduate components, interacting creatively on the problems of human health and well-being.

In 1986 the Howard Hughes Medical Institute opened a research facility on the campus. Concentrating on molecular biology, it has brought outstanding scientists to head laboratories in their specialties. These investigators also hold faculty positions in the basic science departments of the medical school and graduate school.

In October 1987 the UT System Board of Regents approved changing the name of the health science center to The University of Texas Southwestern Medical Center at Dallas, reconfirming its original Southwestern identity. The medical center encompasses UT Southwestern Medical School, UT Southwestern Graduate School of Biomedical Sciences and UT Southwestern School of Health Professions.

UT Southwestern is located on Harry Hines Boulevard, a 10-minute drive northwest of downtown Dallas. Since the late 1960s the university has added more than 6 million square feet of new construction. The South Campus includes 20 buildings housing classrooms, laboratories, offices, an extensive medical library, an auditorium, a large outpatient center and UT Southwestern University Hospital - Zale Lipshy.

In 1987 the John D. and Catherine T. MacArthur Foundation gave the university 30 acres near the South Campus for future expansion. In 1999 the university purchased additional acres from the MacArthur Foundation. The 90-acre site, named the North Campus, has four research towers plus the Bill and Rita Clements Advanced Medical Imaging Building and the W.A. Monty & Tex Moncrief Radiation Oncology Building. A fifth research tower is under construction.

In January 2005, Zale Lipshy and St. Paul University Hospitals consolidated under the ownership of UT Southwestern Medical Center. Two teaching hospitals, Parkland Memorial Hospital and Children's Medical Center Dallas, also adjoin the South Campus.

The West Campus, located across Inwood Road from the South Campus and across Harry Hines Boulevard from the North Campus, includes

the UT Southwestern School of Health Professions Building; UT Southwestern University Hospital - St. Paul; and several outpatient facilities, including the seven-story Outpatient Building.

In 2008 the university acquired Exchange Park, a 24-acre office complex next to the North Campus. UT Southwestern now encompasses 10.8 million square feet of laboratory, clinical, educational and administrative space and covers 387 acres.

UT SOUTHWESTERN SCHOOL OF HEALTH PROFESSIONS

In 1968 Dr. Charles C. Sprague, then dean of The University of Texas Southwestern Medical School, initiated the planning for a new School of Allied Health Professions in Dallas. Dr. Richard D. Burk, chairman of the Department of Physical Medicine and Rehabilitation, was named the first dean of the school in February 1969. Under his leadership and with the assistance of Associate Dean Harry J. Parker, students were first enrolled in baccalaureate programs for the 1970-71 academic year in Medical Technology, Physical Therapy and Rehabilitation Science and in a post-baccalaureate Dietetic Internship.

Dr. John W. Schermerhorn was appointed dean in August 1971. He was succeeded by Dr. William J. Gonyea in November 1985. In 1988 Dr. Vernie A. Stenbridge assumed duties as interim dean. Dr. Gordon Green was appointed dean in January 1991. In August 2001 Dr. Raul Caetano became dean. In 2008 the school was renamed the UT Southwestern School of Health Professions.

The school originally was housed in Methodist Hospital's School of Nursing facilities. From August 1973 until June 1983 it occupied facilities at 6003 Maple Ave. In 1983 the school relocated to the Locke Building, 6011 Harry Hines Blvd. The building subsequently was remodeled and renamed The University of Texas Southwestern Allied Health Sciences School Building (now the UT Southwestern School of Health Professions Building). Permanent facilities in the building include classrooms, clinics, laboratories and administrative offices for most departments of the school.

■ ACCREDITATION

UT Southwestern Medical Center is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award the bachelor's (B.S.), master's (M.A./M.S./M.S.C.S./M.P.A.S./M.P.O.), doctoral (Ph.D./D.P.T.), and medical professional (M.D.) degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097 or call 404-679-4500 for questions about the accreditation of UT Southwestern Medical Center at Dallas. Contact the commission only if there is evidence that appears to support UT Southwestern's significant non-compliance with a requirement or standard.

The Clinical Nutrition program is granted accreditation by the Commission on Accreditation/Approval for Dietetics Education of the American Dietetic Association.

The Biomedical Communications program and the Blood Bank Technology program are accredited by the Commission on Accreditation of Allied Health Education Programs.

The Medical Laboratory Sciences program is accredited through the National Accrediting Agency for Clinical Laboratory Sciences.

The Doctor of Physical Therapy program is accredited by the Commission on Accreditation of Physical Therapy Education.

The Master of Physician Assistant Studies program is accredited by the Accreditation Review Commission on Education for the Physician Assistant.

The Prosthetics-Orthotics program is accredited by the National Commission on Orthotic and Prosthetic Education.

The Radiation Therapy program is accredited by the Joint Review Committee on Education in Radiologic Technology.

BUILDINGS

■ SOUTH CAMPUS

THE JAMES W. ASTON AMBULATORY CARE BUILDING is an outpatient facility where faculty members see patients referred by private physicians. This nine-floor clinical center provides residents, students and faculty with access to a

broad spectrum of illnesses and patient needs. Laboratory and X-ray services are available in the building so that most services can be provided during a single patient visit.

EDWARD H. CARY BUILDING, the first permanent building of the medical school, is a five-level structure housing facilities of the departments of Anesthesiology and Pain Management, Clinical Sciences, Internal Medicine, Neurology, and Pediatrics.

THE DAN DANCIGER RESEARCH BUILDING houses the Moss Heart Center and the clinical laboratories and research offices for the departments of Internal Medicine, Neurological Surgery, Obstetrics and Gynecology, Orthopaedic Surgery, Pathology, Pediatrics, and Surgery.

THE FRED F. FLORENCE BIOINFORMATION CENTER houses the Division of Biostatistics, Continuing Medical Education/Public Education, the Alfred W. Harris Faculty-Alumni Center, the Library, and the Medical Television Center. Also, Clinical Sciences, Internal Medicine, Obstetrics and Gynecology, Ophthalmology, Pediatrics, Radiology, and Surgery have office and laboratory space in the seven-story building.

THE TOM AND LULA GOOCH AUDITORIUM seats 1,200 in an upper-level auditorium offering excellent acoustics and projection equipment. On the lower level it houses the Gallery Cafeteria with food court, additional dining-seminar rooms and the University Store.

THE CECIL H. AND IDA GREEN BIOMEDICAL RESEARCH BUILDING, a nine-story building, houses the Center for Human Nutrition, the Harold C. Simmons Comprehensive Cancer Center, and offices and laboratories for Biochemistry and Internal Medicine.

THE CECIL H. AND IDA GREEN SCIENCE BUILDING is the largest building on the South Campus. The Green Science Building houses major research facilities for the departments of Biochemistry, Cell Biology, Internal Medicine and Molecular Genetics. A major portion of the building is devoted to individual multipurpose laboratories for use by students.

THE KARL HOBLITZELLE CLINICAL SCIENCE BUILDING, a nine-level building, contains principal offices and laboratories of major clinical departments, including Internal Medicine, Obstetrics and Gynecology, Orthopaedic Surgery, Otolaryngology - Head and Neck Surgery, Pathology, Pediatrics, Physical Medicine and Rehabilitation, Radiology, and Surgery.

THE PHILIP R. JONSSON BASIC SCIENCE RESEARCH BUILDING adjoins the Green Science Building. The five-level facility is an important research location of the departments of Biochemistry, Cell Biology, Internal Medicine and Pediatrics. This building also houses facilities for electron and light microscopy and the Office of Medical Education.

THE EUGENE MCDERMOTT ACADEMIC ADMINISTRATION BUILDING, a landmark 12-level structure, gives the South Campus a striking focal point and houses major administrative offices and departments. These include the offices of the president and vice presidents of the medical center and the deans of the medical and graduate schools. The campus cashier's office is located on the first floor.

THE EUGENE MCDERMOTT PLAZA is the architectural center of the South Campus, affording scenic outdoor access between buildings. Below the plaza are the medical center's principal teaching facilities, including four large lecture halls arranged in a circle around a central audiovisual core. A student lounge area faces a sunken garden with a pool and fountain, part of the Margaret and Erik Jonsson Gardens. Also on the lower level are Client Services, a student snack area and academic classrooms.

THE ALGUR H. MEADOWS DIAGNOSTIC IMAGING CENTER, a 1 1/2-story facility, serves patients at UT Southwestern Medical Center and Parkland Memorial Hospital. It houses three magnetic resonance imaging units for clinical diagnosis, as well as for medical education and research. The center's funding includes support from the Meadows Foundation of Dallas.

THE HARRY S. MOSS CLINICAL SCIENCE BUILDING provides office and laboratory space for major clinical departments and principal research centers. Housed in its eight levels are facilities for Cell Biology, the Green Center for Reproductive Biology Sciences, Internal Medicine, Neurology, Obstetrics and Gynecology, Pediatrics, and Urology.

THE SKILLERN BUILDING, a one-story building adjacent to the Bryan Williams, M.D. Student Center at the west end of the Eugene McDermott Plaza, houses the offices of the Registrar, Student Financial Aid, and Student and Alumni Affairs.

THE CHARLES CAMERON SPRAGUE CLINICAL SCIENCE BUILDING is interconnected with two hospitals on the South Campus: Parkland Memorial Hospital and UT Southwestern University Hospital - Zale Lipshy. The Sprague Building houses clinical faculty in the departments of Anesthesiology and Pain Management, Internal Medicine, Neurological Surgery, Neurology, Physical Medicine and Rehabilitation, Psychiatry, Radiology, and Surgery.

THE BRYAN WILLIAMS, M.D. STUDENT CENTER, named for a former faculty member and associate dean for student affairs, includes a gymnasium, multipurpose rooms, an indoor jogging track, racquetball courts, a conditioning room with weights and exercise equipment, and locker and shower facilities.

■ NORTH CAMPUS

THE PAUL M. BASS ADMINISTRATIVE AND CLINICAL CENTER is an office complex adjacent to the North Campus housing the Office of Human Resources; Communication, Marketing and Public Information, including Biomedical Art Services; Grants Management; Mail Services; University Police; and programs in Biomedical Communications, Clinical Psychology, Emergency Medicine Education and Psychiatry. There is a day care facility on site.

THE BILL AND RITA CLEMENTS ADVANCED MEDICAL IMAGING BUILDING encompasses the first structure on the North Campus and houses clinical and research facilities for Radiology,



Psychiatry, the Mary Nell and Ralph B. Rogers Magnetic Research Center and the UT Southwestern Advanced Imaging Research Center.

THE NANCY B. AND JAKE L. HAMON BIOMEDICAL RESEARCH BUILDING adjoins the Simmons Biomedical Research Building. This eight-level building houses facilities for Immunology, Neuroscience, Molecular Biology, Microbiology and two research centers: the Hamon Center for Basic Research in Cancer and the McDermott Center for Human Growth and Development.

THE W.A. MONTY AND TEX MONCRIEF RADIATION ONCOLOGY BUILDING, adjacent to the Seay Biomedical Building, offers state-of-the-art radiation therapy and research equipment. It also houses the Department of Radiation Oncology.

THE T. BOONE PICKENS BIOMEDICAL BUILDING, the largest building on the North Campus, houses offices and laboratories for Biochemistry, Developmental Biology, the Howard Hughes Medical Institute, Neurology, Pharmacology, Physiology and the Harold C. Simmons Comprehensive Cancer Center. The building also houses a food court, University Store and annex to the Library.

THE SEAY BIOMEDICAL BUILDING, an eight-story building, adjoins the Simmons Biomedical

Research Building and houses clinical facilities for Internal Medicine, Psychiatry and Surgery. Also located in the building are Radiation Oncology research facilities, the Seay Center for Basic and Applied Research in Psychiatric Illness, the Harold C. Simmons Comprehensive Cancer Center, and the UT Southwestern Center for Breast Care.

THE SIMMONS BIOMEDICAL RESEARCH BUILDING, in honor of Reuben Leon and Fairess Clark Simmons, was the first research tower built on the North Campus. The 11-story building houses the Excellence in Education Foundation Auditorium and the Simmons Comprehensive Cancer Center administrative offices. Major research facilities include Developmental Biology, Neuroscience, the Hamon Center for Therapeutic Oncology Research, the Komen/UT Southwestern Breast Cancer Research Program, the Cancer Immunobiology Center, and the McDermott Center for Human Growth and Development.

■ WEST CAMPUS

CLINICAL BUILDING 1 and **CLINICAL BUILDING 2**, located on the west side of Harry Hines Boulevard north of Record Crossing, house clinical facilities for the departments of Anesthesiology and Pain Management, Dermatology, Family and Community Medicine, Obstetrics and Gynecology, Oral and Maxillofacial Surgery, and Psychiatry.

THE OUTPATIENT BUILDING is located on Inwood Road adjacent to UT Southwestern University Hospital - St. Paul. This seven-story building houses world-class facilities that include a surgical center, radiology imaging services and overnight guest suites, in addition to clinics, physician offices and diagnostic services. Clinical and academic offices for Orthopaedic Surgery, Plastic Surgery, General Surgery and Internal Medicine are located in the Outpatient Building.

THE UT SOUTHWESTERN SCHOOL OF HEALTH PROFESSIONS BUILDING is located at 6011 Harry Hines Blvd., two blocks north of the South Campus and across Harry Hines Boulevard from the North Campus. The building houses programs in Clinical Nutrition, Medical Laboratory Sciences, Physician Assistant Studies, Physical Therapy and

Prosthetics-Orthotics, as well as the offices of the deans and administration. Offices for the UT Health Science Center at Houston's School of Public Health, Dallas, M.P.H. program are also located in this building.

FACILITIES AND SERVICES

THE ANIMAL RESOURCES CENTER is responsible for the production, procurement, conditioning, maintenance and health status of experimental animals throughout the institution. In addition, the ARC provides experimental surgical facilities to support animal research programs. Faculty and staff are available for consultation and guidance in the selection and use of animal models for research and teaching and for the sources of specific species and strains.

THE BIOINSTRUMENTATION RESOURCE CENTER provides engineering and technical staff to help design and fabricate biomedical and scientific instrumentation and equipment, develop laboratory automation and data-acquisition systems, and consult on the specification and application of laboratory instrumentation. This research-support service center also offers calibration, testing, maintenance and repair of laboratory equipment. Microcomputers and software programming for laboratory instrument control and engineering simulations can be obtained through the center.

THE DIVISION OF BIostatISTICS provides professional consulting and programming in statistical analysis and database management on a fee basis and instruction in the use of statistical software for the faculty, staff and students at UT Southwestern and affiliated institutions. Assistance is available to investigators (one hour at no charge) preparing proposals for IRB or IACRAC review.

Statistical consultants provide expertise for design and analysis of simple and complex research studies. Database consultants work on a variety of projects, including determining the best data management approach for a project, selecting an appropriate computer platform, designing a database, creating custom programs for data

entry, developing reporting procedures and retrieving information for subsequent statistical analysis. Faculty members offer short courses on statistical and computing topics.

Programmers are available to design websites to support research tasks, including Web-based data access, interactive Web forms and other programmable Web tasks. The division also offers campus site licenses for SPSS and SAS programs. Technical support is provided for some computer-based statistical analysis programs, including SAS and SPSS.

The division is responsible for campus testing and evaluation services and also provides expertise in creating and reading scannable forms.

INFORMATION RESOURCES provides computing, voice, audiovisual and data-communication services to the UT Southwestern campus, including the hospital and clinics. The IR organization includes the following services: Administrative Computing manages data-center operations, a centralized operating-systems group and the development of all administrative computing systems. Client Services oversees the UT Southwestern Help Desk and systems training. The development, management and procurement of health care-related systems are managed by Clinical Information Services. Video production and teleconferencing are produced by IR's Medical Television Center. Network Services designs and manages an extensive data-communication network, including local-area/wide-area networks, connectivity to affiliated institutions, Internet and Internet2.

Information Resources works with UT Southwestern's information security officer to manage a comprehensive information security program as an integral component of all computing and communications activities. This program includes education, central access administration, disaster recovery, and the formulation of information security policies and procedures.

INTERNATIONAL AFFAIRS helps acquire and maintain valid visa status for noncitizen scholars, students, teachers, researchers and other employees. Immigration law is complex and changeable. Care is required to bring a person here with the

appropriate documents. International Affairs should be contacted as soon as possible to allow visa and other requirements to be handled with a minimum of anxiety. Additional information can be found at www.utsouthwestern.edu/utsw/home/intaff/index.html.

THE LIBRARY offers a wide range of traditional and digital information services to members of the campus community. With facilities on both the North and South campuses, the Library is open for study, research and exploration seven days, 101 hours per week. The North Campus Branch Library is open 24 hours a day, seven days a week with campus ID card access. The Library's extensive website (www.utsouthwestern.edu/library) is available at any hour. Authorized users are eligible for accounts on the Library's information system, which features access to a variety of full-text databases and information, such as Harrison's Online and MD Consult. More than 30,000 full-text electronic journal subscriptions and 20,000 electronic books also are available.

A computer commons offers convenient access to online curriculum materials and productivity software. The Library's collection of biomedical and scientific journals, books, videotapes, audiotapes, CD-ROMs and academic reserve materials are carefully selected to encourage self-directed study. The Library is involved in both the medical and graduate school and some health professions curricula, and individual instruction and other classes also are available.

The Library participates in regional and national consortia and networks, which speed interlibrary loan service and promote resource sharing. TexShare cards enabling students to borrow materials from other colleges and some public libraries in Texas are available at the Library's information desk.

THE OFFICE OF MEDICAL EDUCATION provides academic support services and programs for the medical and health professions schools. OME professionals collaborate with faculty to design and develop curricula, courses and instructional materials; incorporate interactive learning techniques; and integrate technology into the curriculum via the Web Curriculum Group.

OME provides a comprehensive array of academic assistance services to students. These services include learning skills assessment and development, academic advice and counsel, supplemental peer tutoring, assistance with stress management, communication skills development, and situational referrals.

OME also helps faculty members develop research and administrative skills, conduct educational research to improve teaching and learning, write valid and reliable test items, and develop grant proposals to fund educational innovations.

STUDENT HEALTH and STUDENT MENTAL HEALTH SERVICES, located in the Aston Building, help to maintain and promote good health among all students at UT Southwestern. Care is available for students with medical or emotional problems.

Students may call Student Health Services at 214-645-8690. A health care provider is available full time by appointment. Students may call Student Mental Health Services confidentially at 214-645-8680 for an appointment with a psychiatrist or counselor. The staff will arrange for hospital or specialty care for a student when indicated.

After hours and during weekends and holidays, students may call 214-645-8690 to reach the physician on call in General Internal Medicine. If a student is experiencing a medical emergency, he or she should report to the Emergency Care Center at UT Southwestern University Hospital - St. Paul or any emergency room of choice and identify himself or herself as a student of this institution. For urgent mental health care, call 214-645-8680 to reach the psychiatrist on call.

The cost of services provided by the staff of Student Health and Student Mental Health Services is covered by a portion of the student services fee and medical services fee. However, payment for hospital care, specialty care, emergency care, X-rays and laboratory services is the responsibility of the student. For this reason, the student is required to maintain health-insurance coverage.

Medical records of all students seen in Student Health Services are confidential and are subject to the Family Educational Rights and Privacy Act.

According to the UT System and the Texas Department of Health, students must be current on the required immunizations prior to matriculation. See Required Immunizations in the Student Information chapter for more information.

THE TRANSPLANT SERVICES CENTER is a clinical and academic service department that procures, processes, stores and distributes tissues, such as corneas, sclera, skin, tendon, fascia lata, bone, heart valves and vessels. These transplantable tissues are provided to physicians, hospitals or other procurement agencies upon request. Other tissue and tissue-procurement services, including autograft preservation, are available to physicians by individual arrangement.

Research and teaching tissues, as well as acquisition services, are available to the medical center faculty and to researchers outside the university on request. The Transplant Services Center strives to advance technology in cryopreservation and tissue delivery as well as clinical care through these cooperative efforts.

To meet the medical needs of the community, the Transplant Services Center provides donor information and public and professional education regarding organ and tissue donation. Transplant Services attempts to provide allografts for transplant in a manner appropriate to both the recipient's need and concerns of the donor's family.

BRYAN WILLIAMS, M.D. STUDENT CENTER provides a range of offerings from structured programs to informal activities, such as intramural sports and sport clubs, group fitness programs, special events, and more than 80 student organizations. The award-winning state-of-the-art recreational facility is available for students, residents, faculty and staff. Membership for students is included in the student services fee. Admission requires a valid UT Southwestern ID card.

DISTANCE LEARNING

UT Southwestern Medical Center offers distance learning courses to both on-campus and off-campus students enrolled for academic

credit on the health professions or for continuing education.

UT Southwestern does not offer, nor does it plan to offer at this time, full degree programs via distance education.

UT Southwestern supports and participates in the UT TeleCampus, which facilitates many of the elements in the UT Southwestern institutional plan for distance education/distance learning.

HEALTH CARE INSTITUTIONS

The clinical faculty at UT Southwestern offers patient care at a number of affiliated hospitals and clinics in Dallas and Fort Worth, including UT Southwestern University Hospitals.

UT Southwestern Medical Center has two hospital facilities. **UT SOUTHWESTERN UNIVERSITY HOSPITAL - ST. PAUL**, a 271-bed facility located on the West Campus, offers cardiology, cardiothoracic surgery, heart and lung transplantation, obstetrics and gynecology, orthopaedic surgery, and vascular surgery. **UT SOUTHWESTERN UNIVERSITY HOSPITAL - ZALE LIPSHY**, a 144-bed facility on the South Campus, is adjacent to Parkland Memorial Hospital. Faculty physicians provide diagnostic neurological services and treatments, including stroke-patient care, as well as ophthalmology, oral surgery, psychiatry and other services.

Outpatient services are offered in several clinical specialties throughout the campus.

■ AFFILIATED HEALTH CARE INSTITUTIONS

PARKLAND MEMORIAL HOSPITAL, a component of Parkland Health & Hospital System operated by the Dallas County Hospital District, is the major teaching location of the medical center. This large urban hospital offers a variety of clinical services, ranging from outpatient clinics to an extremely active emergency service, providing an abundance of clinical situations for teaching purposes. Parkland is contiguous to the medical center's South Campus, providing for a free flow of students and staff between the two institutions.

CHILDREN'S MEDICAL CENTER DALLAS is one of the largest pediatric health care providers in the

nation. With nearly 50 specialty clinics and programs, Children's is the primary pediatric teaching hospital for the university.

DALLAS VETERANS AFFAIRS MEDICAL CENTER, a part of the VA North Texas Health Care System, is another valuable health care facility affiliated with the medical center. It is a general hospital with 544 beds and a full range of clinical facilities used by the medical school's undergraduates and residents. These facilities include medical and surgical services in all major specialty areas. All training is under the direction of the Dean's Committee and is supervised by a large full-time staff augmented by consultants.

SOUTHWESTERN INSTITUTE OF FORENSIC SCIENCES is on the medical center's South Campus and serves as the base for teaching forensic medicine. It comprises the Dallas County Criminal Investigation Laboratory and the Office of the County Medical Examiner. It also interacts closely with the Transplant Services Center.

BAYLOR UNIVERSITY MEDICAL CENTER is a tertiary-care facility with 1,025 beds. Baylor has an active teaching program at the house-staff and medical-student levels and is supported by a number of full-time staff members who also are on the medical school's faculty.

METHODIST HOSPITALS OF DALLAS has several hospitals in the Dallas area. Methodist Dallas Medical Center, a 420-bed hospital, is the hub of the system, providing teaching connections with the medical center. Methodist Charlton Medical Center, which has 301 beds, offers a family medicine residency co-sponsored by the medical school's Department of Family and Community Medicine.

RICHARDSON METHODIST MEDICAL CENTER and UT Southwestern Medical Center have formed an oncology affiliation. This partnership brings an advanced level of cancer care to the region by providing medical, surgical and radiation oncology services plus new therapies in drug research, genetic counseling, patient education and support services. UT Southwestern provides medical direction for the cancer center, and Richardson

Methodist provides the facilities and operating support.

JOHN PETER SMITH HOSPITAL in Fort Worth, with 400 beds, is a component of the JPS Health Network. It is the site of the largest of UT Southwestern Medical School's three-year residency training programs in family and community medicine.

TEXAS HEALTH PRESBYTERIAN HOSPITAL DALLAS, with 866 beds, is a teaching hospital of UT Southwestern. Several clinical services of Presbyterian Hospital are closely related to the corresponding departments of the medical school through residency programs affiliated with the school. Several full-time faculty members are based there.

TEXAS SCOTTISH RITE HOSPITAL FOR CHILDREN, a charitable institution operated by the Scottish Rite Bodies of Texas, provides inpatient and outpatient care at no charge to children with orthopaedic or neurological challenges, as well as dyslexia and other learning disorders. UT Southwestern Medical School performs teaching and clinical services in several fields, including orthopaedics, neurology, pediatrics, prosthetics-orthotics, anesthesiology and radiology.

Other health facilities associated with the medical center include Carter BloodCare, HealthSouth Dallas Rehabilitation Institute, Terrell State Hospital, North Central Texas Medical Foundation in Wichita Falls, and McLennan County Medical Education and Research Foundation in Waco.

SPECIAL PROGRAMS AND ENDOWMENTS

■ ENDOWED CENTERS

THE WALTER M. AND HELEN D. BADER CENTER FOR RESEARCH ON ARTHRITIS AND AUTOIMMUNE DISEASES was established with a bequest from Mrs. Bader. Dr. Edward K. Wakeland, chairman of immunology, directs the center.

THE BARRETT FAMILY CENTER FOR PEDIATRIC ONCOLOGY, which seeks ways to prevent and cure childhood cancer, was established through a gift from Bill Barrett. It is directed by Dr. George R. Buchanan, professor of pediatrics.

THE DORIS AND HARRY W. BASS JR. CLINICAL CENTER FOR HEART, LUNG AND VASCULAR DISEASE, established with a gift from the Harry W. Bass Jr. Foundation and administered through Southwestern Medical Foundation, supports the Heart, Lung and Vascular Center for Excellence at UT Southwestern.

THE PAUL M. BASS CENTER FOR NEUROLOGICAL INNOVATION was established with a gift from Mr. and Mrs. Harold C. Simmons (through Southwestern Medical Foundation) to honor their longtime friend.

THE EFFIE MARIE CAIN ALZHEIMER'S RESEARCH CENTER and a distinguished chair were established through a gift from the Cain Foundation to support the work of UT Southwestern researchers in Alzheimer's disease.

THE CAIN/DENIUS COMPREHENSIVE CENTER IN MOBILITY RESEARCH was established by the Cain Foundation to support research into various causes of mobility impairment, such as spinal-cord injury, neuromuscular diseases and aging.

THE CHILDREN'S CANCER FUND COMPREHENSIVE CENTER FOR PEDIATRIC ONCOLOGY RESEARCH was established with gifts from the Children's



Cancer Fund and others. The center has three components — clinical research, translational laboratory research and basic research.

THE JAMES M. COLLINS CENTER FOR BIOMEDICAL RESEARCH was established through gifts from the James M. Collins Foundation, the Carr P. Collins Foundation and Southwestern Medical Foundation. Research in the center focuses on pulmonary disease. The center's director is Dr. Jonathan C. Weissler, chief of pulmonary medicine.

THE CRYSTAL CHARITY BALL CENTER FOR PEDIATRIC BRAIN AND NEUROLOGIC DISEASES was funded with proceeds from the 1995 Crystal Charity Ball. The center is dedicated to improved therapy and prevention of neurological disorders in children.

THE CRYSTAL CHARITY BALL CENTER FOR RESEARCH IN PEDIATRIC CRITICAL CARE was established with funds from the 1997 Crystal Charity Ball. The center focuses on developing new treatments for life-threatening infections, pulmonary hypertension and respiratory distress syndrome.

THE CRYSTAL CHARITY BALL COLLABORATIVE PROGRAM FOR PEDIATRIC BRAIN INJURIES was funded with proceeds from the 2001 Crystal Charity Ball. The program is a joint effort between UT Southwestern and UT Dallas Callier Center for Communication Disorders.

THE HOUSTON J. AND FLORENCE A. DOSWELL CENTER FOR THE DEVELOPMENT OF NEW APPROACHES FOR THE TREATMENT OF HYPERTENSION was established through a bequest from Mrs. Doswell. The center focuses on new ways to treat this disease that affects more than 75 million Americans.

THE GILL CENTER FOR RESEARCH ON BRAIN CELL COMMUNICATION was established with a gift from the Pauline Allen Gill Foundation through Southwestern Medical Foundation to study how brain cells communicate.

THE CECIL H. AND IDA GREEN CENTER FOR REPRODUCTIVE BIOLOGY SCIENCES, established through a gift from Mr. and Mrs. Green, supports

basic, applied and clinical research into reproductive biology. Dr. W. Lee Kraus, professor of obstetrics and gynecology and pharmacology, is the director.

THE CECIL H. AND IDA GREEN COMPREHENSIVE CENTER FOR MOLECULAR, COMPUTATIONAL AND SYSTEMS BIOLOGY was established through a gift from the Cecil H. and Ida Green Foundation. Dr. Rama Ranganathan, professor of pharmacology, directs the center.

THE BEATRICE MENNE HAGGERTY CENTER FOR RESEARCH ON BRAIN INJURY AND REPAIR IN STROKES, established with a gift from the Patrick and Beatrice Haggerty Foundation, provides support for research on the complex reasons behind neuronal cell death. Dr. Mark P. Goldberg, chairman of neurology, directs the center.

THE NANCY B. AND JAKE L. HAMON CENTER FOR BASIC RESEARCH IN CANCER was established by Mrs. Hamon through Southwestern Medical Foundation. It is directed by Dr. Eric N. Olson, chairman of molecular biology.

THE NANCY B. AND JAKE L. HAMON CENTER FOR THERAPEUTIC ONCOLOGY RESEARCH was established by Mrs. Hamon through Southwestern Medical Foundation. The center is directed by Dr. John D. Minna, professor of internal medicine and pharmacology.

THE DOROTHY L. AND JOHN P. HARBIN CENTER FOR ALZHEIMER'S DISEASE RESEARCH was created through a gift from Mr. Harbin. The center conducts studies aimed at understanding the underlying causes of dementia and discovering means to reverse or prevent the derangements that produce the disease.

THE ROBERT T. HAYES CENTER FOR MINERAL METABOLISM RESEARCH was established through a gift from Mr. Hayes. The center conducts research to develop better treatments and preventive therapies for osteoporosis and kidney stones.

THE HOFFMAN FAMILY CENTER IN GENETICS AND EPIDEMIOLOGY was established with a gift from Adelyn Hoffman through Southwestern Medical

Foundation to support UT Southwestern's efforts in these two fields.

THE HOWARD HUGHES MEDICAL INSTITUTE at UT Southwestern is devoted to research in cell biology and regulation, genetics, immunology, neuroscience, and structural biology.

THE ERIK JONSSON CENTER FOR RESEARCH IN MOLECULAR GENETICS AND HUMAN DISEASE was created with funds from the Excellence in Education Foundation. Director of the center is Dr. Michael S. Brown, professor of internal medicine and molecular genetics and winner of the 1985 Nobel Prize in physiology or medicine.

THE KIMBERLY-CLARK CENTER FOR PHYSICAL MEDICINE AND REHABILITATION RESEARCH, established through a gift from the Kimberly-Clark Foundation, studies injuries and illnesses that impair mobility. Dr. Karen J. Kowalske, chairman of physical medicine and rehabilitation, directs the center.

THE KOMEN/UT SOUTHWESTERN BREAST CANCER RESEARCH PROGRAM, established with a gift from Susan G. Komen for the Cure, plus gifts from Mr. and Mrs. Harold C. Simmons, Nancy B. Hamon and others, is a specialized center affiliated with the Harold C. Simmons Comprehensive Cancer Center.

THE LOWE FOUNDATION CENTER FOR WOMEN'S PREVENTATIVE HEALTH CARE was established by a gift from a Houston-based foundation chaired by Mary Ralph Lowe. The center is directed by Dr. Karen D. Bradshaw, professor of obstetrics and gynecology and surgery.

THE EUGENE MCDERMOTT CENTER FOR HUMAN GROWTH AND DEVELOPMENT was established through gifts from the Biological Humanics Foundation and the Eugene McDermott Foundation to study human development, with special attention on genetic regulation. Director of the center is Dr. Helen H. Hobbs, chief of clinical genetics.

THE EUGENE MCDERMOTT CENTER FOR PAIN MANAGEMENT was established through gifts from the Biological Humanics Foundation. The center,

under the direction of Dr. Carl Noe, professor of anesthesiology and pain management, combines state-of-the-art pain management treatment and patient care with comprehensive basic and clinical pain research.

THE MOBILITY FOUNDATION CENTER FOR REHABILITATION RESEARCH was established with a gift from the Mobility Foundation to Southwestern Medical Foundation. Under the direction of Dr. Duke S. Samson, chairman of neurological surgery, it focuses on applied research aimed at developing improved therapies for mobility-impaired patients.

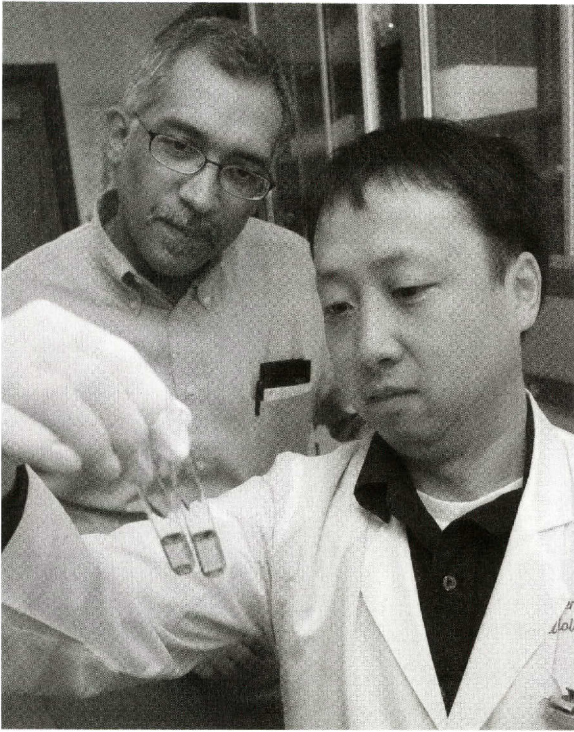
THE W.A. "TEX" AND DEBORAH MONCRIEF JR. CENTER FOR CANCER GENETICS was established with a gift from Mr. and Mrs. Moncrief to support cancer genetics research. The center is directed by Dr. John D. Minna, professor of internal medicine and pharmacology.

THE HARRY S. MOSS HEART CENTER is supported by income from a trust established by the late Harry S. Moss. The center carries out an interdisciplinary research program related to cardiovascular diseases.

THE NEARBURG FAMILY CENTER FOR BASIC AND CLINICAL RESEARCH IN PEDIATRIC ONCOLOGY was established by a gift from Charles and Dana Nearburg to support basic research in pediatric oncology. Dr. Eric N. Olson, chairman of molecular biology, directs the center.

THE CHRIS AND REECE A. OVERCASH JR. FAMILY CENTER FOR BREAST CARE RESEARCH, in Honor of Dr. George Peters, was established with a gift from the Overcash family through Southwestern Medical Foundation. Research in the center focuses on improving treatments for breast cancer.

THE REECE A. OVERCASH JR. CENTER FOR RESEARCH ON COLON CANCER, in Honor of Dr. Eugene P. Frenkel, was established by the family of the late Mr. Overcash through Southwestern Medical Foundation. The center's research is directed at discovering the causes of colon cancer and improving treatment for this disease.



THE CHARLES AND JANE PAK CENTER FOR MINERAL METABOLISM AND CLINICAL RESEARCH coordinates the activities of the Robert T. Hayes Center for Mineral Metabolism Research and the Center for Training in Clinical Investigation. The director is Dr. Orson W. Moe, professor of internal medicine and physiology.

THE CHARLES Y.C. PAK AND DONALD W. SELDIN CENTER FOR METABOLIC RESEARCH, established by Dr. and Mrs. Pak to honor his mentor, Dr. Seldin, supports training of clinical researchers in the area of metabolism.

THE GEORGE N. PETERS, M.D., CENTER FOR BREAST SURGERY was established by friends, colleagues and admirers of the prominent Dallas breast cancer surgeon who retired from the UT Southwestern faculty in 2001.

THE POGUE FAMILY CENTER FOR ADVANCED BRAIN IMAGING IN ALZHEIMER'S DISEASE was created with funds from Mr. and Mrs. Mack Pogue through Southwestern Medical Foundation. The center provides modern imaging technology for

early diagnosis and evaluation of Alzheimer's disease.

THE LAWRENCE S. POLLOCK JR. CENTER FOR INTESTINAL CANCER RESEARCH was established with a gift from the Pollock Foundation to Southwestern Medical Foundation. Researchers in the center are studying causes and treatments for this disease.

THE POLLOCK FAMILY CENTER FOR RESEARCH IN INFLAMMATORY BOWEL DISEASE was established with a gift from the Pollock Foundation to Southwestern Medical Foundation to support research into greater understanding of this disease.

THE C. VINCENT PROTHRO CENTER FOR RESEARCH IN BASIC NEUROSCIENCE was funded by the Vin and Caren Prothro Foundation through Southwestern Medical Foundation and provides support for new areas of research in neuroscience.

THE AUDRE AND BERNARD RAPOPORT CENTER FOR CARDIOVASCULAR RESEARCH was established with a gift from Mr. and Mrs. Rapoport. Dr. M. Elizabeth Brickner, professor of internal medicine, directs the center's study of the pathogenesis and treatment of ischemic heart disease and congenital heart disease.

THE MARY NELL AND RALPH B. ROGERS MAGNETIC RESONANCE IMAGING CENTER was established by Mr. and Mrs. Rogers to support UT Southwestern's efforts in developing innovative uses of imaging technology.

THE ELAINE D. AND CHARLES A. SAMMONS HEART, LUNG AND VASCULAR COMPREHENSIVE CENTER was established with funds from the Sammons Dallas Foundation. The center provides inpatient and outpatient services as well as clinical and translational research programs.

THE SARAH M. AND CHARLES E. SEAY CENTER FOR BASIC AND APPLIED RESEARCH IN PSYCHIATRIC ILLNESS was established by Mr. and Mrs. Seay through Southwestern Medical Foundation. The center brings together clinical and laboratory research relevant to mental disorders.

THE SARAH M. AND CHARLES E. SEAY CENTER FOR EMERGENCY PEDIATRIC ORTHOPAEDIC TREATMENT AND RESEARCH was established by Mr. and Mrs. Seay through Southwestern Medical Foundation. The center supports collaborative programs at UT Southwestern, Children's Medical Center Dallas and Texas Scottish Rite Hospital for Children.

THE SARAH M. AND CHARLES E. SEAY CENTER FOR PEDIATRIC UROLOGY was created by a gift from Mr. and Mrs. Seay to study and treat urologic problems associated with early childhood. Dr. Linda A. Baker, professor of urology, directs the center.

THE SARAH M. AND CHARLES E. SEAY CENTER FOR RESEARCH ON PEDIATRIC BRAIN INJURY was also established by a gift from Mr. and Mrs. Seay.

THE SARAH M. AND CHARLES E. SEAY COMPREHENSIVE CENTER FOR PEDIATRIC EMERGENCY AND INTENSIVE CARE was established by Mr. and Mrs. Seay to provide multidisciplinary focus to the most serious illnesses and injuries of children through collaborative facilities at UT Southwestern, Texas Scottish Rite Hospital for Children and Children's Medical Center Dallas.

THE ANNETTE SIMMONS STEREOTACTIC TREATMENT CENTER was established by Mr. and Mrs. Harold Simmons to offer the most advanced, noninvasive therapies for brain tumors and extracranial lesions, such as lung, liver and kidney cancers.

THE HAROLD AND ANNETTE SIMMONS COMPREHENSIVE CENTER FOR RESEARCH AND TREATMENT IN BRAIN AND NEUROLOGICAL DISORDERS was established with funding from Mr. and Mrs. Simmons through Southwestern Medical Foundation. The center enables UT Southwestern to make major progress in basic and clinical neuroscience.

THE HAROLD C. SIMMONS COMPREHENSIVE CANCER CENTER pursues new initiatives in cancer research. The center brings together a broad spectrum of basic and clinical research spanning a large number of departments in the medical center. Dr. James K.V. Willson, associate dean for oncology programs, is the director.

THE BOB SMITH, M.D., CENTER FOR RESEARCH IN PEDIATRIC PSYCHIATRY was established through a gift from Dr. Smith, a Dallas pediatrician, and the Dr. Bob & Jean Smith Foundation to Southwestern Medical Foundation. The center supports UT Southwestern's research, training and clinical activities in child psychiatry.

THE DR. BOB SMITH FOUNDATION CENTER FOR PROSTATE RESEARCH was established with a gift from the Dr. Bob & Jean Smith Foundation through Southwestern Medical Foundation to boost research efforts into the second-leading cause of cancer death in American men.

THE ANNETTE G. STRAUSS CENTER IN NEURO-ONCOLOGY was established through donations from Ted Strauss and other donors as a tribute to the former Dallas mayor. The center is directed by Dr. Bruce E. Mickey, vice chairman of neurological surgery.

THE TOUCHSTONE CENTER FOR DIABETES RESEARCH was established with a gift from Mrs. Lucian Touchstone to support the development of new treatments aimed at ameliorating and ultimately preventing this disease. Dr. Philipp Scherer, professor of cell biology and internal medicine, directs the center.

THE KENT WALDREP CENTER FOR BASIC RESEARCH ON NERVE GROWTH AND REGENERATION was established through gifts from the Southwestern Ball and the Kent Waldrep National Paralysis Foundation to support basic research in nerve growth, function and regeneration. The center is directed by Dr. Luis F. Parada, chairman of developmental biology.

THE NEILL WALSDORF SR. BIOTECHNOLOGY CENTER IN MINERAL METABOLISM was established with funds from Mission Pharmacal Co., which is based in San Antonio. Under the direction of Dr. Charles Y.C. Pak, professor of internal medicine, the center focuses on translating research from the Charles and Jane Pak Center for Mineral Metabolism and Clinical Research to patient services, including new drugs and devices to diagnose, treat and prevent kidney stones and osteoporosis.

THE JEAN H. & JOHN T. WALTER JR. CENTER FOR RESEARCH IN AGE-RELATED MACULAR DEGENERATION was established by a gift from Mr. and Mrs. Walter to Southwestern Medical Foundation. Directed by Dr. James P. McCulley, chairman of ophthalmology, the center focuses on identifying genetic markers associated with AMD and devising therapies to prevent vision loss.

THE JEAN H. & JOHN T. WALTER JR. CENTER FOR RESEARCH IN UROLOGIC ONCOLOGY was created through a gift to Southwestern Medical Foundation from the Walters. Under the direction of Dr. Jer-Tsong Hsieh, professor of urology, the center's research efforts are focused on treating and preventing malignancies of the urinary tract, kidney, bladder and prostate.

THE JEAN WALTER CENTER FOR RESEARCH IN MOVEMENT DISORDERS conducts basic and clinical research dealing with involuntary movement disorders, such as blepharospasm, dystonias, Parkinson's disease and others. It was established through gifts from Mr. and Mrs. J. Thomas Walter Jr. to Southwestern Medical Foundation.

THE JEAN D. WILSON CENTER FOR BIOMEDICAL RESEARCH was established with a gift from Dr. Wilson and his sister, Dr. Margaret Sitton, to promote research in endocrinology.

THE WINSPEAR FAMILY SPECIAL CENTER FOR RESEARCH ON THE NEUROPATHOLOGY OF ALZHEIMER'S DISEASE was established with a gift from Margot and William Winspear to support research into the causes of Alzheimer's disease. Dr. Charles L. White III, professor of pathology, is the director.

THE MILDRED WYATT AND IVOR P. WOLD CENTER FOR GERIATRIC CARE was established by Mr. and Mrs. Wold to improve medical care for this rapidly growing segment of the U.S. population. The center is directed by Dr. Craig D. Rubin, professor of internal medicine.

THE CANCER IMMUNOBIOLOGY CENTER is a specialized research center affiliated with the Harold C. Simmons Comprehensive Cancer Center. The center is directed by Dr. Ellen S.

Vitetta, professor of immunology and microbiology.

THE CENTER FOR ALZHEIMER'S AND NEURODEGENERATIVE DISEASE RESEARCH was established to support investigations into the causes of Alzheimer's disease and other forms of dementia. It is directed by Dr. Joachim Herz, professor of molecular genetics.

THE CENTER FOR BASIC RESEARCH IN MOLECULAR IMMUNOLOGY was established through a gift from Mr. and Mrs. Louis Beecherl Jr. to conduct basic immunology studies that are relevant to understanding and preventing organ rejection following transplantation.

THE CENTER FOR HUMAN NUTRITION was established through a special endowment to conduct research on human nutrition, to promote sound nutritional education for health professionals and to develop useful nutrition programs for lay people. The center is directed by Dr. Scott M. Grundy, chairman of clinical nutrition.

THE NUCLEAR MEDICINE CENTER conducts research on the circulation of the brain and the heart in health and in disease using experimental imaging methods. The director of the center is Dr. Frederick J. Bonte, professor of radiology.

■ LABORATORIES

THE EXXON CORPORATION LABORATORIES FOR MOLECULAR RESEARCH, established with a gift from the Exxon Mobil Corp., provide state-of-the-art equipment for research in oncology and genetics.

THE GIFFORD LABORATORIES FOR DIABETES RESEARCH were created through a gift from the Gifford Foundation. The laboratories are directed by Dr. Roger H. Unger, professor of internal medicine.

THE W.M. KECK FOUNDATION GENE MANIPULATION LABORATORIES were designed and equipped for basic genetic research with a gift from the W.M. Keck Foundation, one of the world's largest charitable organizations. Nobel laureates Drs. Michael S. Brown, professor of molecular genetics

and internal medicine, and Joseph L. Goldstein, chairman of molecular genetics, direct the laboratories.

THE W.M. KECK FOUNDATION HUMAN GENOMICS LABORATORY was funded by a grant from the Keck Foundation to support research on the role of genetic mutation in human disease.

THE DONALD W. SELDIN, M.D., LABORATORIES FOR NEUROSCIENCE RESEARCH were created through a gift from the Karl and Esther Hoblitzelle Fund of Southwestern Medical Foundation to support UT Southwestern's efforts in neuroscience research.

THE PAULINE AND ADOLPH WEINBERGER LABORATORIES FOR CARDIOPULMONARY RESEARCH were established through a gift from Mr. and Mrs. Weinberger. Researchers study circulatory and pulmonary reactions to stress. Director of the laboratories is Dr. Jere H. Mitchell, clinical professor of internal medicine and physiology.

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THE BEATRICE AND MIGUEL ELIAS FUND was established from the estate of Mrs. Elias and from the Beatrice and Miguel Elias Charitable Trust for the support of medical research.

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THE LUCILLE P. MARKEY BASIC MEDICAL RESEARCH FUND supports research efforts in basic biomedical science by young investigators.

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THE VIRGINIA LAZENBY O'HARA FUND FOR RESEARCH IN BIOCHEMISTRY, administered through Southwestern Medical Foundation, supports research activities in the Department of Biochemistry.

THE PEROT FOUNDATION FUND supports genetic research under the direction of Nobel laureates Dr. Joseph Goldstein and Dr. Michael Brown and provides scholarships for students in the Medical Scientist Training Program.

THE DR. RALPH C. SMITH FUND FOR UROLOGY was established by a bequest from Dr. Smith, who was a distinguished teacher and leading urologist in Dallas for many years.

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CHARLOTTE BAUM MEMORIAL CANCER FUND

BELKIN SCHOLARSHIP FUND

WILLIAM F. AND PEGGY W. BOCKHOFF
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JANET CALDWELL STUDENT FELLOWSHIPS IN
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DR. E.H. CARY SCHOLARSHIP FUND

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EDMUND EICKENROHT SCHOLARSHIP FUND

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CLARENCE THOMAS HILL JR., M.D.,
SCHOLARSHIP FUND

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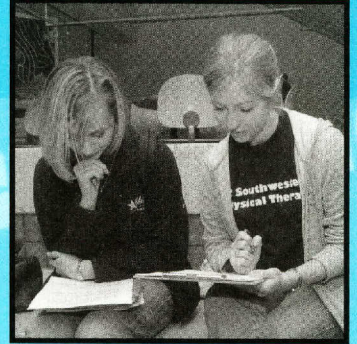
LEONE V. HOPPER MEDICAL SCHOLARSHIP

CLASS OF '98 SHANNON NEVILLE HOUGHTON,
M.D., MEMORIAL SCHOLARSHIP

HELEN MAURINE JACOBS SCHOLARSHIP FUND

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 PHILIP O'BRYAN MONTGOMERY JR., M.D.,
 MEDICAL STUDENT SCHOLARSHIP FUND
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 SCHOLARSHIP FUND
 SHIRLEY P. POLLOCK SCHOLARSHIP FUND
 KATHRYN AND ASHLEY PRIDDY MEMORIAL
 ENDOWMENT FUND
 JANICE ANN PROEBSTING SCHOLARSHIP FUND
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 SOUTHWESTERN MEDICAL FOUNDATION
 ANONYMOUS SCHOLARSHIP
 VERNIE STEMBRIDGE, M.D., SCHOLARSHIP FUND
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 R.L. TAYLOE SCHOLARSHIP FUND
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 UT SOUTHWESTERN MEDICAL CENTER STUDENT
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 VANATTA, HESSER AND SCHMALSTIEG
 EXCELLENCE IN TUTORING AWARD FUND
 HELEN AND JUAN R. VILARÓ-GRAU SCHOLARSHIP
 FUND FOR MINORITY STUDENTS
 VILARÓ-GRAU SCHOLARSHIP FUND
 JEFFREY M. WALTNER, M.D., AND JAMES D.
 WALTNER, M.D., SCHOLARSHIP FUND
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 RESEARCH AWARD
 KURT IAN WEY, M.D., AWARD IN SENIOR
 PEDIATRICS
 EVELYN M. WHITMAN SCHOLARSHIP FUND
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 WYNDHAM INTERNATIONAL INC. SCHOLARSHIP
 FUND
 XI OF PHI CHI BENEFIT ASSOCIATION FUND
 IONA K. YOUNG SCHOLARSHIP ENDOWMENT
 FUND
 YUEN-TSAI FAMILY FELLOWSHIP

STUDENT INFORMATION • biomedical communications • clinical nutrition • emergency medicine education • health care sciences • medical laboratory sciences • physical therapy • physician assistant studies • prosthetics-orthotics • radiation therapy • rehabilitation counseling



DEGREE AND CERTIFICATE PROGRAMS

Programs leading to certificates or to Bachelor of Science, Bachelor of Medical Laboratory Sciences, Master of Arts, Master of Clinical Nutrition, Master of Physician Assistant Studies, Master of Prosthetics-Orthotics, Master of Rehabilitation Counseling or Doctor of Physical Therapy are offered in the following academic areas:

PROGRAM	DEGREE OR CERTIFICATE
Biomedical Communications	
Biomedical Illustration	M.A.
Clinical Nutrition	M.C.N.
Emergency Medicine Education	Certificate
Medical Laboratory Sciences	B.S., Certificate
Blood Bank Technology	Certificate
Physical Therapy	D.P.T.
Physician Assistant Studies	M.P.A.S.
Prosthetics-Orthotics	M.P.O.
Radiation Therapy	B.S., Certificate
Rehabilitation Counseling	M.R.C.

Descriptions of the programs are given elsewhere in this catalog. A detailed program description and admissions information for the master's degree program in Biomedical Communications is provided in the *UT Southwestern Graduate School of Biomedical Sciences Catalog*.

Each program is under the jurisdiction of the appropriate UT Southwestern School of Health Professions department chair or program director. Subject to approval of the dean, each program has the responsibility to select applicants for admission, to evaluate the academic progress of students, to recommend which students will be regarded as candidates for degrees or certificates, and to administer all other aspects of the program.

Each health professions program welcomes inquiries about the academic program, including information about admissions or employment opportunities. For more detailed information, call or write the specific program:

Biomedical Communications/Biomedical Illustration
214-648-4699; e-mail, biocomm@utsouthwestern.edu; ZIP code: 75390-8881

Clinical Nutrition
214-648-1520; e-mail, CN.sshp@utsouthwestern.edu; ZIP code: 75390-9052

Emergency Medicine Education
214-648-3131; ZIP code: 75390-8890

Medical Laboratory Sciences/Blood Bank Technology
214-648-1780; e-mail, MLS.sshp@utsouthwestern.edu; ZIP code: 75390-8878

Physical Therapy
214-648-1550; e-mail, PT.sshp@utsouthwestern.edu; ZIP code: 75390-8876

Physician Assistant Studies
214-648-1700; e-mail, PA.sshp@utsouthwestern.edu; ZIP code: 75390-9090

Prosthetics-Orthotics
214-648-1580; e-mail, PO.sshp@utsouthwestern.edu; ZIP code: 75390-9091

Radiation Therapy
214-648-1512; e-mail, radtherapy.sshp@utsouthwestern.edu ZIP code: 75390-9082

Rehabilitation Counseling
214-648-1740; e-mail, RC.sshp@utsouthwestern.edu; ZIP code: 75390-9088

Office of the Dean
214-648-1500; e-mail, recruit@utsouthwestern.edu; ZIP code: 75390-9082

Letters should be addressed to the individual program at UT Southwestern School of Health Professions, UT Southwestern Medical Center, 5323 Harry Hines Blvd., Dallas, TX (ZIP codes above).

ADMISSIONS

Information regarding admissions and online application is available on the UT Southwestern website at www.utsouthwestern.edu/health-professions. Other queries should be sent to the Admissions Office, UT Southwestern Medical Center, 5323 Harry Hines Blvd., Dallas, TX 75390-9162.

■ APPLICATION PROCEDURE

Submission of materials must follow the procedure outlined by the Admissions Office and must include the following:

- 1) Application. Supply all applicable information requested on the application. Online application is required.
- 2) Filing fee. A filing fee as specified on the application is required at the time of application.
- 3) Letters of recommendation. For most programs, three letters of recommendation from among the following people are required: undergraduate adviser, instructor in a major course, and employment or volunteer experience supervisor. These letters should be sent directly to the Admissions Office by the author.
- 4) Transcripts. An applicant must arrange for official transcripts to be sent directly to the Admissions Office from each college/university attended, even if transfer credit is shown at the most recent school attended. As additional course work is completed, updated transcripts also must be sent.

■ DEADLINES

Since deadlines for completed applications vary from program to program, applicants should determine the necessary dates from the Admissions Office or the program director. Application well in advance of such deadlines is strongly advised. If program requirements include a personal interview, the student should plan to respond to the scheduled interview as soon in the admissions process as possible.

Written notification of acceptance or rejection will be sent by the chair or program director.

■ STUDENT RESPONSIBILITY

It is the student's responsibility to understand degree requirements and to enroll in courses necessary for the desired degree program. Applicants should be aware of prerequisite courses and conditions, which may change from time to time. Current information may be obtained from UT Southwestern's website, www.utsouthwestern.edu/healthprofessions. Students also are responsible for knowing the school's regulations

and policies regarding the standard of work and conduct required for continued enrollment in a program. A student who needs additional information should consult the program office.

To obtain a complete list of requirements for a particular degree or certificate, the student should combine the general requirements detailed in this section with any special requirements listed under the appropriate program.

■ CRIMINAL BACKGROUND CHECK

Based on recommendations of the Association of American Medical Colleges and as authorized by the Board of Regents of the UT System, UT Southwestern School of Health Professions will conduct a criminal background check on all students prior to their initial enrollment.

■ ACTIVE MILITARY SERVICE

A student who withdraws from the health professions school to perform active military service (not including Texas National Guard training exercises) will not have to reapply for admission but will be readmitted upon request made within one year of being released from active military service. The student may be eligible for the same financial assistance provided before the student's withdrawal.

Students who are engaged in active military service may receive a temporary excused absence from attending classes, engaging in other academic activities, or examinations to participate in called military service. Students who are excused for these activities are expected to complete assignments and examinations within a reasonable time frame as determined with the course director.

ENTRANCE REQUIREMENTS

■ UNDERGRADUATE ADMISSIONS

The minimum requirements for admission to each program are listed in each program's section of this catalog. Physical education activity courses and military science credits do not apply toward these requirements. Computer competency is expected of entering students; the curriculum for some programs may require specific computer courses.

Texas state law requires that students receiving bachelor's degrees from Texas public institutions must complete a Core Curriculum. All Texas public colleges and universities have specified their own core curriculum within the guidelines of state requirements.

Bachelor's degree applicants who have completed the core curriculum of another Texas public college or university are not required to meet the UT Southwestern School of Health Professions Core Curriculum requirements. Applicants to undergraduate programs who have not completed a state-required core curriculum elsewhere must complete the specified courses of the UT Southwestern School of Health Professions Core Curriculum before enrollment here. Any exception to this policy must have written approval of the dean (Conditionally Accepted Student). See individual degree program sections of this catalog for specific course requirements.

■ GRADUATE ADMISSIONS

UT Southwestern School of Health Professions offers graduate admission to the Doctor of Physical Therapy and the Master of Clinical Nutrition, Physician Assistant Studies, Prosthetics-Orthotics and Rehabilitation Counseling programs. (See appropriate catalog section.) UT Southwestern Graduate School of Biomedical Sciences, in conjunction with UT Southwestern School of Health Professions, offers the Master of Arts in Biomedical Communications.

The basic requirement for admission is a bachelor's degree or its equivalent from an accredited institution in the United States or proof of equivalent training at a foreign university. The applicant must have maintained satisfactory grades, especially in appropriate courses, in upper-division work (junior and senior level) and in any graduate work already completed. The applicant must submit the general test score on the Graduate Record Examination. Admission is

■ UT SOUTHWESTERN SCHOOL OF HEALTH PROFESSIONS CORE CURRICULUM

COMPONENT AREAS	COMMON COURSE NUMBERS	CREDIT HOURS
Communication		
English Composition	ENGL 1301, 1302, 1311, 1312, 2311, 2314, 2315, or equivalent	6
Speech/Communication	SPCH 1311, 1315, 1318, 1321; COMM 1307 or equivalent	3
Mathematics		
College Algebra	MATH 1314 or higher level course	3
Natural Sciences		
	Courses with prefixes: BIOL, CHEM, GEOL, PHYS, ENVR, or other natural sciences	6
Humanities and Visual/Performing Arts		
Visual and Performing Arts	Courses with prefixes: ARTS, DANC, MUAP, MUEN, MUSI, DRAM, or equivalent	3
Other Humanities	Courses including literature, philosophy, religion, modern or classical languages or literature, and cultural studies	3
Social and Behavioral Sciences		
U.S. History (may include 3 hours of Texas history)	HIST 1301 and 1302 or 1301 and 2301	6
Political Science (must include study of Texas Constitution)	GOVT 2301 and 2302, or 2301 and 2305, or 2301 and 2306, or 2305 and 2306	6
Social/Behavioral Science	Courses with prefixes: ANTH, ECON, CRIJ, GEOG, PSYC, SOCI, SOCW	6
Total UT Southwestern School of Health Professions Core Curriculum Credit Hours		42

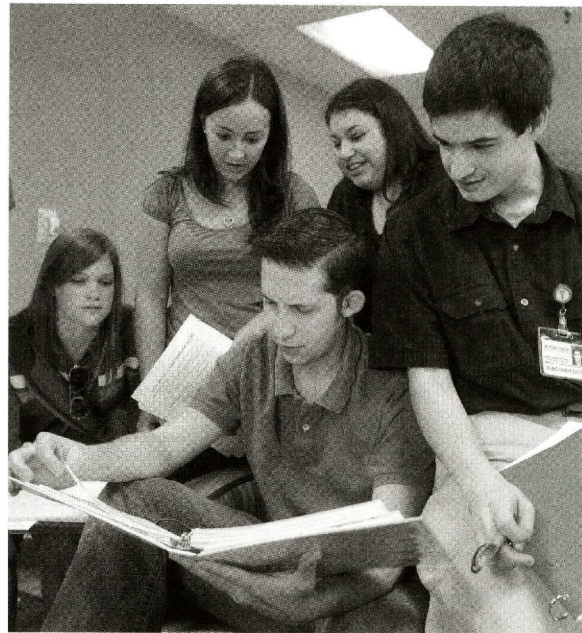
competitive. Application to these programs must be approved by the academic program and by the admissions committee in the intended major area of study.

Details concerning admission to the Biomedical Communications Graduate Program are published in the *UT Southwestern Graduate School of Biomedical Sciences Catalog*.

■ EVALUATION OF APPLICANTS

UT Southwestern School Health Professions does not use race or ethnicity in making admission determinations. The criteria are not intended to replace prerequisites or state requirements or to negate legitimate qualifications for specific health professions. Admission decisions may be based upon any combination of the following considerations:

- 1) Texas residency;
- 2) Scores on entrance examinations;
- 3) Prior college-level academic performance (overall grade-point average, science grade-point average, etc.);
- 4) Special and unique talents and accomplishments: artistic, scientific, intellectual, manual and/or computer skills; leadership (health-related or community); participation in extra curricular activities;
- 5) Experience: work history (health-related or nonhealth-related), special honors, community service, research;
- 6) Measures of motivation: letters of recommendation, grade improvements and trends, applicant essay (e.g., "Please discuss how your experience and environment have shaped your intellectual and personal development and your interest in health professions.");
- 7) Demographic and geographic information: rural or inner-city home address or ZIP code, rural or inner-city high school, magnet high school (health-related or nonhealth-related);
- 8) Social and economic background: first in family to attend high school or college, parents' occupations, parents' educational attainment;
- 9) Communication skills: writing samples, portfolio of work, interview (individual or small group), multilingual.



For all programs other than Physical Therapy and Physician Assistant Studies, data on race and ethnicity will be collected by the Admissions Office for statistical purposes only and will not be used in admission decisions. Each department will have recruitment and admission policies that are consistent with these guidelines. The admission process may include input from alumni, practitioners and current students; however, final admission decisions are made by a panel of the faculty. As authorized by the Board of Regents, and subject to the approval of the UT System, UT Southwestern School of Health Professions has added race and ethnicity to the broad range of criteria considered for student admission to the graduate degree programs in Physical Therapy and Physician Assistant Studies.

■ ADMISSION STATUS

Students may be accepted to UT Southwestern School of Health Professions in one of the following categories:

REGULAR STUDENT: The applicant has fully satisfied the requirements for admission to a degree program.

CONDITIONALLY ACCEPTED STUDENT: Some degree programs accept applicants who have not fully satisfied the requirements for admission to a degree program. Any student so admitted will agree, at the time of admission, to a specific, written plan for the removal of deficiencies. The plan must include the course name(s), the number of deficient credit hours and a time-phased schedule for completion of the course(s). The plan also will include notification that, if the terms are not met, the student will not be allowed to enroll further at UT Southwestern. All such plans for conditionally accepted students must be approved by the dean or associate dean before being transmitted to the student for signature.

SPECIAL STUDENT (not seeking a degree or certificate): Admission as a special student is possible under certain circumstances. Special students must have approval of the appropriate program director and the dean or associate dean to register under this status. To be accepted as a special student, an applicant must provide documentation of successful completion of, or exemption from, the Texas TASP examination to the Office of the Registrar for approval. The applicant also must submit one or more of the following: 1) official transcript(s), 2) certified copies of diplomas and 3) official grade reports from accredited institutions.

Without approval of the dean or associate dean, a special student cannot enroll for more than six semester hours in a given semester nor for more than a total of 12 semester hours. Applicants seeking special-student status must meet the same requirements as regular students, including necessary immunizations.

CERTIFICATE STUDENT: The applicant may be admitted to a certificate program by meeting the admission requirements of that particular program. These requirements may differ from those required for admission to a baccalaureate program. A certificate-program student who subsequently desires to pursue a degree must make a formal application for admission. Such admission is not assured.

NON-UT SOUTHWESTERN STUDENT: UT Southwestern's capacity to accommodate students from other institutions who wish to take courses or undertake an elective rotation is very limited.

UT Southwestern cannot reserve classroom or clinical positions in advance for any students other than those enrolled in UT Southwestern's degree or certificate programs. The burden placed on UT Southwestern's faculty to provide adequate supervision to UT Southwestern students and the demands placed upon the limited number of supervised clinical-placement sites leave scant room for students from other institutions.

In the unlikely event that UT Southwestern has excess capacity on its clinical teaching services for well-trained elective students from other accredited schools, UT Southwestern will consider applications from those students on a department-by-department "exception" basis. All such exceptions are subject to review and approval by the dean or dean's designee, and the student must apply for "special student" admission to UT Southwestern School of Health Professions.

■ TEXAS SUCCESS INITIATIVE

Texas law stipulates that all students who enter undergraduate programs be assessed for college readiness in mathematics, reading and writing. Since the undergraduate programs offered by UT Southwestern School of Health Professions offer only upper-division course work, all admitted students must meet or exceed the minimum readiness standard before entering the admitting program.

At UT Southwestern, the student's readiness may be assessed through any of the following means:

- 1) Meeting the qualifying standards of examinations such as SAT, ACT, TAKS (exit-level) or TAAS (exit-level)*;
- 2) Graduating with an associate or baccalaureate degree from an accredited institution of higher education;
- 3) Transferring to UT Southwestern from an accredited institution of higher education after satisfactorily demonstrating competence in college-level prerequisite course work; or

- 4) Meeting the readiness standards established by a previous Texas public institution of higher education prior to matriculation at UT Southwestern.

*TAKS and TAAS scores are valid for three years from the date of testing. SAT and ACT scores are valid for five years from the date of testing.

■ CREDIT TRANSFER FOR ADMISSION

Transferred grades are accepted as they appear on the student's transcript. Grades from other institutions are not averaged with work done at this school. Only credit earned in an accredited institution will be accepted for transfer. Institutional accreditation must be recognized by the American Council on Education/Commission on Recognition of Postsecondary Accreditation. All such credit must be reflected on submitted transcripts.

The Admissions Office will make the initial evaluation of a student's transcripts. This process will be followed by an individual evaluation conducted by the program director or department chair. A committee on admissions has been established to evaluate credits of transfer students if special problems arise. Established UT System procedures for evaluating transcripts will be followed for foreign students applying to UT Southwestern School of Health Professions.

Where an official transcript shows that a course has been repeated, both grades will be used in calculating the grade-point average.

The grade of D in any previous college course is accepted to fulfill UT Southwestern School of Health Professions basic prerequisites, but the student must present a minimum overall grade-point average of 2.0 on a 4.0 system to be considered for admission. Individual programs may set a higher average or not permit the grade of D for prerequisite courses, so the student should check the program description. Upon petition, the Admissions Committee may approve conditional admission for an applicant who falls below this level, with the concurrence of the department chair or program director.

College Level Examination Program, Advanced Placement or ACT-PEP scores may be accepted in lieu of specific courses to fulfill, in part, the basic requirements for admission. Only subject exam-

inations will be considered, and a score at or above the 50th percentile is required.

In the event of transfer disputes or problems, resolution will be determined in accordance with Section 61.826 of the *Texas Education Code*.

■ ACADEMIC FRESH START

An applicant for admission who is a Texas resident may seek to enter this institution's undergraduate programs pursuant to the "academic fresh start" statute, Section 51.931 of the *Texas Education Code*. If the applicant informs the Office of the Registrar in writing of the election by submitting the Academic Fresh Start Acknowledgment Form prior to the specified application deadline, UT Southwestern will not consider academic course credits or grades earned by the applicant 10 or more years prior to the starting date of the semester in which the applicant seeks to enroll. An applicant who makes the election to apply under this statute may not receive any course or prerequisite credit for courses taken 10 or more years prior to enrollment.

■ ACADEMIC COMMON MARKET

UT Southwestern participates in the Academic Common Market (ACM), a cooperative tuition-reduction agreement among 16 Southern Regional Education Board (SREB) states allowing residents in participating states to pursue academic degree programs that are not available in their home state. Once admitted to an applicable UT Southwestern graduate-level program of study, eligible students should contact the Texas Academic Common Market Coordinator at 512-427-6225 to request an ACM application packet.

■ INTERNATIONAL APPLICANTS

In addition to meeting the general requirements for admission described above, all applicants whose native language is not English are required to take the Test of English as a Foreign Language. The minimum acceptable score of 600 on the paper exam is required; if taking the Internet-based exam (IBT), the minimum required is 100.

The test is offered at Sylvan Technology Centers, at specified universities and Educational

Testing Service field offices. Test scores must be sent directly from the TOEFL Information Center to the Office of the Registrar, UT Southwestern. (Photocopies will be used for review only and are not accepted as official.)

Transcripts of records from foreign universities must be evaluated with subject, grade and grade-point average breakdowns. It is preferred that the applicant provide the transcript(s) with this information translated into English to facilitate review. Translation service is available from Education Credential Evaluators for a fee. For applications and fee information, contact ECE, P.O. Box 514070, Milwaukee, WI 53203-3470, 414-289-3400, or visit the website at www.ece.org. ECE evaluations should be sent directly to the Office of the Registrar. ECE requires at least one month to prepare an evaluation after all documentation is complete.

Before UT Southwestern's Office of International Affairs can issue a Certificate of Eligibility for Nonimmigrant F-1 Student Status (U.S. Department of Homeland Security, Citizenship and Immigration Services, Form I-20AB), evidence of financial support while in the United States must be demonstrated. The minimum amount of financial support for 2009-2010 academic year for a single student was \$16,000 plus the costs of tuition and fees. This amount is subject to change each year. In addition, proof of funding in the amount of \$2,000 for each dependent is required. There are two ways to demonstrate proof of financial support:

1) If the student is awarded a stipend, a letter from the dean indicating the amount of the stipend is sufficient; or 2) In the case of those students who will receive partial or no funding from UT Southwestern, a financial statement must be provided guaranteeing adequate funds as stated above for educational, living and other expenses while in the United States.

Form I-20AB must be presented to U.S. consular officials when applying for a visa. It is the responsibility of the nonregistered alien to accurately inform the medical center's Office of International Affairs of his or her visa status and to advise that office of any changes. Further information may be obtained through the website of

the Office of International Affairs at www.utsouthwestern.edu/international or by writing to the Office of International Affairs, UT Southwestern Medical Center, 5323 Harry Hines Blvd. Dallas, TX 75390-9011.

■ MEDICAL INSURANCE REQUIREMENTS

All UT Southwestern Medical Center students are required to have medical insurance. Some students who will be employees of UT Southwestern on at least a half-time basis will receive coverage under the UT System Employee Health Plan. Other students may purchase medical insurance available through the UT System or provide proof of coverage by medical insurance obtained through other sources. International students holding nonimmigrant visas must buy supplemental coverage (evacuation and repatriation insurance) to meet the minimum requirements. Information on the UT System Student Medical Insurance Plan is available from the Office of Student and Alumni Affairs.

■ RESIDENCY DEFINED

Under state statutes and Texas Higher Education Coordinating Board rules and regulations interpreting those statutes, a prospective student is classified as a resident of Texas, a nonresident or a foreign student.

A person who has resided in the state under circumstances specified in these rules is eligible for classification as a resident. A citizen, a national or a permanent resident of the United States not eligible to be classified as a resident is classified as a nonresident. An alien who is not a permanent resident of the United States and has not been permitted by Congress to adopt the United States as a domicile while in this country is classified as a foreign student. Individuals classified as nonresidents or foreign students may qualify, under certain circumstances specified in these rules, for resident tuition rates and other charges.

The student is responsible for registering under the proper residence classification. If there is any question about the student's right to classification as a resident of Texas, it is the student's obligation to consult the Office of the Registrar and have his or her status officially determined. The applicable

statutory provisions are set forth in Sections 54.052-54.219 et seq., *Texas Education Code*. Rules and regulations and interpretations have been issued by the Texas Higher Education Coordinating Board for the effective and uniform administration of these provisions. A brochure on residency determination is available in the Office of the Registrar.

Students must file a Core Residency Questionnaire for classification as a resident. If the student's classification as a resident becomes inappropriate for any reason, the student must notify the proper administrative official at the medical center. Information and advice regarding residency status are available from the Office of the Registrar.

■ ESSENTIAL FUNCTIONS

All individuals, including people with disabilities, who apply for admission to UT Southwestern School of Health Professions must be able to perform specific essential functions. Essential functions are the basic activities that a student must be able to perform to complete the program's curriculum.

Each student at UT Southwestern School of Health Professions must be able to:

- 1) Attend scheduled classes and laboratory sessions and be present for examination and testing;
- 2) Travel to practicum sites and have mobility within and around the sites;
- 3) Assimilate information presented via lecture, handouts, videos, discussions, computer and/or other educational modalities;
- 4) Complete assignments such as written assignments, oral presentations, class participation, examinations and computer-based activities;
- 5) Apply the assimilated information to appropriate clinical situations;
- 6) Communicate effectively with patients/clients, their families, faculty and other professionals using oral, telephonic, written and computer modalities in private and group settings; and
- 7) Make effective use of learning resources at UT Southwestern and affiliated facilities.

A specific academic program may require additional essential functions to accommodate unique aspects of that program, and such requirements may be subject to change. No applicant who can perform the school's and the program's essential functions – either with or without reasonable accommodation – will be denied consideration for admissions. A description of the essential functions is listed in each program's section.

■ REQUIRED IMMUNIZATIONS

In accordance with state law, the following immunizations are required for all students enrolled in health-related courses that will involve direct patient contact in medical- or dental-care facilities or who come in contact with human biological fluids or tissue. Students for whom these immunizations are not required are strongly urged to obtain these immunizations for their own protection.

MEASLES: proof of two doses of measles vaccine, MMR vaccine, or one dose of measles vaccine and one dose of MMR vaccine administered since Jan. 1, 1968, or a positive titer confirming immunity or evidence of prior infection (include a copy of the laboratory report);

MUMPS: proof of one dose of mumps vaccine or one dose of MMR vaccine or proof of immunity;

RUBELLA: proof of one dose of rubella vaccine or one dose of MMR vaccine or proof of immunity;

TETANUS/DIPHTHERIA/PERTUSSIS: proof of one booster dose of tetanus/diphtheria, acellular pertussis (Tdap) within the past 10 years;

HEPATITIS B VIRUS: proof of three doses of hepatitis B vaccine or a positive titer confirming immunity or evidence of prior infection (include a copy of the laboratory report);

VARICELLA (CHICKEN POX): proof of two doses of varicella vaccine or a positive titer confirming immunity or evidence of prior infection (include a copy of the laboratory report) or history of the disease validated by the student, parent/guardian or health care provider. The student may enclose a letter written by the student, parent/guardian or health care provider stating the approximate date of infection.

TUBERCULIN SKIN TEST (PPD): proof of one PPD within six months prior to enrollment (must include millimeters of induration). If the PPD was positive or if the student has a history of a positive PPD, a chest X-ray within the past six months is required. The month, date and year of the positive PPD also is required.

Students enrolled at UT System institutions will assume the full cost of the immunizations. Students may obtain information from the Office of Student Health Services regarding the consequences of not being current on immunization for certain diseases, the age group most vulnerable to these vaccine-preventable diseases and local providers of immunization services.

■ BACTERIAL MENINGITIS

All new students to UT Southwestern, in conjunction with their initial registration, receive information approved by the Texas Department of Health related to bacterial meningitis. This information includes the symptoms of the disease; how it may be diagnosed and its possible consequences if untreated; how the disease is transmitted; how it may be prevented; and the relative risk of contracting the disease for students of higher education. The information also discusses the availability and effectiveness of vaccination against treatment for the disease and sources of additional information. Students are requested to confirm their receipt of this information.

REGISTRATION

Registration dates are listed on the academic calendar, which is available through the Office of the Registrar. Most newly admitted and continuing students will have the opportunity to preregister by mail and are urged to do so in order to save time and to reduce confusion on registration day. Before classes start, a registration packet will be sent from the Office of the Registrar to each eligible student with appropriate instructions. Careful attention to the complete procedure will eliminate the need for long delays before attending class.

Registration after the indicated deadline is not permitted. Under exceptional circumstances, a

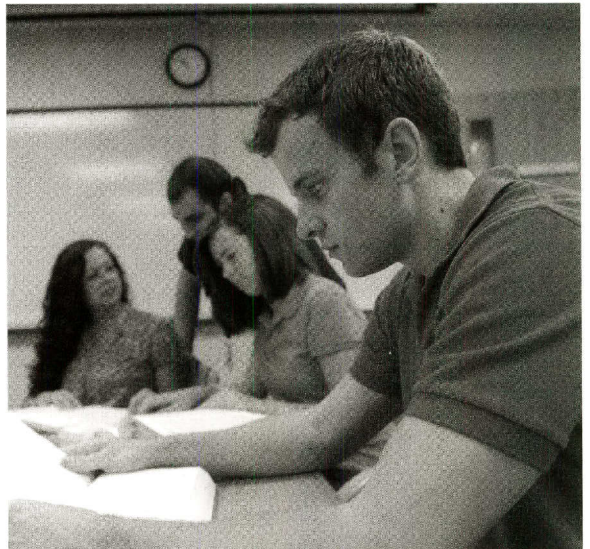
department chair or program director may petition the registrar to waive this restriction. Upon its recommendation and with the concurrence of the course instructor, the dean or associate dean may approve such a request.

A student may register as an auditor for a given course with approval of the instructor. Audit registration must be accomplished on the designated registration day. No academic credit will be granted.

Prior to matriculation, each student must submit official documentation of immunizations required by the Texas Department of Health and the UT System (see Required Immunization in this section).

STUDENTS WITH DISABILITIES

Title III of the Americans With Disabilities Act has elements that apply to the relationship between a student with a disability and educational institutions. Students must be able to perform the essential functions (see Entrance Requirements and program-specific essential functions). A student who has been accepted for admission to UT Southwestern School of Health Professions and who has a disability requiring special accommodations may submit a Request for Accommodation, in accordance with the Policy on Students With Disabilities (available



from the Office of the Registrar, Office of the Dean and department/program offices).

EXPENSES

All tuition and fees are subject to change without prior publication and become effective when enacted. The Texas Legislature does not set the specific amount for any particular student fee. The student fees assessed below are authorized by state statute; however, the specific fee amounts and the determination to increase fees are made by the university administration and The University of Texas System Board of Regents.

■ APPLICATION FEE

An application fee of \$10 per program application is required of each applicant at the time of application.

■ TUITION

Statutory tuition for Texas residents is \$50 per semester hour in 2010-2011 with a minimum tuition of \$120 per semester. Statutory tuition for nonresident students currently is \$360 per semester hour.

Students in doubt about their residency status for tuition purposes should consult the Residency Defined section of this catalog.

The designated tuition fee is \$75 per semester hour for students enrolled in undergraduate-level curricula. The designated tuition fee is \$111 per semester hour for students enrolled in graduate-level curricula. The designated tuition fee does not increase for nonresident students.

The differential tuition fee supplement is \$50 per semester hour for students enrolled in the Physician Assistant Studies and Physical Therapy programs. The differential tuition fee does not increase for nonresident students.

All tuition fees are subject to annual change.

■ TUITION INSTALLMENT PAYMENTS

Students may elect to pay tuition and certain fees in installment payments (not applicable to the summer term). At the time of registration, students wishing to participate in the installment

payment option will be required to sign a promissory note and a truth-in-lending form. These documents will specify the terms and conditions of the payment plan. Students will incur a \$15 charge when participating in the plan. A \$10 late fee will be charged for each payment not received by the due date.

The Office of Accounting will mail notices as reminders of payment due dates; however, students are obligated to pay on or before the due date regardless of the receipt of a reminder. A student who fails to provide full payment of tuition and fees, including late fees assessed, to the university when the payments are due is subject to one or more of the following actions at the university's option: 1) bar against admission at the institution; 2) withholding of grades, degree and official transcript; or 3) all penalties and actions authorized by law.

Tuition and fees for the summer semester must be paid in full at the time of registration.

■ ANATOMY DISSECTION FEE

Students enrolled in Human Anatomy Dissection Laboratory (HCS 4309, HCS 5309 or BME 5308) are required to pay \$380 per course enrollment.

■ AUDITOR'S FEE

An auditor's fee of \$25 per course is required for persons not registered for credit and not currently enrolled as a UT Southwestern School of Health Professions student. If a person is currently enrolled as a student, the auditor's fee is \$5 per course. Customary laboratory fees apply for each laboratory course. A nonstudent library deposit of \$25 is required to use the library. Permission of the instructor is required for registration as an auditor.

■ COURSE, COMPUTER USAGE AND TECHNOLOGY FEES

UT Southwestern provides student computer resources in multiple locations. All students pay a computer usage fee of \$95 per term. Students enrolled in the Physical Therapy program are charged supplemental fees ranging from \$10 to \$96 for enrollment in designated courses. Students enrolled in programs of Medical Laboratory

Sciences are charged a technology fee of \$54 per semester hour with a maximum charge of \$648 per term to meet the costs of related equipment. Students enrolled in the Prosthetics-Orthotics program are charged technology fees for enrollment in specific courses, ranging from \$22 to \$58. Students enrolled in the Physician Assistant Studies program are charged supplemental fees ranging from \$35 to \$95 for enrollment in designated courses.

Students should refer to the Schedule of Fees of the specific academic year for detailed information.

■ GRADUATION FEE

Graduation fees of \$95 for undergraduate degree programs and \$120 for graduate degree programs, payable at registration for the final semester, are required of all students who will receive a degree. Students who withdraw before graduation are entitled to a refund. No refund can be given for students who graduate in absentia.

■ HEALTH INSURANCE

With each term registration, all students are required to present documentation of a current health insurance plan. Information regarding the UT System-approved plan is included with registration materials. Students may purchase this plan directly from the vendor or provide documentation of alternate coverage. International students should consult the International Affairs coordinator for more information regarding the requirements for international students.

■ INCIDENTAL FEES

Lost identification cards may be replaced for \$10, lost mailbox or lab-carrel keys for \$6.

The Library recovers the cost of some services, such as black and white photocopying and laser printing at 10¢ per page and color laser printing at \$1 per page. Charges for other cost-recovery-based services vary. Theses and other manuscripts can be archived for \$15 per volume. Dissertations can be published and archived for \$85 per volume with an optional copyright fee of \$50. Lost books are charged at replacement cost plus a nonrefundable \$15 processing fee. There is no charge for literature searching or routine processing of

interlibrary loan requests made by students; however, there is a fee for expedited interlibrary loan delivery.

■ LABORATORY FEE

Students are required to pay a laboratory fee of \$8 for each laboratory science course of four or more semester hours.

■ LATE REGISTRATION FEE

A late registration fee of \$220 is assessed to students who fail to register by the dates established each term by the registrar. In cases of emergency, this fee may be waived with prior approval of the dean.

■ LIABILITY INSURANCE

Each student enrolled in any course involving clinical work must have professional liability insurance. The charge for professional liability insurance is automatically included in a student's registration bill for enrollment in corresponding clinical courses. The present charge for this coverage is \$14.50 per year for students in programs other than Physician Assistant Studies, which carries a charge of \$61 per year.

■ MEDICAL SERVICES FEE

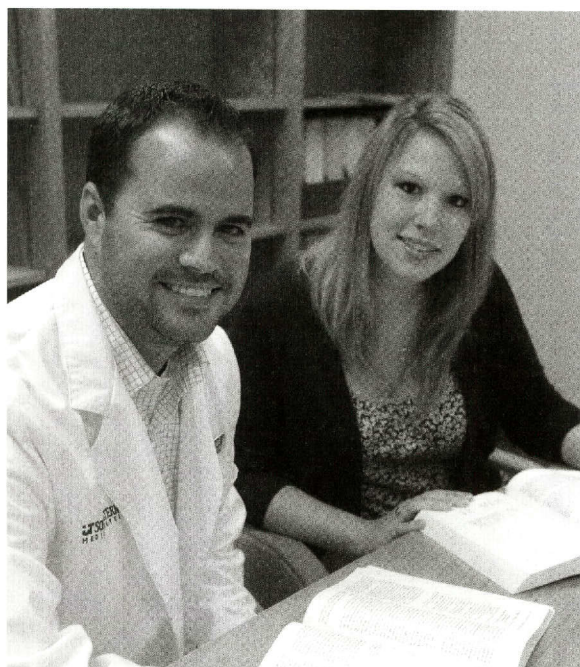
Students pay a medical services fee of \$75 per enrollment term. The medical services fee provides necessary supplementation for Student Health Services.

■ MICROSCOPES

Rental microscopes, when required by course instructors in Biomedical Communications or Rehabilitation Counseling, are available at a charge of \$75 per term. Students may choose to provide their own microscopes; however, individual microscopes must meet the specifications set forth by the Department of Cell Biology.

■ RETURNED CHECK FEE

A service fee of \$15 will be charged on any check cashed by and returned to the university. If two or more checks are returned, check-cashing privileges will be suspended for one year.



■ STUDENT SERVICES FEE

Students pay a student services fee of \$42 per semester hour each term with a \$250 per term maximum. The student services fee is used to support Student Health Services, the Bryan Williams, M.D. Student Center, and other student services.

■ BOOKS AND EQUIPMENT

The annual cost of books and equipment essential for a health professions student is estimated below. A student should take this information into account in planning for financial support. Approximate costs, dependent upon the curriculum for the 2010-2011 academic year, are as follows:

Biomedical Communications	\$685
Blood Bank Technology	\$685
Clinical Nutrition	\$685
Medical Laboratory Sciences	\$782
Physical Therapy	\$1,151
Physician Assistant Studies	\$1,756
Prosthetics-Orthotics	\$685
Radiation Therapy	\$685
Rehabilitation Counseling	\$685

Students are not obligated to purchase textbooks from the University Store. The same textbook may be available from an independent retailer, including an online retailer (Section 51.9705, *Texas Education Code*).

■ CAMPUS PARKING

Limited parking facilities are available on campus. Any student wishing to park on campus is required to obtain a permit and pay an annual parking and car registration fee. The fee was \$85 for fiscal year 2009-2010. Student parking is restricted to designated areas, and violations of the parking regulations may result in fines and/or loss of parking privileges.

Special parking is available to people with permanent disabilities. Those who permanently require wheelchairs, crutches or leg braces should advise the Office of Parking Services. Every effort will be made to provide parking for those whose need for crutches or wheelchairs is temporary; such individuals should take a physician's statement with a time estimate to the Office of Parking Services.

Texas law requires motor vehicles not registered in this state to satisfy the state requirements for vehicle emission inspections. Owners of vehicles who reside in Texas who fail to register the vehicle in Texas or fail to display a current inspection certificate may violate Texas law.

Anyone wishing to file a complaint about, or needing assistance with, a parking assignment may contact the Office of Equal Opportunity and Minority Affairs.

■ DISABILITY INSURANCE

Information on disability insurance is available through the Office of Student and Alumni Affairs.

■ STUDENT HOUSING

In 1999 UT Southwestern acquired 50 acres adjacent to the North Campus, some of which it set aside for student housing. This consists of 284 one- and two-bedroom apartments for full-time medical, graduate and health professions students. All apartments are within a 24-hour security-controlled area. Apartment amenities include all

appliances and full-size washer and dryer. Park-like surroundings include a large pool and gazebo, clubhouse, workout facility and study center. One-bedroom apartments were available in 2009 for \$755-\$790 per month; two-bedrooms for \$1,110-\$1,140 per month.

The neighborhoods along nearby Oak Lawn Avenue, Cedar Springs Road and Lemmon Avenue also offer plentiful housing options, but outlying areas may provide less expensive rentals.

■ OTHER EXPENSES

Students in most clinical programs should budget financial resources for transportation to clinical sites and for living expenses. When there are special clothing or uniform requirements, the student will be notified upon acceptance into the specific program. Some programs require that students wear name tags as well as the identification patch of their discipline. The student is responsible for the cost of these items.

CONCURRENT ENROLLMENT

■ THE UNIVERSITY OF TEXAS SYSTEM INSTITUTIONS

A student enrolling concurrently at another University of Texas component institution may register and pay tuition and fees for all courses through the student's home campus. Detailed procedures may be obtained from the registrar of the student's home campus. The concurrent enrollment agreement and waiver of specified fees apply only to students following the concurrent enrollment procedures specified by the registrar of the home campus.

The charges for tuition at an appropriate rate, applicable laboratory fees and student fees will be assessed and collected at the home institution for the other institution.

Student services at the second institution will be made available to concurrently enrolled students paying the appropriate fees at the second institution.

UT Arlington, UT Dallas and UT Southwestern have a reciprocal agreement for honoring parking permits. Details may be obtained from the police office of the home campus.

Concurrently enrolled students should report any problems concerning registration, payment of fees or other matters related to concurrent enrollment procedures to the registrar of the home institution.

■ OTHER PUBLIC INSTITUTIONS OF HIGHER EDUCATION

When a student registers at more than one public institution of higher education in Texas, tuition is determined in the following manner:

- 1) The student will pay the full tuition charges to the first institution at which he or she is registered.
- 2) If the minimum tuition at the first institution is the same or greater than the medical center minimum, the amount charged for tuition will be the hourly rate.
- 3) If the minimum tuition at the first institution is lower than the medical center minimum, the amount charged for tuition will be the difference in the minimum charges, but in no case will the amount charged for tuition be less than the medical center hourly rate.

Other applicable fees will be charged. Students desiring to take advantage of the concurrent enrollment plan should bring a copy of the fee receipt from the other institution when registering at the medical center.

REFUNDS

All policies regarding the payment or refunding of tuition, fees and charges are approved by the Board of Regents of The University of Texas System and comply with applicable state statutes. If a person desires clarification of any matter relating to payment or refund of such charges, he or she should contact the office or administrative unit from which the charge or refund originated.

■ REFUND OF TUITION AND REGISTRATION FEES (FALL AND SPRING SEMESTERS)

A student who officially withdraws from school is entitled to a refund according to the following schedule:

Prior to first class day	100%
The first five class days	80%
The second five class days	70%
The third five class days	50%
The fourth five class days	25%
No refunds thereafter	

No refund will be made until the expiration of 12 class days after the beginning of classes. A check covering all refunds due will be mailed to the address left with the Office of Accounting. No refund will be granted unless applied for within one year after official withdrawal.

A matriculation fee of \$15 will be deducted from the refund to students who withdraw before the first class day.

A student who withdraws as a result of being called to active military service may choose (1) to receive a refund of tuition and fees for the semester; (2) if eligible, to be assigned an incomplete in each course; or (3) as determined by the instructor, to receive a final grade in courses where he or she has completed a substantial amount of coursework and has demonstrated sufficient mastery of the course material.

■ REFUND OF TUITION AND REGISTRATION FEES (SUMMER TERM)

A student who officially withdraws from school will receive a refund as shown in the following table:

Prior to first class day	100%
The first three class days	80%
Fourth, fifth or sixth class day	50%
No refunds thereafter	

Refund procedures for the summer term are the same as those for the fall and spring semesters.

■ RETURN OF TITLE IV FUNDS

A student attending UT Southwestern Medical Center who has received student financial aid and who officially withdraws, takes an approved leave of absence or is dismissed may be liable to return all or a portion of any aid received if the student's separation (withdrawal, leave or dismissal) occurs after a term has begun and before completion of

the academic term. The Office of Student Financial Aid will use approved federal formulas to determine the amount of applicable financial aid as of the separation date. Financial aid funds that must be returned by the separating student will be designated to the appropriate financial aid program in accordance with federal regulations.

A student's separation date is the date the student begins the withdrawal process or officially notifies UT Southwestern of an intent to withdraw; or the student's last date of attendance at a documented, academically related activity.

If UT Southwestern is required to return any funds to one or more financial aid programs on the student's behalf as a result of the student's withdrawal, leave of absence or dismissal within a term, the student will be billed accordingly for all amounts returned on the student's behalf.

STUDENT FINANCIAL AID

UT Southwestern Medical Center makes student financial assistance available through a number of loan, scholarship and employment programs. Unless otherwise noted, most of these programs are administered by the Office of Student Financial Aid, operating under policies established by the various agencies providing the funds.

UT Southwestern subscribes to the philosophy that financing education is primarily the responsibility of the student and the student's family; however, UT Southwestern seeks, within its means, to offer financial assistance to a qualified student whose family resources are insufficient to meet the full costs of education. No student should allow the pressures of financial constraint to cause a postponement of educational plans without first consulting with the Office of Student Financial Aid. The office can provide the student with necessary applications, forms and advice concerning the rules and regulations of federal, state and institutional financial-aid programs available to students. Additionally, the office can provide counseling in debt management and can assist students in finding outside sources of aid for which they may qualify. Students are under significant pressure while preparing for classes, and the

Office of Student Financial Aid will attempt to alleviate additional financial burdens.

In order to be eligible for need-based financial assistance, the student must establish financial need by filing a copy of the Free Application for Federal Student Aid for the specific academic year. FAFSAs generally are available beginning Jan. 2 preceding the start of the academic year. Students are encouraged to complete the FAFSA via the approved website. A link to the approved website is available from the Office of Student Financial Aid website at www.utsouthwestern.edu/student. Financial need is defined as the difference between the reasonable cost of education and the amount that the student and the student's family can reasonably be expected to provide.

Financial-aid awards usually are assigned for the full academic year. All awards are subject to revision if, at any time, the information used as a basis for making the original award changes.

Packets of application materials may be obtained from the Office of Student Financial Aid or its website. Awards are made on a first-come, first-served basis. Application materials should be submitted as far in advance of enrollment as possible in order to be assured full consideration.

Students are eligible to receive financial aid throughout their education provided they continue to demonstrate financial need and are making satisfactory academic progress in their program of study. The continued receipt of financial aid is not automatic, however, and requires annual reapplication. Students should request a

copy of the Satisfactory Academic Standards statement from the Office of Student Financial Aid. A student who wishes to reapply for financial assistance each year must submit the FAFSA in order to determine financial need as well as reasonable academic progress toward the degree program. Continuing UT Southwestern students may access their Renewal FAFSA at www.fafsa.ed.gov. This secured site is maintained by the U.S. Department of Education.

Students subject to selective service registration under federal law must file a statement that the student has either registered or is exempt from registration before the student is eligible to receive financial assistance. This statement is included in the student's financial aid award notification.

■ TYPES OF ASSISTANCE

Student financial aid comprises three general categories: loans, grants or scholarships, and employment. The aid may be received from various sources: federal programs, state programs, private foundations and corporations, individual contributors, and institutional programs. The table below lists many of the available programs by the program source. Detailed information regarding the aid programs is available from the Office of Student Financial Aid.

The Texas Higher Education Coordinating Board administers various financial assistance programs including programs for vocational nursing students. Further information about these

PROGRAM TYPE	PROGRAM SOURCE	PROGRAM NAME
Employment	Federal	Federal College Work Study Program
Employment	State	Texas College Work Study Program
Grant/Scholarship	Federal	Pell Grant
Grant/Scholarship	Federal	Supplemental Educational Opportunity Grant
Grant/Scholarship	State	State Student Incentive Grant — Leveraging Educational Assistance Partnership
Grant/Scholarship	Institution	Student Deposit Scholarship
Grant/Scholarship	Institution	Texas Public Education Grant
Loan	Federal	Federal Family Education Loan Programs
Loan	Federal	Federal Perkins Loan
Loan	State	College Access Loan
Loan	Institution	American Physical Therapy Association Loan Fund

programs may be obtained by contacting the Texas Higher Education Coordinating Board.

■ AWARDING OF SCHOLARSHIPS AND FELLOWSHIPS

UT Southwestern Medical Center awards scholarships and fellowships on the basis of financial need, academic performance and other specified criteria. Additionally, UT Southwestern honors the expressed wishes of scholarship/fellowship donors, including such considerations as career interests, residency status and year in school. Financial need is based on the methodology developed by the U.S. Department of Education. This methodology also is used to determine eligibility for other financial aid. Academic performance is based on an assessment of the student's record in comparison to peers.

Factors considered in the awarding of various competitive scholarships and fellowships include:

- 1) Academic performance as reflected in the grade-point average;
- 2) Performance on standardized tests (MCAT or GRE);
- 3) Recommendations from professors or mentors;
- 4) Scientific research activities;
- 5) Involvement in community and extracurricular activities; and
- 6) Demonstrated leadership and personal integrity.

The Student Scholarship Committee is charged with determining the validity and appropriateness of criteria and making selections when criteria do not automatically identify the recipient.

■ LOANS

Loans are financial obligations that must be repaid. Interest and repayment terms vary among the different programs, and UT Southwestern follows a policy of offering the student the most favorable loan for which he or she qualifies if funds are available in the program.

All financial aid programs administered by UT Southwestern are subject to the conditions, limitations and requirements prescribed by the agency sponsoring the program.

UNSUBSIDIZED FEDERAL STAFFORD LOANS are available to students who do not qualify for a subsidized Federal Stafford Loan. The amount of the UFSL will be based on a student's total aid budget minus any other aid that has been awarded. Unsubsidized loans accrue interest from the time the loan check is disbursed. Principal and interest payments may be postponed until completion of a program of study or until the student ceases to be enrolled on at least a half-time basis.

EMERGENCY LOANS are available to students with short-term, unforeseen emergency expenses. These loans typically are interest-free if repaid by the due date. The maximum period a loan can be outstanding is six months.

■ OTHER FINANCIAL AID

UT Southwestern offers some scholarships or emergency loans that are specific to the program of study within UT Southwestern School of Health Professions.

SCHERMERHORN SCHOLARSHIP: Scholarships in the amount of \$250 each per year are awarded based upon a student's academic performance. One or more are awarded to a degree-seeking undergraduate student, and one is awarded to a degree- or certificate-seeking graduate student. Students must have achieved a minimum grade-point average of 3.0 for previous and current work and must have completed at least 12 semester hours in UT Southwestern School of Health Professions. Awards are presented in the early spring of each year. The award was established in honor of Dr. John W. Schermerhorn, the second dean of the health professions school.

MARGE BARRÉ SOCIETY SCHOLARSHIP FUND: The Marge Barré Society Scholarship Fund is available to physical therapy students on the basis of academic performance and need. Interested students are encouraged to contact their program director.

DR. ZOE EVANS SCHOLARSHIP AWARD: Each year the Department of Medical Laboratory Sciences presents the Dr. Zoe Evans Scholarship Award to an entering medical laboratory sciences student based on demonstrated need and prior academic performance.



L. RUTH GUY PROFESSIONAL DEVELOPMENT

AWARD: Each year the Department of Medical Laboratory Sciences presents the L. Ruth Guy Professional Development Award to the best all-around student within the department. The award, based on recognition of the personal qualities and academic performance that exemplify the laboratory professional, was established in honor of Dr. L. Ruth Guy, the first chair of the department. The award is accompanied by a cash prize.

BARBARA SUITER MEMORIAL SCHOLARSHIP: The Barbara Suiter Memorial Scholarship Fund provides financial assistance to medical laboratory sciences students during the clinical phase of their training.

■ TUITION EXEMPTIONS

Texas residents who are included among the following categories may be eligible for exemption from tuition and specific fees:

- 1) Honorably discharged veterans of military service who were residents of Texas at the time of their entry into military service;
- 2) Dependent children of armed forces, Texas National Guard or Texas Air National Guard personnel who were killed in action, died while in service, were missing in action or whose deaths were directly connected with military service;
- 3) Children of firefighters or peace officers who were disabled or killed in the line of duty;
- 4) Students raised in foster care or other residential care under the Department of Family and Protective Services; and
- 5) Students who were adopted and who received adoption assistance from the Department of Family and Protective Services (Section 162.302, *Texas Family Code*).
- 6) Any dependent child of a member of the U.S. armed forces, who is a resident of this state or entitled to pay resident tuition, while the member of the armed forces is deployed on active duty for the purpose of engaging in a combative military operation outside the United States.

Contact the Office of the Registrar for more information regarding the eligibility requirements and benefits available.

■ PAYMENT OF FEES FOR STUDENTS WITH DISABILITIES

The Department of Assistive and Rehabilitative Services offers assistance for tuition and non-refundable fees to students with disabilities classified as Texas residents, provided their vocational objectives have been approved by a DARS counselor. Other services also are available to assist students with disabilities in becoming employable. Students should call the DARS regional office in Arlington, Texas, at 817-467-8400 for more information.

ACADEMIC REGULATIONS

The regulations contained in this catalog are based upon present conditions and are subject to change. The regulations described herein represent minimum standards for all students. Individual departments and programs have special policies pertaining to degree requirements, academic progress and dismissal. Students should

consult the policies of the program in which they plan to enroll.

■ ACADEMIC AND PROFESSIONAL INTEGRITY

The health professions demand that one act honorably at all times. UT Southwestern expects its students to manifest this attitude from the day they enter the university. A demonstrable failure to maintain it will result in dismissal.

Academic dishonesty is a rare event at UT Southwestern. Such acts are not tolerated by the health professions school and are grounds for dismissal. Examinations are conducted in a setting that trusts students to behave honorably.

If an allegation of academic dishonesty is brought against a student, the due process afforded the student is specifically outlined in the UT System regents' *Rules and Regulations*. A copy of these rules is available on request from the vice president for student and alumni affairs. The following is a summary of the process.

- 1) Allegations must be presented to the associate dean, who has primary authority and responsibility for student discipline. If the associate dean finds the allegations have merit, a written statement of the charges and a summary statement of the evidence supporting the charges are prepared and sent to the student.
- 2) If the student does not dispute the charges, he or she may sign a waiver for a hearing and be disciplined summarily.
- 3) If the student does dispute the charges, a hearing officer is selected and a hearing is held at which the student has the right to be assisted by an adviser of choice. The hearing is recorded. The hearing officer determines guilt or innocence on the weight of credible evidence. Decisions of the hearing officer may be appealed to the president of UT Southwestern.

■ GRADING

Individual course instructors retain the primary responsibility for assigning grades and evaluating course work. Numerical scores may be used in determining letter grades. Five grades are used to calculate the grade-point average: **A** (excellent), **B**

(good), **C** (fair), **D** (poor) and **F** (failure). Numerical scores corresponding to these grades may vary from program to program. Under certain conditions an instructor may report grades under the pass/fail system. Use of this system is normally restricted to practicum courses or directed reading offerings. Grade designations under this system are **H** (honors), **P** (passing) and **F** (failure). Grades of H and P are not used in calculating a GPA.

The GPA is computed by multiplying the individual credit hours for each course attempted by the grade points earned in that particular course. The results are then added together and divided by the total number of credit hours attempted, excluding those hours for which non-computed grades are recorded. The GPA includes only courses attempted at UT Southwestern and excludes transfer work; however, semester hours of credit taken under concurrent enrollment procedures with either The University of Texas at Arlington or The University of Texas at Dallas are included as attempted hours in the academic evaluation.

Grade points are assigned to passing grades earned as follows: 4 points for each hour's credit earned with a grade of A, 3 with a grade of B, 2 with a grade of C and 1 with a grade of D. No grade points are assigned for a grade of F.

Individual departmental policy may require that students earn a grade of C or higher in one or more courses to be eligible for graduation. When courses in which the student received a D, F or WF (failing at the time of withdrawal) are repeated to meet program standards, the successfully repeated course will be accorded a grade no higher than C, which will be used in calculating the overall GPA.

At the discretion of the instructor, **I** (incomplete) may be used in reporting a student's standing in the semester's work. An "incomplete" must be removed under written conditions and within one year from the end of the semester in which the I was reported. Should the established conditions not be met one year from the end of the semester in which the I was reported, the instructor must assign a final grade. If, after one year from the end of the semester, the instructor has failed to assign a grade, the I will be changed to a

final grade of F. An “incomplete” is not considered a final grade. A final grade must be assigned to calculate the GPA.

■ GRIEVANCES AND APPEALS

A student who has a grievance regarding grades or other academic decisions is obligated first to make a serious effort to resolve the issue with the instructor. If the issue cannot be resolved, the student should initiate an appeal to the chair or program director. If the matter remains unresolved at this level, the student may submit a written appeal to the Academic Affairs Committee. If the matter is still unresolved, the student may appeal in writing to the dean or the person designated by the dean to hear student grievances. The dean’s or designee’s decision is final.

■ COURSE WITHDRAWALS AND ADDITIONS

Prior to any change in course enrollment, the student should confer with a department or program adviser to assure compliance with curricular regulations of that program and complete a course change form, obtainable from the registrar.

A student may withdraw from a course at any time before the beginning of the sixth week of classes (third week of the summer term) and receive a **W**, indicating withdrawal without penalty.

A student who elects to withdraw from a course after the start of the sixth week of classes (third week of the summer term) will receive a **WP** if his or her cumulative performance up to the time of withdrawal indicates a passing grade. No student will receive a grade of WP except by withdrawing from a course in the prescribed manner. A **WF** will be recorded if the student is failing at the time of withdrawal. The official course withdrawal date is determined by the last official date of class attendance.

Students planning to withdraw from a course must do so before the 15th week of a regular semester or the 11th week of the summer term. Students who take the final examination in a course may not subsequently withdraw from the course. Failure to attend classes is not equivalent to an official withdrawal. Failure to withdraw

from courses in the prescribed manner may result in a grade of F.

Withdrawal from all courses or failure to register in a given semester is considered an official withdrawal from school unless the department chair or program director grants an official leave of absence. A student who withdraws in good standing and who subsequently wishes to be readmitted must complete the required application process and will be considered in competition with other applicants.

No student may add a course without departmental approval and in no instance after the 12th class day (ninth class day in summer term).

A student who withdraws from the health professions school to perform active military service (not including Texas National Guard training exercises) will not have to reapply for admission but will be readmitted upon request made within one year of being released from active military service. The student may be eligible for the same financial assistance provided before the student’s withdrawal.

■ LEAVE OF ABSENCE

A leave of absence not to exceed one year may be granted by the program director or department chair upon the request of a student as long as the student is in good academic standing. A leave of absence for a student who is not in good academic standing requires the approval of the Academic Affairs Committee.

■ ACADEMIC PROBATION AND DISMISSAL

Students may be placed on probation, suspended or dismissed for failing to meet minimum academic performance and/or progress standards as specified in individual program policy manuals.

Academic probation serves as a warning to the student of inadequate academic performance. A student will be placed on probation at the end of any semester in which his or her cumulative grade-point average is less than 2.0. Students may be placed on academic probation at the end of any semester in which performance does not meet established program or departmental standards. Individual programs may establish a minimum

GPA standard higher than 2.0. A student placed on academic probation must remedy the academic deficiencies as specified in the individual departmental or program policy manuals. If a student fails to raise the cumulative GPA to the minimum standard or fails to overcome specific academic deficiencies the following semester, the student will be dismissed.

Individual academic programs may have specific criteria for probation, dismissal, suspension or course-work evaluation. Students are expected to obtain this information from the appropriate department chair or program director.

Academic suspension is a temporary separation of the student from UT Southwestern School of Health Professions for a specified period of time, normally no more than one year. During a period of academic suspension the student may not register for any courses in the school. Academic suspension is permanently recorded on the academic record of the student. Upon re-entry to the school, the student will automatically be placed on academic probation.

Academic dismissal is a permanent separation of the student from UT Southwestern School of Health Professions. Academic dismissal is permanently recorded on the academic record.

■ ACADEMIC PROGRESS RECORDS

The registrar will receive, record and periodically report to students grades they achieved in their courses. Normally, grades will be mailed to each student no later than two weeks after the end of the semester. If a grade cannot be obtained by that time, it may be communicated separately.

For clinical rotations, practicums and other instructional sequences that do not conform to the regular semester calendar, progress reports will be available in the office of the department chair or program director no later than two weeks after completion of the sequence. Only grades communicated by the registrar are considered official.

■ HONORS PROGRAMS

Undergraduate students are eligible to participate in the following honors programs.

DEAN'S LIST: To be eligible for the Dean's List for

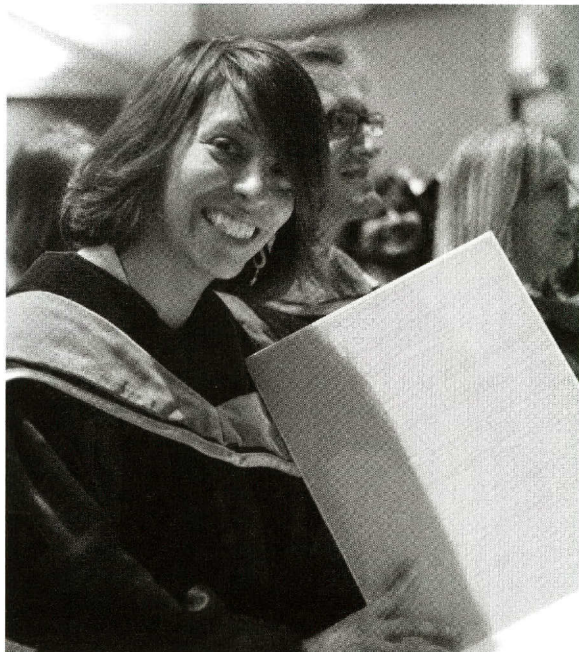
a given semester, a student must achieve a semester GPA of 3.5 or higher while enrolled for at least 12 credit hours in an undergraduate program.

GRADUATION WITH HONORS: Students must enroll in the school with a GPA of 3.0 or greater to be eligible for honors activities. Only undergraduate credit will be considered for those seeking a bachelor's degree. Subsequently, rankings will be based upon the GPA for credit hours earned at UT Southwestern School of Health Professions (minimum GPA of 3.5 based on a minimum of 45 credit hours).

Honors will be given to those students from each undergraduate program in the school who have obtained a GPA of 3.5 or higher. This calculation will be made immediately prior to the annual commencement exercises. Graduation with honors is noted on the diploma and on the student's permanent academic record.

■ GRADUATION REQUIREMENTS

Graduation requirements for students in the Clinical Nutrition, Physical Therapy, Physician Assistant Studies, Prosthetics-Orthotics and Rehabilitation Counseling programs are listed in the chapters describing these programs.



The requirements for undergraduate students are described as follows. The student must earn a minimum 2.0 cumulative GPA at UT Southwestern School of Health Professions and fulfill all specific program requirements to qualify for graduation with a degree. An F (failure) in any required subject must be removed prior to graduation by satisfying the requirements of the department or program in which the student is enrolled.

The student must have satisfactorily completed a minimum of 120 semester hours, including all work undertaken at UT Southwestern School of Health Professions. A student must complete a minimum of 30 semester hours in residence to meet degree requirements. Up to six of the last 30 hours may be taken at other UT System components with prior approval from the dean or associate dean.

Students granted admission to any UT Southwestern School of Health Professions program with prerequisite course requirements not completed prior to matriculation in the program, or with academic deficiencies, must complete these requirements as outlined in the Entrance Requirements section of this catalog. (Individual programs may require earlier completion of these requirements.) Students with academic deficiencies are not eligible for graduation. Students with academic deficiencies must present official transcripts as documentation of the deficiency completion. In order to be eligible for graduation, the transcripts must be received by the Office of the Registrar prior to enrollment for the semester prior to graduation. Where applicable, programs may waive prerequisite requirements with prior approval of the dean or associate dean.

■ COMMENCEMENT

The varying requirements of the programs of the school result in different completion times. Degrees may be conferred at the end of each semester, but the commencement ceremony is held in December following the conclusion of the fall term.

All degree candidates are expected to participate in commencement exercises. Advancement or deferral of commencement is not permitted. In the event attendance is not possible, a petition for

the award in absentia should be made to the Office of the Dean at least three weeks prior to the scheduled event. All students who have completed degree requirements since the previous commencement will be listed in the commencement program.

Degrees earned are posted to the students' permanent academic records at the end of the semester in which all degree requirements are met. If required for employment or to substantiate credentials, a letter verifying completion of educational requirements may be obtained from the department chair or program director.

■ ALUMNI ASSOCIATION

The Alumni Association of UT Southwestern School of Health Professions was organized Sept. 24, 1994. The objectives of the Alumni Association are to promote and support education of health professionals, including continuing education and lifelong learning. All graduates of the school become members of the Alumni Association upon completion of all academic requirements for graduation.

STUDENT AFFAIRS

The Student Affairs Committee, composed of student members, serves as an advisory body for the management of student affairs. In addition to addressing problems the student may encounter during the academic year, it is responsible for planning and scheduling official student functions, including those utilizing the Bryan Williams, M.D. Student Center.

Each program strives to assist students with personal, career and academic problems. Students are encouraged to contact their department or program academic advisers as early as possible when a problem is identified. Every effort will be made to help the student resolve the problem.

■ STUDENT CONDUCT AND DISCIPLINE

Students at the university neither lose the rights nor escape the responsibilities of citizenship. All students are expected to obey and conduct themselves in accordance with the law, including all penal and civil statutes of the local, state and

federal governments; the *Rules and Regulations* of the UT System Board of Regents; and university regulations and administrative rules and directives. Students may be disciplined by the university for violating these standards of conduct whether such conduct occurred on or off the campus or whether civil or criminal penalties also are imposed for such conduct.

Each student, by registering, is under the jurisdiction of the dean of UT Southwestern School of Health Professions. The associate dean has primary responsibility for student conduct and authority for the administration of student discipline.

In any disciplinary action, students will receive reasonable notice of the charges against them and will be afforded an opportunity for an impartial hearing in accordance with Rule 50101 of the *Rules and Regulations* of the UT System Board of Regents. A copy of the *Rules and Regulations* is available on the UT System Board of Regents website www.utsystem.edu/bor/rules.htm.

■ GANG-FREE ZONES

Premises owned, rented or leased by The University of Texas Southwestern Medical Center at Dallas, and areas within 1,000 feet of the premises are "gang-free" zones. Certain criminal offenses, including those involving gang-related crimes, will be enhanced to the next highest category of offense if committed in a gang-free zone by an individual 17 years of age or older. See Texas Penal Code, Section 71.028.

■ POLICY AGAINST DISCRIMINATION

To the extent provided by applicable law, no person shall be excluded from participation in, denied the benefits of, or be subject to discrimination under any program or activity sponsored or conducted by The University of Texas System or any of its component institutions, on the basis of race, color, national origin, religion, sex, age, veteran status or disability.

To ensure fair treatment of individual cases where discrimination is alleged and to maintain the integrity of the institution's academic system, grievances alleging discrimination should be resolved through use of the institution's internal

procedures. Any grievances alleging discrimination should be resolved as promptly as possible.

Students are encouraged to use this procedure, and they will not be penalized in any way for filing complaints involving discrimination with the institution. To the extent possible, a student's confidentiality will be protected.

The student who feels discriminated against should seek resolution of the grievance through an appointment with the appropriate department chair or program director. If the student cannot resolve the grievance through this route, the student should appeal to the dean of UT Southwestern School of Health Professions within 10 calendar days after meeting with the appropriate department chair or program director. The dean will meet with the student and, within five calendar days of this meeting, will elect to 1) call for the appropriate faculty committee to investigate the grievance and make recommendations concerning the matter; 2) choose to investigate the matter personally; or 3) refer the matter to the Office of Equal Opportunity for investigation. An investigation undertaken by a faculty committee or dean must be completed within 30 calendar days. An investigation conducted by the Office of Equal Opportunity will follow the timetables adopted by the Office of Equal Opportunity. If the decision rendered by the dean is unsatisfactory to the student, the student may appeal to the president, who will render the final decision.

■ GENERAL GRIEVANCE PROCEDURE

Grievance of disputes related to matters other than academic matters, disciplinary action and discrimination must be initiated by discussing and making an effort to resolve the matter with the individual who took the disputed action. If the matter is not resolved, the grievance must be submitted in writing within five working days to the appropriate department chair or program director. Grievances not satisfactorily resolved by the department chair or program director may then be appealed to the dean within five working days. If the grievance is not satisfactorily resolved by the dean, it may be appealed within five working days to the president, who will render the final decision.

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT

The Family Educational Rights and Privacy Act, 20 U.S.C., Section 1232g, and the Texas Public Information Act, Texas Government Code, Section 552.001 et seq., are, respectively, a federal and a state law that provide for the review and disclosure of student educational records. In accordance with these laws, the university has adopted the following policy. Individuals are informed of their rights under these laws through this policy, which is included in the university's official policies and catalogs. This catalog will be made available for inspection through the dean's office, and the official policies are available in most administrative offices.

The university will not permit access to or the release of personally identifiable information contained in student educational records to any party without the written consent of the student, except as authorized by FERPA. FERPA's authorizations for release without consent include the following:

- 1) To appropriate university officials who require access to educational records in order to perform their legitimate educational duties;
- 2) To officials of other schools in which the student seeks or intends to enroll, or where the student is already enrolled so long as the disclosure is for purposes related to the student's enrollment or transfer;
- 3) To federal, state or local officials or agencies authorized by law;
- 4) In connection with a student's application for, or receipt of, financial aid;
- 5) To accrediting organizations or organizations conducting educational studies, provided that these organizations do not release personally identifiable data and that they destroy such data when it is no longer needed for the purpose it was obtained;
- 6) To the parents of a dependent student as defined in Section 152 of the Internal Revenue Code of 1954;
- 7) In compliance with a judicial order or subpoena, provided a reasonable effort is made to notify the student in advance unless such subpoena specifically directs the institution not to disclose the existence of a subpoena;
- 8) In an emergency situation if the information is necessary to protect the health or safety of the student or other persons; or
- 9) To an alleged victim of any crime of violence or nonforceable sex offense, the final results, as defined by FERPA, of the alleged perpetrator's disciplinary proceeding with respect to such crime or offense may be released.

The university will release information in student educational records to appropriate university officials as indicated in 1) above when such records are needed by administrators, faculty or staff in furtherance of the educational or business purposes of the student or university. A contractor, consultant, volunteer or other party to whom the university has outsourced institutional services or functions may be considered an appropriate university official provided the outside party satisfies requirements as defined by FERPA.

A record of requests for disclosure and such disclosure of personally identifiable information from student educational records will be maintained by the Office of the Registrar for each student and also will be made available for inspection pursuant to this policy. If the university discovers that a third party who has received students' records from the university has released or failed to destroy such records in violation of this policy, it will prohibit that third party access to educational records for five years. Respective records no longer subject to audit nor presently under request for access may be purged according to regular schedules.

■ DIRECTORY INFORMATION

At its discretion, the university may release directory information, which shall include:

- 1) Name, address, telephone number and e-mail address;
- 2) Date and place of birth;
- 3) Major field of study;
- 4) Participation in officially recognized activities;
- 5) Dates of attendance;
- 6) Enrollment status;

- 7) Most recent previous educational institution attended;
- 8) Classification;
- 9) Degrees and awards received; and
- 10) Date of graduation.

Students have the right to withhold the disclosure of all directory information data through written notification to the Office of the Registrar. Students may designate their directory preferences at any time but are strongly encouraged to record their preference during registration. Changes will be effective within two working days after receipt of the request. The student's FERPA designation will remain in effect until suspended by a subsequent request even after the conclusion of the student's enrollment.

■ ACCESS TO FILE

Upon written request, the university shall provide a student with access to his or her educational records. The Office of the Registrar coordinates the inspection and review procedures for student educational records, which include admissions files, academic files and financial files. Students wishing to review their educational records must make written requests to the registrar listing the item or items of interest. Educational records covered by FERPA will be made available within 45 days of the request.

A list of educational records and names of officials responsible for the records will be maintained at the indicated office. This list includes:

- 1) Academic records from the Office of the Registrar, registrar;
- 2) Student services records from the Office of Student and Alumni Affairs, vice president for student and alumni affairs; and
- 3) Financial records from the Business Office, executive vice president for business affairs; or the Office of Student Financial Aid, director of student financial aid.

Educational records do not include:

- 1) Financial records of the student's parents or guardians;
- 2) Confidential letters of recommendation to which the student has waived rights of inspec-

- tion or review or that were placed in the educational records of a student prior to Jan. 1, 1975;
- 3) Records of instructional, administrative and educational personnel that are kept in the sole possession of the maker and are not accessible or revealed to any other individual except a temporary substitute for the maker;
- 4) Records of law-enforcement units;
- 5) Employment records related exclusively to an individual's employment capacity;
- 6) Medical and psychological records;
- 7) Thesis or research papers; or
- 8) Records that contain only information about an individual after the individual is no longer a student at the institution.

■ CHALLENGE TO RECORD

Students may challenge the accuracy of their educational records. Students who believe that their educational records contain information that is inaccurate or misleading or is otherwise in violation of their privacy or other rights may discuss their problems informally with the dean. If agreement is reached with respect to the student's request, the appropriate records will be amended. If not, the student will be notified within a reasonable period of time that the records will not be amended, and he or she will be informed by the dean of the right to a hearing.

Student requests for a hearing must be made in writing to the dean. Within a reasonable period of time after receiving such requests, the dean will inform students of the date, place and time of the hearing. Students may present evidence relevant to the issues raised and may be assisted or represented at the hearings by one or more people of their choice, including attorneys, at the students' expense. The hearing officer who will adjudicate such challenges will be appointed by the dean.

Decisions of the hearing officer will be final, will be based solely on the evidence presented at the hearing, will consist of the written statements summarizing the evidence and stating the reasons for the decisions, and will be delivered to all parties concerned.

The educational records will be corrected or amended in accordance with the decision of the

hearing officer if the decision is in favor of the student. If the decision is unsatisfactory to the student, the student may place with the educational records statements commenting on the information in the records or statements setting forth any reasons for disagreeing with the decision of the hearing officer, or both. The statements will be placed in the educational records, maintained as part of the student's records and released whenever the records in question are disclosed.

Students who believe that the adjudications of their challenges were unfair or not in keeping with the provisions of FERPA may request, in writing, assistance from the president of the institution.

■ COPIES

Students may have copies of their educational records and this policy. Official copies of academic records or transcripts will not be released for students who have a delinquent financial obligation or financial "hold" at the university. The Office of the Registrar does not charge for copies. There is no charge for transcripts. Students must make their requests in writing and allow at least 24 hours for compliance.

■ STUDENT WORKS

Copies of student theses and dissertations are required to be placed in the university library and in many departmental libraries. Once filed with campus libraries, these documents are subject to public access and review. Other student course works also may be subject to disclosure consistent with the requirements of FERPA.

■ COMPLAINTS

Complaints regarding alleged failures to comply with the provisions of FERPA may be submitted in writing to the Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Ave. SW, Washington, DC 20202-5920.



MISCELLANEOUS INFORMATION

■ AIDS, HIV AND HEPATITIS B VIRUS POLICY

UT Southwestern Medical Center recognizes AIDS, human immunodeficiency virus and hepatitis B virus as serious public-health threats and is committed to encouraging an informed and educated response to issues and questions concerning AIDS, HIV and HBV. The university has a policy that provides guidance in complying with statutes concerning AIDS, HIV and HBV. This policy addresses administrative policies; residence life; health education; testing for HIV or HBV infection; confidentiality of information relating to people with AIDS, HIV or HBV infection; and patient care. It is applicable to students, faculty and employees of UT Southwestern Medical Center.

A complete copy of the *Acquired Immune Deficiency Syndrome, Human Immunodeficiency Virus Infection and Hepatitis B Virus Policy* is available in the dean's office of each school, school libraries and most UT Southwestern departments.

The UT System has published educational material about methods of transmission and pre-

vention of HIV infection and about related state laws, which is available to every UT System employee and student. Copies of this material and the educational pamphlet on HIV infection developed by the state Department of Health are available through Student Health Services and will be made available to all students upon request by telephoning UT Southwestern at 214-648-3320.

■ CAMPUS SECURITY AND SAFETY

In accordance with the federal Student Right-to-Know and Campus Security Act, the university prepares an annual security report containing information about campus security policies, campus crime statistics, fire safety, and emergency management and evacuation procedures, and provides this information to all current students and employees via the UT Southwestern website (www.utsouthwestern.edu/police). Applicants for enrollment or employment may obtain a copy of the annual security report by writing to University Police, UT Southwestern Medical Center, 5323 Harry Hines Blvd., Dallas, TX 75390-9027.

To report a campus emergency, dial

911. To contact University Police for nonemergency matters, dial 214-648-8311.

■ COPYRIGHT AND FILE SHARING

Unauthorized distribution of copyrighted material may subject students to disciplinary action and civil and criminal penalties. Information concerning the legal consequences of such violations may be found in Copyright Law of the United States of America and Related Laws Contained in Title 17 of the United States Code, Circular 92 (<http://www.copyright.gov/title17/92chap5.html#504>). The University's policies on copyrighted materials can be found in Chapter 2, Section 2.4 of the Handbook of Operating Procedures at http://www.utsouthwestern.edu:8080/utsw/cit_192819/8/35/461464Chapter2GeneralAdm.pdf. The University's policies on use of UT Southwestern networks (including file sharing) and disciplinary actions for violations of these policies may be found in Information Resources Policy No. 200-30 (Network Security Management, <http://inside.utsouthwestern.edu/irwebfiles/200-30.pdf>) and Policy No. 200-05

(Information Security Disciplinary Actions, http://www8.utsouthwestern.edu:8080/utsw/cit_192819/31/61/554852pol_200_05.pdf).

■ EMPLOYMENT

Full-time students should be aware that UT Southwestern School of Health Professions courses require the major portion of a student's time and concentration. A few students find it possible to have outside employment and still maintain a high quality of school work. School assignments and clinical duties cannot be altered to fit a work schedule for an individual student.

■ HAZING

Hazing is prohibited by state law (Sections 37.151–.157 and 51.936, *Texas Education Code*), by the regents' *Rules and Regulations* (Rule 50101) and by the UT Southwestern *Handbook of Operating Procedures*. The term "hazing" is defined broadly by statute to mean any intentional, knowing or reckless act occurring on or off the campus of an educational institution that endangers the mental or physical health or safety of a student for the purpose of pledging, being initiated into, affiliating with, holding office in or maintaining membership in any organization whose members are, or primarily include, students at an educational institution. Hazing with or without the consent of the student is prohibited, and violators are subject to criminal prosecution and to student disciplinary action by the institution.

It is an offense not only to engage in hazing but also to encourage hazing, to recklessly permit hazing to occur, or to fail to report hazing that has occurred or is being planned. In accordance with the *Texas Education Code*, any person making a good-faith report of a specific incident involving a student to the dean or other appropriate official of the university will be granted immunity from criminal or civil liability that might otherwise be incurred or imposed as a result of the report.

■ INCLEMENT WEATHER POLICY

UT Southwestern will remain open regardless of weather. Students must use their own judgment with regard to personal safety; however, student responsibilities are not obviated by weather con-

ditions. If a student reasonably believes traveling in such weather would be hazardous, the student will be expected to make up missed classwork.

■ INFECTIOUS AND ENVIRONMENTAL HAZARDS POLICY

Contact with patients may entail exposure to hazards. Such hazards include exposure to patients with contagious diseases that can be transmitted to students and other health care providers by way of airborne droplets or needle- puncture wounds involving infected body fluids. Examples of these diseases include tuberculosis, hepatitis B and AIDS.

Although the risk of contracting serious illness from these hazards is very small, UT Southwestern seeks to reduce incidents of students' exposure to infectious diseases and environmental hazards. For example, health professions students are required to obtain a skin test for tuberculosis prior to enrollment, and students enrolled in medical laboratory sciences, physical therapy, physician assistant studies, prosthetics-orthotics or radiation therapy are required to obtain the hepatitis B vaccine prior to enrollment. Students completing clinical rotations may be required to receive a skin test for tuberculosis intermittently during their enrollment.

Students also receive a communication from Student Health Services outlining the proper course of action should a hazardous exposure occur. In addition, physicians are available to advise students and answer any questions through Student Health Services. The school reserves the right to restrict patient contact by a student believed to pose a risk to the health of patients.

Should a hazardous exposure occur, the health professions school will cover the costs of initial testing and any medically indicated prophylactic treatment not covered by insurance. The individual student will be responsible for all remaining costs that may result from the hazardous exposure. Students are strongly encouraged to obtain their own comprehensive health insurance in case an unexpected illness or injury occurs. Information on disability insurance is available through the Office of the Registrar.

■ INSTITUTIONAL COMPLETION OR GRADUATION RATES

In accordance with the federal Student Right-to-Know and Campus Security Act, the university produces a report of the completion or graduation rates of certificate- or degree-seeking full-time students entering the university and distributes this report by campus mail. It is readily available to all students. Any prospective student may, upon request, obtain a copy of the graduation report prior to enrolling or entering into any financial obligation by writing to the Office of the Registrar, UT Southwestern Medical Center, 5323 Harry Hines Blvd., Dallas, TX 75390-9096.

■ INTELLECTUAL PROPERTY POLICY

The Intellectual Property Policy of the UT System covers inventions, discoveries, trade secrets, technology and computer software developed by students employed by the university or who use university facilities. The university handles all legal and business matters involving protection and commercialization of the intellectual property. After approved costs are deducted, income from intellectual property is usually divided 50-50 between UT Southwestern and the responsible student or students.

Copies of the complete *Intellectual Property Policy* and disclosure forms can be obtained from the Office of the Vice President for Technology Development.

■ INTERNET GUIDELINES

These guidelines apply to all students communicating electronically on the university's Campus-Wide Area Network (CWAN) and other Internet-based resources, regardless of the location on campus or remote servers.

- 1) The Internet may not be used for commercial purposes.
- 2) The Internet may not be used solely for personal purposes. (Personal use is acceptable only if such use is incidental to the performance of the user's responsibilities, i.e., student course work and any duties to the university.)
- 3) Each student must act professionally in every

respect when creating or using university resources for electronic communication.

■ PROFESSIONAL ORGANIZATIONS

Any enrolled student may apply for student membership in the association representing his or her discipline. The purpose of these organizations is to promote interest in the profession with specific aims toward service and fellowship for the social, intellectual and professional benefit of each member. Membership generally entitles the student to the journal of the profession and the right to attend meetings. Student memberships are available in such associations as the American Physical Therapy Association, American Academy of Physician Assistants, American Dietetic Association, American Society for Clinical Laboratory Science, International Society of Prosthetics and Orthotics, National Rehabilitation Association, American Society of Radiologic Technologists and Texas Academy of Physician Assistants. Students are encouraged to join the profession's local, state and regional groups as well. Further information may be obtained from the department's faculty and journals.

In addition, the Association of Schools of Allied Health Professions and the Texas Society of Allied Health Professions, groups representing the entire health professions team, are highly desirable organizations for students. The Office of the Dean can provide information about these organizations.

ALPHA ETA SOCIETY: As stated in the bylaws, the chapter membership in this Allied Health Professions National Honor Society consists of active faculty, alumni and honorary members. The purpose of the society is to promote scholarship and friendship and to recognize high attainments in the health professions. No more than 10 percent of the graduating class of each eligible program will be invited into membership annually.

■ SMOKING RESTRICTIONS

Smoking on the campus of UT Southwestern Medical Center is restricted to a few specially designated areas. No smoking is allowed in any meeting room or classroom.

■ SOLICITATION POLICY

In accordance with regents' *Rules and Regulations*, Rule 80103, solicitation by registered organizations is permitted only under certain circumstances. Strict guidelines are enforced, and interested persons or organizations should contact the Office of Student and Alumni Affairs for approval. The university's campus facilities are not open for general public use.

■ STUDENT ABSENCES

Students who wish to be excused from classes or other required activities for any reason, including observance of religious holy days, must file a written request with the course directors of all applicable courses to be excused. If the absence is approved by the course director, the student will not be penalized and will be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence. For information on rules and procedures, contact the Office of the Registrar.

■ STUDENT TRAVEL

Students who will travel more than 25 miles from the UT Southwestern campus to activities organized, sponsored and funded by the institution are subject to restrictions detailed in the UT Southwestern student travel policy. These restrictions include the required use of seat belts by all motor vehicle passengers, the prohibition of any alcohol or illegal substances, passenger limitations, licensing and training of all vehicle operators, proof of insurance and vehicle inspection, and the legal operation of motor vehicles.

Reimbursement for travel from UT Southwestern funds, including student organization funds, is subject to UT Southwestern policies and procedures pertaining to the documentation of reimbursable expenses. Copies of these policies are available from the Office of Student and Alumni Affairs.

No registered student organization may require its members to travel at any time. Should a student organization sponsor optional travel for its members, all travel arrangements and related

costs must be approved by the Vice President for Student and Alumni Affairs no less than 48 hours prior to departure.

■ TRANSPORTATION

Bicycles may be practical transportation for students living near the campus. Bicycles may be parked in designated spaces. Bicyclists not experienced at riding in traffic may want to consider some alternative forms of transportation.

Students living any great distance from campus may find a car necessary. A permit must be obtained to park on campus. Car pools are encouraged and are given preference in the event of limited parking.

The Dallas Area Rapid Transit System offers bus and light rail service from various locations throughout the Metroplex. Economical unlimited-travel E-passes are available to UT Southwestern students, faculty and staff through the University Store. Schedules, maps and rate information may be obtained by writing to DART, Customer Assistance, P.O. Box 660163, Dallas, TX 75266-0163; by visiting their website at www.dart.org; and by calling 214-979-1111. DART administrative offices are located at 1401 Pacific Ave. in Dallas.

■ USE OF UNIVERSITY NAME

The university seal, logo, and the names *UT Southwestern Medical Center*, *The University of Texas Southwestern Medical Center*, *Southwestern Medical Center*, and *Southwestern Medical School* are registered trademarks of The University of Texas System.

The seal and other registered trademarks may be used on commercial products only if licensed by the UT System, which restricts authorized use to products that will preserve the reputation of component institutions represented by the trademarks. UT System regulations on the commercial use of trademarks are stated in its *Intellectual Property Policy*. Students should consult the university's Office of the Vice President for Legal Affairs for information on permission for use.

The seal and other registered trademarks may not be used in business names and/or logos. They

may be used in a few other instances only with prior written consent of the president. Requests should be sent to the Office of the Vice President for Legal Affairs.

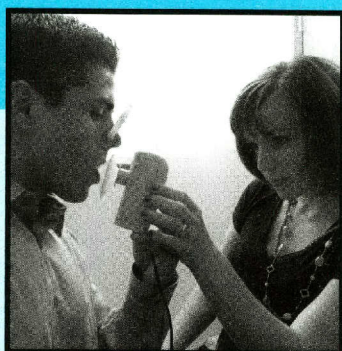
CLINICAL NUTRITION • biomedical communications •

emergency medicine education • health care sciences • medical

laboratory sciences • physical therapy • physician assistant

studies • prosthetics-orthotics • radiation therapy •

rehabilitation counseling



CLINICAL NUTRITION■ **DEGREE OFFERED**

Master of Clinical Nutrition

■ **CHAIR**

Scott M. Grundy, M.D., Ph.D.

■ **PROGRAM DIRECTOR**

Jo Anne S. Carson, Ph.D., R.D.

FACULTY AND ACADEMIC INTERESTS**Jo Ann S. Carson, Professor**

Ph.D., University of Texas at Austin, 2000
Nutrition in cancer and heart disease; nutrition education; nutrition in medical education.

Scott M. Grundy, Professor

M.D., Baylor College of Medicine, 1960; Ph.D., Rockefeller University, 1968
Cholesterol; nutrition; atherosclerosis.

Gloria Lena Vega, Professor

Ph.D., Louisiana State University Medical Center, 1979
Biochemistry of atherosclerosis; clinical nutrition; primary and secondary hyperlipidemia.

Elizabeth J. Parks, Associate Professor

Ph.D., University of California, Davis, 1990
Fatty acid and cholesterol synthesis and metabolism.

Cynthia Cunningham, Assistant Professor

M.S., Indiana Purdue University at Indianapolis, 1973
Pediatric nutrition; nutrition support.

Bernadette Latson, Assistant Professor

M.S., University of Florida, 1981
Geriatric nutrition; eating disorders; diabetes.

Linda Michalsky, Assistant Professor

Ph.D., University of Texas at Austin, 2002.
Nutrition education and evaluation; nutrition in prevention and treatment of obesity and chronic disease.

Lona Sandon, Assistant Professor

M.Ed., University of Texas at Brownsville, 2002
Career counseling; sports and wellness nutrition; educational technology.

Meena Shah, Clinical Associate Professor

Ph.D., London University, 1986
Prevention and treatment of cardiovascular risk factors; weight loss and maintenance.

Joyce P. Barnett, Clinical Assistant Professor

M.S., Case Western Reserve University, 1970
Weight management; diabetes; pediatric nutrition.

Vickie A. Vaclavik, Clinical Assistant Professor

Ph.D., Texas Woman's University, 1989
Food science; food safety and sanitation; food-service management.

Lora Day, Clinical Instructor

M.A., University of Texas at Austin, 1987
Nutrition support in adults; gastrointestinal disease.

Susan G. Rodder, Clinical Instructor

M.S., Texas Woman's University, 1991
Nutrition in preventive cardiology.

DESCRIPTION OF THE PROGRAM

The Master of Clinical Nutrition offers the opportunity to develop an advanced level of knowledge and skill so clinicians can address the complex nutritional issues of healthy and ill individuals at various stages of the life span. Two tracks are available.

The first track, the Master of Clinical Nutrition Coordinated Program, provides didactic course work and supervised practice to meet the knowledge and competency requirements of the American Dietetic Association Commission on Accreditation of Dietetics Education. Graduates of this program are eligible to take the Registration Exam for Dietitian and to apply for licensure in the state of Texas. They also are eligible for active membership in the American Dietetic Association.

The second track, the Master of Clinical Nutrition for Health Professionals, is available to individuals who are already registered dietitians or other licensed health care professionals. Having previously met the academic and clinical requirements to become a licensed clinician, these students do not complete supervised practice, but they do complete academic coursework to pro-

vide high-level nutritional care with greater emphasis and time devoted to completion of a research project.

MASTER OF CLINICAL NUTRITION COORDINATED PROGRAM

The Master of Clinical Nutrition Coordinated Program prepares students to address the nutritional and health needs of society as registered dietitians. Registered dietitians individualize nutrition therapy to optimize management of such diseases as diabetes, hypertension, obesity and cancer.

The program uses the unique resources of the medical center to prepare graduates to become registered dietitians capable of meeting the demands of the changing health care system. Having developed a strong knowledge base in clinical nutrition, graduates use food and nutrition information effectively in prevention and treatment of disease. Individualized experiences facilitate students' pursuit of their own career goals, whether in health care, in research or as a nutrition authority for the public.

■ OBJECTIVES

The goal of the coordinated program is to graduate team-oriented clinicians ready to function in acute, chronic and community settings with evidence-based nutrition therapy. With a concentration in nutrition therapy, the program builds on a science foundation to develop the skills to:

- 1) Assess the nutritional needs of individuals, based on lifestyle and health status;
- 2) Provide medical nutrition therapy for patients of all ages across a spectrum of settings from intensive care to home care;
- 3) Integrate interpretation of biochemical parameters and medications in the nutrition-care process;
- 4) Adapt nutrition counseling strategies to overcome barriers to lifestyle change;
- 5) Function within interdisciplinary teams to provide nutritional support for patients with complex medical problems;
- 6) Provide culturally competent nutrition education to populations with diverse nutritional needs;
- 7) Incorporate knowledge of functional foods, phytochemicals and food processing, as well as knowledge of nutrient gene interactions to serve as a food and nutrition authority for the public through mass media and other nutrition information venues;
- 8) Interpret evidence-based research and formulate research hypotheses to advance evidence-based dietetics practice; and
- 9) Manage human, material and financial resources in food and nutrition-related businesses.

Graduates of the program may assume positions in hospitals, clinics, nursing-care facilities and home health care agencies. They may focus on clinical areas such as pediatrics, diabetes, cardiac rehabilitation or cancer. Others may pursue opportunities in fitness and wellness programs, schools, community health programs and industry.

■ ACCREDITATION

The coordinated program is granted accreditation with an emphasis in nutrition therapy by the Commission on Accreditation for Dietetics Education of the American Dietetic Association (www.eatright.org/CADE), 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606, 312-899-0040.

■ REQUIREMENTS FOR ADMISSION

The Admissions Committee of the Department of Clinical Nutrition determines the admissibility of an applicant into the program in accordance with the quality of his or her credentials. The department works in cooperation with the Office of the Registrar of UT Southwestern Medical Center and with the approval of the dean of UT Southwestern School of Health Professions. Admission requirements are:

- 1) Baccalaureate degree from a regionally accredited institution prior to matriculation;
- 2) Completion of all admission course requirements as outlined in the following chart;

■ COORDINATED PROGRAM IN CLINICAL NUTRITION PREREQUISITE COURSE REQUIREMENTS

COMPONENT AREAS	COMMON COURSE NUMBERS	CREDIT HOURS
Communication		
English (at least 3 hours of English composition; technical writing also is recommended)	ENGL 1301, 1302, 1311, 1312, 2311, 2314, 2315 or equivalent	6
Mathematics		
College Algebra (or higher-level math course)	MATH 1314 or higher	3
Statistics	MATH 1342 or 2342	3
Natural Sciences		
General Chemistry with laboratory*	CHEM 1411 or 1412 or 1413	4
Organic Chemistry with laboratory*	CHEM 2423	4
Biochemistry*	Must be upper-division course	3
Microbiology*	BIOL 2321 or 2421	3
Human Physiology* (must include all body systems)	BIOL 2401 & 2402 or 2301 & 2302	4
Genetics*	BIOL 2316 or 2416	3
Introduction to Nutrition*	BIOL 1322, NUTR 1322 or HECO 1322	3
Social and Behavioral Sciences		
Sociology, Psychology or Anthropology	PSYC 2301, SOCI 1301, ANTH 1301 or higher	3
Principles of Management or Introduction to Business	BMGT 1303 or equivalent, or BUSI 1301 or equivalent	3
Total Credit Hours		42

* All science prerequisites must be completed upon enrollment with a grade of "C" or higher.

Texas Common Course numbers are provided for guidance. Information is available online at www.tccns.org. Click on "The Academic Course Guide Manual." Applicants should contact academic advisers at their college or university to determine course equivalencies prevailing on their home campus. Applicants are encouraged to contact the UT Southwestern Admissions Office or the academic program about other courses that may satisfy course requirements.

College Level Examination Program and Advanced Placement credit may be accepted for course requirements as long as such credit has previously been accepted and indicated on the applicant's transcript by a previously attended college or university.

- 3) Graduate Record Examination;
- 4) A recommended minimum of a 3.0 prerequisite and a 3.0 overall grade-point average;
- 5) Ability to perform essential functions as described in this chapter;
- 6) Completion of online application and submission of \$10 fee;
- 7) Official transcripts from all schools attended;
- 8) Three letters of recommendation;
- 9) Personal interview;
- 10) Personal statement of career goals; and
- 11) Work experience.

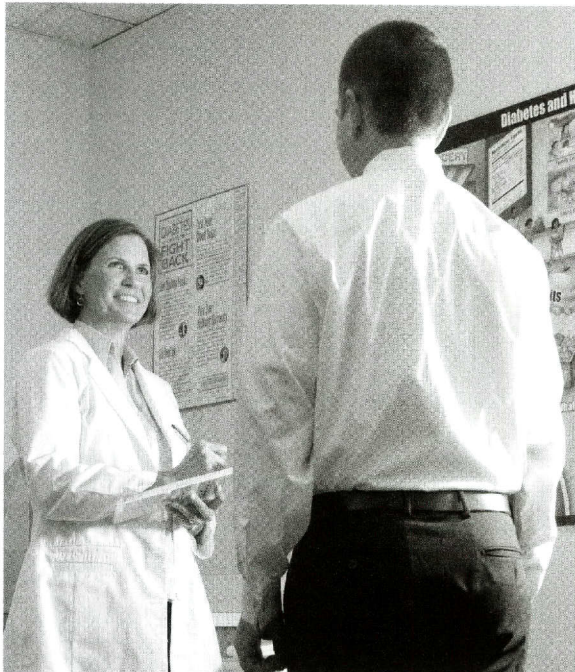
Because admission into the Clinical Nutrition program is competitive and made on a space-

available basis, the following are given special consideration in the selection process.

- 1) Overall grade-point average;
- 2) Science grade-point average;
- 3) Last 60 hours GPA;
- 4) The three letters of recommendation;
- 5) Personal interview;
- 6) Personal statement of career goals; and
- 7) Work experience.

■ INTERNATIONAL APPLICANTS

Foreign transcripts must be evaluated by a transcript evaluation agency, TOEFL is required.



■ **ESSENTIAL FUNCTIONS**

In addition to essential functions for all students (see Entrance Requirements in the Student Information chapter), each student in the Clinical Nutrition program must be able to:

- 1) Participate in supervised practice activities for eight-hour days;
- 2) Demonstrate sufficient problem-solving skills to assess multifactorial aspects of nutritional care and organize and prioritize necessary tasks within time constraints;
- 3) Demonstrate sufficient vision, smell and taste to evaluate the appearance, aroma and flavor of food;
- 4) Demonstrate sufficient upper-body strength and manual dexterity to operate and clean household and institutional equipment required for food preparation and food service; and
- 5) Demonstrate sufficient vision to observe compliance with food sanitation and safety codes.

■ **CURRICULUM**

The Master of Clinical Nutrition Coordinated Program is a full-time graduate program encom-

passing two years with six semesters. The curriculum includes both academic course work and supervised practice. Supervised practice and some classroom courses are offered during the typical work day; some course work is available online or in the early evening.

Students have supervised practice in prominent Dallas health care facilities under the direction of both staff dietitians and faculty members who are registered dietitians. Current trends in health care are considered as students train in ambulatory-care and long-term care facilities, home-health agencies, work site wellness programs, schools and community settings, in addition to acute-care hospitals.

■ **PROGRAM OF INSTRUCTION**

Year One

FALL	HOURS
CN 5310 Nutrition Care Process	3
CN 5321 Communication and Behavior Change	3
CN 5222 Nutrition in Wellness	2
CN 5331 Food Science and Technology	3
CN 5340 Nutrition in Metabolism	3
HCS 5106 Professional Development	1
CN 5250 Nutrition Care Process Practicum	2
<i>Total</i>	<i>17</i>

SPRING	HOURS
CN 5311 Medical Nutrition Therapy in Chronic Care	3
CN 5332 Food Service Management	3
CN 5341 Nutrition in Growth and Development	3
CN 5002 Special Topics	1
HCS 5330 Health Care Research	3
CN 5351 Chronic Care Medical Nutrition Therapy Practicum	3
<i>Total</i>	<i>16</i>

SUMMER	HOURS
CN 5312 Medical Nutrition Therapy in Acute Care	3
CN 5242 Nutrition in Aging	2
CN 5452 Acute Care Medical Nutrition Therapy Practicum	4
<i>Total</i>	<i>9</i>

Year Two

FALL	HOURS
CN 5313 Medical Nutrition Therapy in Pediatrics	3
CN 5002 Special Topics	1
CN 5353 Advanced Medical Nutrition Therapy Practicum	3
CN 5360 Education and Community Nutrition Practicum	3
CN 5370 Food Service Practicum	3
<i>Total</i>	13
SPRING	HOURS
CN 5223 Nutrition in Media Communications	2
CN 5233 Business of Health Care	2
CN 5954 Integrated Nutrition Practicum	9
<i>Total</i>	13
SUMMER	HOURS
CN 5390 Nutrition Research	3
<i>Program total</i>	71

■ SPECIAL REQUIREMENTS

For a student to enroll in any required course in the curriculum, all prerequisite courses must be completed with a grade of C or better. Failure to meet the specifications of a student's degree plan may prohibit that student from enrolling in the subsequent semester or from graduating from the program.

■ GRADUATION REQUIREMENTS

A candidate for the degree of Master of Clinical Nutrition at UT Southwestern School of Health Professions must meet all of the following requirements:

- 1) The student must demonstrate a high order of scholarly achievement in clinical nutrition, including appropriate research and professional competencies. The program's Student Progress Committee determines whether adequate mastery has been acquired.
- 2) The student must complete satisfactorily the minimum semester hours at UT Southwestern School of Health Professions. For the Master of Clinical Nutrition Coordinated Program,

the minimum is 71 semester hours. For the Master of Clinical Nutrition for Health Professionals, the minimum is 36 semester hours.

- 3) The student must discharge all financial obligations to the medical center. In the event of nonpayment, one or more action may be taken by the dean: a) readmission may be denied; b) a student's grades and official transcript may be withheld; and c) the degree to which the student would otherwise be entitled may be withheld.
- 4) The student must maintain at least a 2.75 cumulative grade-point average, have no academic deficiencies and no incompletes.
- 5) The student must complete the academic requirements listed on his or her degree plan, including completion of any academic deficiencies in prerequisite courses, by the time stated in the student's official letter of acceptance. The student is responsible for submitting official documentation of successful completion of the prerequisites to the Office of the Registrar.
- 6) The student must complete all required courses in the degree plan with a grade of C or higher (P for Pass/Fail courses) while maintaining at least a 2.75 cumulative grade-point average. Students in the Coordinated Program must receive practical evaluations reflecting an acceptable level of performance and professional conduct and complete all required supervised practice.
- 7) The student must successfully complete a graduate project.

MASTER OF CLINICAL NUTRITION FOR HEALTH PROFESSIONALS

The Master of Clinical Nutrition for Health Professionals is designed to advance the skills and knowledge in nutrition of registered dietitians and other health professionals. Available to part-time students, this graduate degree program builds on current professional skills and exposes students to the latest clinical nutrition research. The degree is designed to prepare graduates for the growing challenges of caring for the health care needs of Americans.

■ OBJECTIVES

This graduate degree program offers the opportunity to strengthen and extend professional health care skills to enhance opportunities for job flexibility and upward mobility. It includes opportunities to develop or refine the health care professional's ability to:

- 1) Use the nutrition diagnoses and other components of the nutrition care process in patient care and documentation;
- 2) Provide nutritional care in multiple health care settings, from pediatrics to geriatrics;
- 3) Collaborate within interdisciplinary teams to provide nutritional support for patients with complex medical problems;
- 4) Provide culturally competent nutrition education to populations with diverse nutritional needs;
- 5) Serve as an authority on food and nutrition information for the public through mass media and other nutrition information venues; and
- 6) Conduct evidence-based research to support the practice of clinical nutrition.

Classes and research opportunities reflect the rich research and clinical care environment of UT Southwestern Medical Center. Students are exposed to current nutrition research. They interact with practicing health care professionals and researchers as they learn about evidence-based care and cost-effective treatment options. Classroom and research experiences facilitate students' pursuit of individual career goals in health care, research or nutrition communications.

■ REQUIREMENTS FOR ADMISSION

Admission requirements for the Master of Clinical Nutrition for Health Professionals are the same as those listed for the Master of Clinical Nutrition Coordinated Program (see earlier section) plus evidence of being a registered dietitian or a licensed health professional in a profession recognized by the Texas Department of State Health Services.

■ CURRICULUM

Students in the program complete 36 semester hours. They may enroll as part-time or full-time

students to complete the degree within a minimum of fifteen months and a maximum of six years. Some classroom courses are offered during the typical work day; others are available online or scheduled in the early evening.

■ PROGRAM OF INSTRUCTION

REQUIRED COURSES	HOURS
CN 5310 Nutrition Care Process	3
CN 5311 Medical Nutrition Therapy in Chronic Care	3
CN 5312 Medical Nutrition Therapy in Acute Care	3
CN 5340 Nutrition in Metabolism	3
CN 5390 Nutrition Research	3
HCS 5330 Health Care Research	3
<i>Total</i>	<i>18</i>

In addition, students must take six semester hours of Clinical Nutrition electives and 12 semester hours of general electives, for a total of 36 semester hours. General electives may be selected from CN courses and courses offered by other departments and schools within UT Southwestern Medical Center, as well as the School of Public Health of the University of Texas Health Science Center at Houston.

■ SAMPLE CURRICULUM SEQUENCE

Year One

FALL	HOURS
CN 5310 Nutrition Care Process	3
CN 5340 Nutrition in Metabolism	3
CN 5002 Special Topics	1
<i>Total</i>	<i>7</i>

SPRING	HOURS
CN 5311 Medical Nutrition Therapy in Chronic Care	3
HCS 5330 Health Care Research	3
CN 5002 Special Topics	1
<i>Total</i>	<i>7</i>

SUMMER	HOURS
CN 5312 Medical Nutrition Therapy in Acute Care	3
CN 5002 Special Topics	1
<i>Total</i>	<i>4</i>

Year Two

FALL	HOURS
CN 5390 Nutrition Research	3
Clinical Nutrition Elective	3
General Elective	3
<i>Total</i>	9
SPRING	HOURS
CN 5390 Nutrition Research	3
General Electives	6
<i>Total</i>	9
SUMMER	HOURS
General Elective	3
<i>Total</i>	3

■ SPECIAL REQUIREMENTS

See requirements listed under Master of Clinical Nutrition Coordinated Program.

■ GRADUATION REQUIREMENTS

The Master of Clinical Nutrition for Health Professionals requires satisfactory completion of 36 semester credit hours and other criteria listed under graduation requirements for the Master of Clinical Nutrition Coordinated Program.

COURSE DESCRIPTIONS**CN 5002 SPECIAL TOPICS****1-3 SEMESTER HOURS**

This course is designed to provide the most recent scientific information on issues of current concern, such as weight management, women's health, critical care or metabolism.

**CN 5202 SPECIAL TOPICS IN SPORTS NUTRITION
2 SEMESTER HOURS**

This course covers nutritional aspects for the elite athlete and the active adult or adolescent. Topics include fluids, carbohydrates, protein, health assessment, weight management, vitamins, minerals and dietary supplements. Issues related to special populations are addressed, including vegetarianism, diabetes and the female athlete triad.

**CN 5222 NUTRITION IN WELLNESS
2 SEMESTER HOURS**

Approaches to prevention of disease through nutrition and other lifestyle interventions are introduced. Community health programs are

described. Steps in the development of a community nutrition intervention are presented. Students plan a community nutrition program, including marketing strategies and process and outcome evaluation methods.

**CN 5223 NUTRITION IN MEDIA COMMUNICATIONS
2 SEMESTER HOURS**

Students develop skills in translating scientific nutrition statements into meaningful messages for the mass media and the lay consumer. They produce written educational materials that promote health, wellness and positive lifestyle choices.

**CN 5233 BUSINESS OF HEALTH CARE
2 SEMESTER HOURS**

This course applies principles of management and business theory to the delivery of health care. Content covered includes cost-benefit analysis, billing and reimbursement for health care services, analysis of financial data, fiscal accountability, and development of business plans and budgets.

**CN 5242 NUTRITION IN AGING
2 SEMESTER HOURS**

This course presents overall biologic, social and behavioral aspects of aging, in addition to prevention and treatment of age-related chronic diseases and conditions. Nutritional needs in aging, altered by physiology, lifestyle and socio-cultural factors are studied. The continuum of health services emerging to meet the needs of aging adults are reviewed, along with the integration of nutrition services in promoting optimal interdisciplinary health outcomes.

**CN 5250 NUTRITION CARE PROCESS PRACTICUM
2 SEMESTER HOURS**

In this introductory practicum course, students gather data from electronic health records. Students perform the nutrition care process on clients, including conducting nutrition physical examinations and developing nutrition diagnoses.

**CN 5310 NUTRITION CARE PROCESS
3 SEMESTER HOURS**

This course introduces the role of registered dietitian in the nutrition care process and evidence-based practice. The Scope of Practice and Code of

Ethics are covered. Assessment of nutritional status, differentiation of nutrition diagnoses, and creation of problem, etiology, signs and symptoms statements are included. Students may develop skills in basing interventions and evaluation on the nutrition diagnoses. The use of standardized nutrition language and the medical record are included.

CN 5311 MEDICAL NUTRITION THERAPY IN CHRONIC CARE

3 SEMESTER HOURS

The role of food, nutrition and lifestyle choices in health promotion and disease prevention are discussed. The focus is on obesity, cardiovascular disease, diabetes and some gastrointestinal disorders. Related pathophysiology and pharmacology are covered.

Prerequisite: CN 5310 or consent of instructor

CN 5312 MEDICAL NUTRITION THERAPY IN ACUTE CARE

3 SEMESTER HOURS

Students apply the nutrition care process in providing evidence-based medical nutrition therapy for patients with significant needs for nutrition support, including those with diseases of the gastrointestinal and renal systems, HIV, cancer or trauma. Related pathophysiology and pharmacology are covered.

Prerequisite: CN 5311 or consent of instructor

CN 5313 MEDICAL NUTRITION THERAPY IN PEDIATRICS

3 SEMESTER HOURS

This course applies principles of medical nutrition therapy to the care of infants, children and adolescents. Students use growth charts to assess and interpret growth status of pediatric patients. Selection and use of specialized infant formulas to promote appropriate growth in children with a variety of chronic and acute conditions, including genetic disorders, are covered.

Prerequisite: CN 5312 and CN 5341; or consent of instructor

CN 5321 COMMUNICATION AND BEHAVIOR CHANGE

3 SEMESTER HOURS

Theories of behavior change and principles of counseling to promote lifestyle change are cov-

ered in the context of nutrition issues. A system for planning nutrition education and communication with individuals and groups is introduced.

CN 5331 FOOD SCIENCE AND TECHNOLOGY

3 SEMESTER HOURS

Principles of food science are applied to the development of food products that appeal to consumers based on appearance, texture, flavor and nutritional content. The roles of various ingredients in processed foods and functional foods are covered. Other topics include food irradiation, genetically modified foods, organic foods, food safety and sustainable agriculture. (2 credits lecture; 1 credit lab)

CN 5332 FOOD SERVICE MANAGEMENT

3 SEMESTER HOURS

This course covers management of resources in the procurement, production, distribution and service in food-service systems. Development of menus for a variety of group settings is presented with attention to culture, nutritional needs, culinary skills and resource allocation. Policies and procedures, marketing, and government regulations are included.

CN 5340 NUTRITION IN METABOLISM

3 SEMESTER HOURS

Nutritional science concepts are presented within the context of human metabolism. In providing



the scientific foundation for nutrition therapy, this course covers nutrient functions, bioavailability, clinical signs of inadequate and excessive intake, and biochemical methods of evaluating status. Achieving nutritional requirements from food and/or supplements is addressed, with attention to emerging issues related to nutrigenomics.

CN 5341 NUTRITION IN GROWTH AND DEVELOPMENT

3 SEMESTER HOURS

Normal nutrition needs during growth and development from preconception through adolescence are covered. Sociological and environmental aspects that influence the outcome of pregnancy are explored. Students have the opportunity to become acquainted with the benefits of breastfeeding and to learn how to promote breastfeeding by recognizing reliable resources for new mothers. Appropriate progression of feeding from infancy throughout childhood is addressed, with an introduction to use of growth charts for assessing growth of infants and children.

CN 5351 CHRONIC CARE MEDICAL NUTRITION THERAPY PRACTICUM

3 SEMESTER HOURS

Students provide evidence-based nutrition therapy for clients in wellness and clinic settings. Nutrition for prevention and treatment of obesity, cardiovascular disease, diabetes and some gastrointestinal disorders is addressed.

Prerequisite: CN 5250

CN 5353 ADVANCED MEDICAL NUTRITION THERAPY PRACTICUM

3 SEMESTER HOURS

The student provides medical nutrition therapy to specific populations, including pediatric clients.

Prerequisite: CN 5452

CN 5360 EDUCATION AND COMMUNITY NUTRITION PRACTICUM

3 SEMESTER HOURS

In this course the student is afforded the opportunity to practice nutrition education and counseling in community settings, such as community clinics and public health programs.

Prerequisite: CN 5250, CN 5321

CN 5370 FOOD SERVICE PRACTICUM

3 SEMESTER HOURS

Within a food service operation, the student coordinates procurement, production, distribution and service of food. Attention is given to the organizational structure of the food service unit, quality management, employee training and safety programs.

Prerequisite: CN 5332

CN 5390 NUTRITION RESEARCH

3 SEMESTER HOURS

This course meets the research requirement for the Master of Clinical Nutrition. In this course, students complete one of three types of research projects: 1) a clinical study, usually in conjunction with a larger, on-going research study; 2) an evidence-based review of literature that results in recommendations for clinical practice; or 3) a clinical outcomes study. The research may be completed individually or by a small group of students.

Prerequisite: HCS 5330

CN 5452 ACUTE-CARE MEDICAL NUTRITION THERAPY PRACTICUM

4 SEMESTER HOURS

The student provides evidence-based medical nutrition therapy to clients with renal disease, cancer, traumatic injuries and other complex medical problems.

Prerequisite: CN 5351; concurrent enrollment in CN 5312

CN 5954 INTEGRATED NUTRITION PRACTICUM

9 SEMESTER HOURS

Students integrate knowledge and skill in medical nutrition therapy and management in applying the nutrition-care process to care of clients with complex medical and social histories. Students apply management skills in team communication, reimbursement procedures and quality improvement. The practicum includes a block in which students function independently in patient care and one in which they gain insights into applied research in clinical nutrition.

Prerequisite: CN 5313, CN 5351, CN 5360, CN 5370

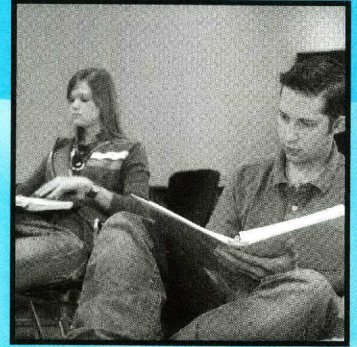
HEALTH CARE SCIENCES • biomedical communications •

clinical nutrition • emergency medicine education • medical

laboratory sciences • physical therapy • physician assistant studies

• prosthetics-orthotics • radiation therapy • rehabilitation

counseling



HEALTH CARE SCIENCES**■ ACTING CHAIR**

Jon W. Williamson, Ph.D.

FACULTY AND ACADEMIC INTERESTS**Raul Caetano, Professor**

M.D., University of Rio de Janeiro, Brazil, 1969;
M.P.H., Ph.D., University of California, Berkeley,
1979, 1983

Epidemiology of substance abuse; substance abuse
among minorities.

Gordon Green, Professor

M.D., UT Southwestern Medical Center, 1968
Public health and human ecology; allied health pro-
fessions education; HIV/AIDS prevention.

Charles E. McConnell, Professor

Ph.D., University of Southern California, 1970
Medical economics; aging; health-care analysis;
epidemiology.

Jon W. Williamson, Professor

Ph.D., University of North Texas Health Science
Center, 1992

Human physiology; brain mapping; neural control of
the circulation; health professions education.

Richard V. King, Associate Professor

Ph.D., University of Illinois at Urbana-
Champaign, 1988

Medical education; curriculum development; faculty
development; instructional technology;
competency-based education.

Helmut Krämer, Associate Professor

Ph.D., University of Cologne, Germany, 1989
Molecular mechanisms that regulate membrane traf-
ficking events in cells, employing a combination of
molecular, genetic and cell biological approaches..

Scott Smith, Associate Professor

Ph.D., University of North Texas Health Science
Center, 1999

Human physiology; carotid baroreflex function;
kinesiology; experimental biology.

Anne C. Freeman, Assistant Professor

M.S.P.H., University of North Carolina at Chapel
Hill, 1979

AIDS/HIV intervention and prevention.

Palma Longo, Assistant Professor

Ph.D., Columbia University, 2001

Neurocognitive theory applied to teaching and learning
science; using zebra fish to determine the mechanism of
action involved in Reiki biofield therapy.

Lori Millner, Assistant Professor

Ph.D., Texas Woman's University, 1999

Area health education center; community awareness;
community/rural health care.

Thomas H. McConnell III, Clinical Professor

M.D., UT Southwestern Medical Center, 1962

Anatomic and clinical pathology; laboratory management.

Alisa Winkler, Clinical Instructor

Ph.D., University of California, Los Angeles, 1977

Human anatomy; functional morphology, taxonomy,
paleontology, paleobiogeography of fossil mammals.

OBJECTIVES

This department provides basic and interdis-
ciplinary courses available to all health
professions programs. In addition, it serves as an
administrative base for the Biomedical Communi-
cations, Medical Laboratory Sciences, Prosthetics-
Orthotics, Radiation Therapy and Emergency
Medicine Education programs and the Area
Health Education Center and the Community
Prevention and Intervention Unit.

The department is also home to the Division
of Health Care Education and Research. The divi-
sion directs and supports interdisciplinary educa-
tion and research, not only between UT South-
western School of Health Professions departments
and programs, but also within the entire medical
center.

Enrollment in many courses in this section is
restricted. Students interested in taking any of the
following courses as electives should consult their
advisers or the Office of the Dean.

COURSE DESCRIPTIONS**■ BASIC BIOMEDICAL SCIENCES****HCS 3106 INTRODUCTION TO PATHOLOGY****1 SEMESTER HOUR**

This course offers an introduction to general path-
ology. Basic pathological processes are emphasized,

with additional focus on musculoskeletal and neurological disease encountered in prosthetic and orthotic practice. Clinical manifestations of disease are correlated with their pathology.

**HCS 3112 BIOCHEMISTRY (LABORATORY)
1 SEMESTER HOUR**

Laboratory exercises that illustrate biochemical principles and methods are presented in this course. May be taken concurrently with HCS 3311.

**HCS 3306/5306 INTRODUCTION TO PATHOLOGY
(LECTURE AND DEMONSTRATION)
3 SEMESTER HOURS**

This course offers an introduction to general pathology. Basic pathologic processes are emphasized, and specific disease entities are used extensively to illustrate principles. Clinical manifestations of disease are correlated with their pathology. Admission to HCS 5306 is limited to students enrolled in the Physician Assistant Studies, Physical Therapy and Prosthetics-Orthotics programs.

**HCS 3311 BIOCHEMISTRY (LECTURE)
3 SEMESTER HOURS**

Fundamental aspects of human biochemistry are introduced in this course. Topics include structure and intermediary metabolism of carbohydrates, fats, proteins, nucleic acids, vitamins and minerals.

**HCS 3407/5407 HUMAN PHYSIOLOGY
4 SEMESTER HOURS**

This course offers a comprehensive study of the basic functions of the body systems and their interrelationships. For students enrolled in HCS 5407, small-group sessions emphasize the integration of physiological response to therapeutic exercise using clinical-case studies. Admission to HCS 5407 is limited to students enrolled in the Physical Therapy, Physician Assistant Studies and Prosthetics-Orthotics programs.

**HCS 4207 INTRODUCTORY HUMAN
NEUROANATOMY
2 SEMESTER HOURS**

This course offers a study of the anatomical substrate related to function of the nervous system. Topics include neuroanatomy, cellular and intercellular physiology, neuroplasticity, development of the nervous system, and the somatic and motor systems. Neural disorders encountered in practice

are emphasized.

**HCS 4230/5230/5330 HEALTH CARE RESEARCH
2-3 SEMESTER HOURS**

This course provides an overview of the research process, with focus on evidence-based health-care research. Lecture topics include critical literature evaluation, research theory, measurement, design, statistical analysis and interpretation. For students enrolled in 5230/5330, small-group sessions with research advisers emphasize practical application of research concepts and foster project development. Admission to HCS 5230/5330 is limited to students enrolled in the Physical Therapy, Physician Assistant Studies and Prosthetics-Orthotics programs.

**HCS 4301 INTRODUCTION TO RESEARCH
METHODOLOGY
3 SEMESTER HOURS**

This course offers an introduction to statistical and epidemiological concepts with an emphasis on research strategies and an analysis of literature. A research topic is selected and a literature review completed. This course is the first in a two-semester sequence.

**HCS 4302 DIRECTED RESEARCH
3 SEMESTER HOURS**

This course is a continuation of HCS 4301. Students complete a research project started in the previous semester with data collection, analysis, paper and presentation.

**HCS 4308/5308 HUMAN ANATOMY (LECTURE)
3 SEMESTER HOURS**

This course offers a comprehensive study of the structure and function of human body systems and their mechanisms. Emphasis is placed on the major characteristics of each body system and its relationship to other systems. Lectures emphasize basic correlative clinical concepts. Admission to this course is limited to students enrolled in degree-granting programs at UT Southwestern. For students enrolled in HCS 5308, small-group sessions will emphasize the musculoskeletal system, including muscle origins and insertions. Admission to HCS 5308 is limited to students enrolled in the Physical Therapy, Physician Assistant Studies and Prosthetics-Orthotics programs.

HCS 4309/5309 HUMAN ANATOMY DISSECTION LABORATORY**3 SEMESTER HOURS**

This course presents an advanced study of the human body and includes cadaver dissection. Admission to this course is limited to students enrolled in degree-granting programs at UT Southwestern. For students enrolled in HCS 5309, small-group sessions emphasize recognition of surface anatomy and palpation skills. Admission to HCS 5309 is limited to Physical Therapy, Physician Assistant Studies and Prosthetics-Orthotics programs.

Prerequisite: Concurrent enrollment in HCS 4308/5308.

HCS 5207 INTRODUCTION TO NEUROSCIENCE**2 SEMESTER HOURS**

This course consists of lectures and small-group laboratory sessions. It is offered by Neurology and Neuropathology from UT Southwestern Medical School, with assistance from Cell Biology, Physiology, Psychiatry, Anesthesiology and Pain Management, Neuroradiology, and Neuroscience. Basic concepts in anatomy, cellular physiology and neural-systems physiology are covered in the course. Emphasis is given to the practical application of these basic anatomical and physiological principles to human neuroscience and neuropathology.

■ **BEHAVIORAL SCIENCES AND OTHER COURSES**

HCS 3101 MEDICAL TERMINOLOGY**1 SEMESTER HOUR**

This course introduces the entering health professions student to medical terminology through a self-instructional format. Explanations of Greek and Latin root words, prefixes and suffixes serve as a basis for interpretation of terms common in medicine and health professions fields. Students are provided an opportunity to develop skills in defining, pronouncing and spelling medical terms.

HCS 3303 INTRODUCTION TO PUBLIC HEALTH**3 SEMESTER HOURS**

This course introduces the major principles and practices of public health. Topics discussed are the infrastructure and components of the public health system and how they work together to maintain the public's health at the local, state, regional and national levels.

HCS 5021 MEDICAL SPANISH I**2 SEMESTER HOURS**

This course provides introductory instruction on the four basic skills necessary for language acquisition (speaking, aural comprehension, reading and writing) through a systematic study of basic Spanish grammar, medical terminology and culture.

HCS 5022 MEDICAL SPANISH II**2 SEMESTER HOURS**

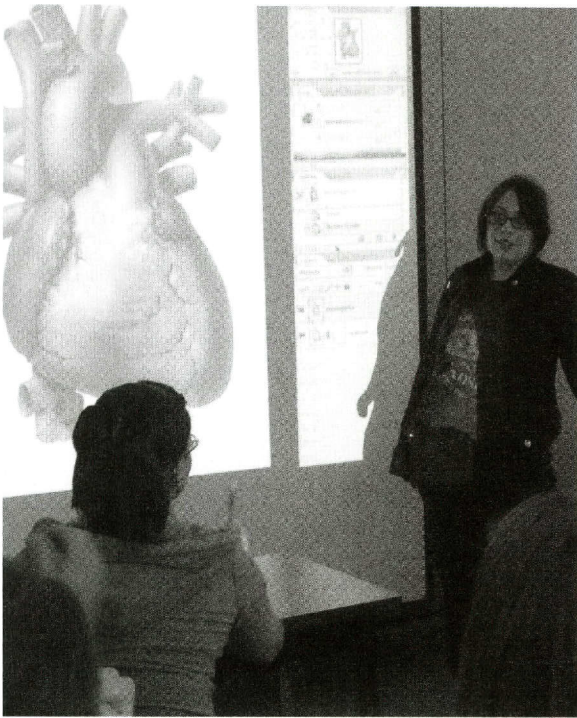
This course provides further instruction on the four basic skills necessary for language acquisition (speaking, aural comprehension, reading and writing) through a systematic study of more advanced Spanish grammar, medical terminology and culture.

HCS 5023 MEDICAL SPANISH III**2 SEMESTER HOURS**

This course is a conversational course in which each student practices being the provider and the patient.

HCS 5106 PROFESSIONAL DEVELOPMENT**1 SEMESTER HOUR**

This course introduces the major principles and issues involved in interpersonal skills for interdisciplinary health care. Topics covered include intrapersonal effectiveness, verbal and nonverbal communication, building teams, managing conflict, behavioral change, and ethics.



BIOMEDICAL COMMUNICATIONS

■ **DEGREE OFFERED**

Master of Arts
Biomedical Communications-
Biomedical Illustration

■ **PROGRAM DIRECTOR**

Lewis E. Calver, M.S.

FACULTY AND RESEARCH INTERESTS

Lewis E. Calver, Associate Professor

M.S., University of Michigan, 1973
Effective use of medical illustration in biomedical communications; visual explanations of biomedical information; envisioning scientific concepts and information.

Kimberly A. Hoggatt Krumwiede, Associate Professor

M.A., UT Southwestern Medical Center, 1993
Biomedical multimedia development and production; research and development of applications for new and emerging technologies with multimedia for student, physician and patient education.

Kenneth D. Coulter, Assistant Professor

M.F.A., Cleveland Institute of Art, 2007
Computer modeling; texturing; rigging; lighting; rendering and compositing production for the biomedical professions; educational gaming theory and production; interactive multimedia development and programming.

Angela M. Diehl, Instructor

M.A., UT Southwestern Medical Center, 2005
2-D animation; cellular and molecular illustration and animation; multimedia development; art direction and design.

■ **ADJUNCT FACULTY**

Susan B. Douglass, Adjunct Assistant Professor

B.F.A., University of Mississippi, 1981
Graphic design applications in the health sciences; use of computers as production tools; art direction and design; instruction for the health sciences.

Gregory G. Gion, Adjunct Instructor

B.S., University of Illinois Medical Center, 1981
3-D models and prosthetics.

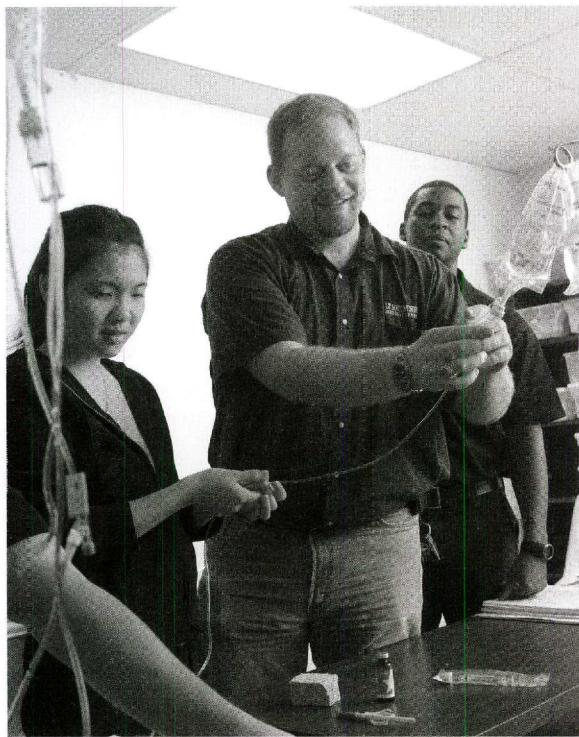
OBJECTIVE

The objective of the Biomedical Communications Graduate Program is to help students develop the ability to communicate biomedical information effectively. The program offers students the opportunity to develop their skills as medical illustrators within the health-care system. Training is accomplished in an active medical center environment.

FACILITIES

Classrooms, equipment and student work space are located at the Bass Center campus and provide an excellent work and study environment.

For a complete description of this program, including requirements for admission, please refer to the *UT Southwestern Graduate School of Biomedical Sciences Catalog*.



EMERGENCY MEDICINE EDUCATION

■ DEGREE OFFERED

Certificate (from El Centro College)

■ PROGRAM DIRECTOR

Debra Cason, EMT-P, R.N., M.S.

FACULTY AND ACADEMIC INTERESTS

James M. Atkins, Professor

M.D., UT Southwestern Medical Center, 1967
Cardiology; emergency medicine.

Debra Cason, Associate Professor

EMT-P, R.N., M.S., Texas Woman's University, 1979
Geriatrics; accreditation of paramedic educational programs.

Lynne Dees, Associate Professor

NREMT-P, Ph.D., Texas Woman's University, 2009
Continuing education specialist; student-centered, Inter-

net and problem-based adult education; fire fighter/EMS provider health.

Kathy Rinnert, Associate Professor

M.D., University of Chicago, 1995; M.P.H., University of Pittsburgh, 1997
Emergency medical services systems; aeromedical services; tactical EMS.

Sherry Clark, Assistant Professor

L.P., R.N., B.S.N., Texas Woman's University, 1980
EMS education.

Ann Hudgins, Assistant Professor

NREMT-P, R.N., B.S.N., Texas Christian University, 1980
Curriculum development; classroom and field instruction.

Monica Huff-Gresham, Assistant Professor

L.P., R.N., B.S.N., University of Texas Medical Branch at Galveston, 1976
Exam preparation and class instruction.

Suzanne Kee, Assistant Professor

NREMT-P, R.N., B.S.N., Texas Woman's University, 1986
Paramedic continuing education; field evaluation.

Kenneth Navarro, Assistant Professor

L.P., M.Ed., American Intercontinental University, 2009
Emergency medicine and paramedic continuing education.

Michael Pebworth, Assistant Professor

EMT-P, B.A., University of Texas at Arlington, 1978
Paramedic continuing education.

Karen Pickard, Assistant Professor

L.P., R.N., B.S.N., University of Texas at Arlington, 1986
Continuing education; quality improvement.

Paul Rosenberger, Assistant Professor

NREMT-P, M.P.A., University of North Texas, 1999
EMS initial education.

Ryan Dikes, Instructor

L.P., B.S., Baylor University, 1999
Emergency medicine and paramedic continuing education.

Richard LaChance, Instructor

L.P., B.A., University of Texas at Arlington, 1997
Webmaster for continuing education.

T.J. Starling, Instructor

L.P., A.S., Amarillo College, 2001
EMT and paramedic education.

Leslie Teel, Instructor

NREMT-P, B.S.Ed., L.P., Stephen F. Austin State
University, 1980
Paramedic education; geriatrics.

Gregory Winters, Instructor

L.P., M.P.A., University of Texas at San Antonio,
2007

Mike Ziem, Instructor

EMT-P, A.S., Collin County Community College,
2007

Paul Vogt, Assistant Instructor

L.P., A.A.S., Hill College, 2001

Chris Thompson, Assistant Instructor

L.P., B.A.A.S., University of North Texas, 2009

John Hutchison, Faculty Associate

EMT-P, Dallas County Community College
District, 1980

David Williams, Faculty Associate

NREMT-P, Dallas County Community College
District, 2003

DESCRIPTION OF THE PROGRAM

The Emergency Medicine Education program offers instruction to students enrolled at El Centro College of the Dallas County Community College District. The program offers two levels of courses: emergency medical technician and paramedic. These courses prepare the graduate to function in emergency medical services positions in the pre-hospital environment.

The EMT course includes instruction in basic life support, such as cardiopulmonary resuscitation, automatic external defibrillation, physical assessment, bandaging and splinting, traction splinting, spinal immobilization, airway management, oxygen therapy and other noninvasive procedures.

The paramedic program prepares the graduate to function in an advanced life-support capacity with invasive skills, such as intravenous initiation, external jugular cannulation, endotracheal intubation, drug administration by various routes, intra-osseous infusions, electrocardiogram rhythm identification, 12-lead ECG interpretation, defibrillation and cardioversion, noninvasive cardiac pacing, and chest decompression. The program includes 42 semester hours.

Both EMT and paramedic courses include classroom instruction, hospital rotations with emphasis on emergency department experience, and emergency ambulance experience. Current information should be obtained from the Emergency Medicine Education Program, 5323 Harry Hines Blvd., Dallas, TX 75390-9134, 214-648-5246.



MEDICAL LABORATORY SCIENCES

■ **DEGREE AND CERTIFICATES OFFERED**

Bachelor of Science Degree
 Medical Laboratory Sciences
 Post-Baccalaureate Certificates
 Medical Laboratory Sciences
 Blood Bank Technology

■ **PROGRAM DIRECTOR**

LeAnne M. Hutson, M.A., MLS(ASCP)

FACULTY AND ACADEMIC INTERESTS

Patricia M. Jones, Associate Professor

Ph.D., Texas Woman's University, 1986
 Biochemistry.

Laurie J. Sutor, Associate Professor

M.D., Emory University School of Medicine, 1985
 Transfusion medicine; apheresis; stem-cell harvesting and processing; viral serology.

Rebecca DesPlas, Assistant Professor

M.S., University of North Texas Health Science Center, 2003
 Clinical microbiology and immunology.

Franke Gill, Assistant Professor

M.S., New Mexico State University, 1971
 Clinical chemistry.

LeAnne M. Hutson, Assistant Professor

M.A., Texas Tech University, 2001
 Clinical hematology.

Eric S. Hoy, Clinical Associate Professor

Ph.D., University of Illinois at Chicago, 1987
 Clinical immunology.

Lesley Lee, Clinical Assistant Professor

B.S., Oklahoma State University, 1994
 Immunohematology.

Stacie Hill, Clinical Instructor

B.S., UT Southwestern Medical Center, 2008
 Medical laboratory sciences.

OBJECTIVES

The Medical Laboratory Sciences program offers preparation for careers in medical (clinical) laboratory science. Students enrolled in the program are offered training in all major areas of the clinical laboratory through classroom instruction and practical experiences. Students may pursue either a bachelor of science degree or, for those who already hold a bachelor's degree, a post-baccalaureate certificate.

The Blood Bank Technology program is a post-baccalaureate program for medical laboratory scientists who wish to specialize in immunohematology technology.

MEDICAL LABORATORY SCIENCES PROGRAM

A career in medical laboratory sciences combines an aptitude for science with the desire to help others. Medical laboratory scientists are highly skilled professionals who perform analytical tests on blood and body fluids to provide laboratory information for the detection, diagnosis and treatment of human diseases. There also is a growing trend for medical laboratory scientists to perform wellness laboratory testing aimed at preventing disease.

Medical laboratory scientists are in demand in hospital laboratories, reference clinical laboratories, physician office laboratories, public-health agencies, university research laboratories, and in industry in laboratory, sales and customer-support positions.

The primary goal of the Medical Laboratory Sciences program is to provide the community with medical laboratory scientists who are prepared to enter the health care work force as qualified clinical laboratory practitioners and who meet the requirements for certification in their profession. The curriculum also provides a foundation for graduate study in clinical or health-related basic sciences, laboratory management, education, medicine and dentistry.

■ ACCREDITATION

The Medical Laboratory Sciences program is accredited by the National Accrediting Agency for Cli-

nical Laboratory Sciences. Graduates of the program are eligible to take the national certifying examination in medical laboratory science.

REQUIREMENTS FOR ADMISSION

Factors considered in the selection of applicants include cumulative grade-point average, science and mathematics grade-point averages, communication skills, health status, personal qualities such as maturity and career goals, letters of recommendation, and personal interview.

Students without a baccalaureate degree who are admitted to the Medical Laboratory Sciences program are candidates for the baccalaureate degree conferred by UT Southwestern Medical Center. Students who enter the program from another institution in the UT System may be eligible to receive a joint degree conferred by both institutions.

■ ESSENTIAL FUNCTIONS

In addition to essential functions for all students (see Entrance Requirements in the Student Information section), each student in the Medical Laboratory Sciences or Blood Bank Technology program must be able to:

- 1) Observe laboratory demonstrations in which lab procedures are performed on biological specimens (i.e., body fluids, culture materials, tissue sections and cellular specimens.
- 2) Functionally use the senses of smell, vision and somatic sensation to characterize and describe orally and in writing the color, consistency, and clarity of biological specimens and reagents.
- 3) Use a clinical-grade binocular microscope to discriminate among fine differences in structure and color (hue, shading and intensity) in microscopic specimens.
- 4) Perform moderately taxing, continuous physical work, often requiring prolonged sitting and/or standing, over several hours.
- 5) Grasp, hold, transport and utilize specimens, reagents, hazardous chemicals and equipment of varying sizes in a safe manner as needed to perform laboratory testing.
- 6) Use laboratory equipment (e.g., pipettes, inoculating loops, test tubes) and instruments

- to perform laboratory procedures according to established laboratory guidelines.
- 7) Demonstrate critical-thinking and judgment skills appropriate to a given situation.
 - 8) Demonstrate professional demeanor and behavior and perform activities in an ethical manner in all dealings with peers, faculty, staff and clients. A student must treat all clients equally without regard to ethnicity, race, gender, religion or any other attribute.
 - 9) Demonstrate the emotional health required to use fully his or her intellectual ability, such as exercising good judgment, promptly completing all responsibilities required by the program, and being able to develop mature, sensitive and effective relationships. A student must be able to tolerate demanding workloads and to function effectively under stress. He or she must be able to adapt to changing environments, display flexibility, accept appropriate criticism and alter performance if necessary.
 - 10) Demonstrate the professional demeanor and behaviors required to uphold standards of ethics, compassion, honesty and responsibility. This applies to the student's responsibility, as well as others', to be forthright concerning possible errors, to evaluate behaviors, and to improve or help others to improve.

■ BACHELOR OF SCIENCE DEGREE

The Admissions Committee of the Medical Laboratory Sciences program determines the admissibility of an applicant into the program in accordance with the quality of his or her credentials. An interview is required. In addition to the general admission requirements specified in the Student Information section of this catalog, applicants to the Bachelor of Science in Medical Laboratory Sciences degree program must satisfy the following requirements:

- 1) Minimum of 64 semester hours of college credit, not including physical education or military science courses;
- 2) Minimum cumulative grade-point average of 2.5 on a 4.0 scale;
- 3) Minimum cumulative GPA of 2.5 on a scale of 4.0 in natural sciences and mathematics courses (Science courses must be courses offered for science majors.);
- 4) Organic chemistry, microbiology, and anatomy and physiology completed within seven years before admission;
- 5) Medical Laboratory Sciences program prerequisite courses as specified in the chart on the following page.

The curriculum in medical laboratory sciences is equivalent to the junior and senior years of college and comprises 19 months (five semesters) of intensive study.

■ TEXAS CORE CURRICULUM POLICY

The state of Texas requires students to complete a core curriculum in order to receive a bachelor's degree from a public college or university. Using guidelines provided by the state, each institution designates its own core curriculum. The UT Southwestern School of Health Professions Core Curriculum consists of 42 semester credit hours in specified component areas. The core curriculum requirements and courses that may be used to satisfy them are listed in the Student Information chapter under Core Curriculum and are included in the admission requirements tables shown in this chapter. Bachelor's degree applicants who have completed the core curriculum of another Texas public college or university are not required to complete the UT Southwestern core curriculum.

Applicants who attended non-public or out-of-state institutions of higher education or applicants who attended Texas public institutions without completing that institution's core curriculum must complete the UT Southwestern School of Health Professions Core Curriculum prior to enrolling here. Core curriculum courses are not offered at UT Southwestern.

College Level Examination Program (CLEP) and Advanced Placement (AP) credit may be accepted for core curriculum requirements as long as such credit has previously been accepted and indicated on the applicant's transcript by a previously attended college or university.

■ MEDICAL LABORATORY SCIENCES PROGRAM ADMISSION REQUIREMENTS

COMPONENT AREAS	COMMON COURSE NUMBERS	CREDIT HOURS
Communication		
English Composition*	ENGL 1301, 1302, 1311, 1312, 2311, 2314, 2315, or equivalent	6
Speech/Communication*	SPCH 1311, 1315, 1318, 1321; COMM 1307 or equivalent	3
Mathematics		
College Algebra* **	MATH 1314 or higher level course	3
Natural Sciences		
General Chemistry with laboratory**	CHEM 1411 and 1412, or 1413 and 1414	8
Organic Chemistry with laboratory**	CHEM 2423 (It is strongly recommended, but not required, that applicants also take CHEM 2425.)	4
General Biology with laboratory**	BIOL 1406 and 1407, or equivalent	8
Microbiology with laboratory**	BIOL 2421 or equivalent	4
Anatomy and Physiology**	BIOL 2401 (It is strongly recommended, but not required, that applicants also take BIOL 2402.)	4
Humanities and Visual/Performing Arts		
Visual and Performing Arts*	Courses with prefixes: ARTS, DANC, MUAP, MUEN, MUSI, DRAM, or equivalent	3
Other Humanities*	Courses including literature, philosophy, religion, modern or classical languages or literature, and cultural studies	3
Social and Behavioral Sciences		
U.S. History* (may include 3 hours of Texas history)	HIST 1301 and 1302 or 1301 and 2301	6
Political Science* (must include study of Texas Constitution)	GOVT 2301 and 2302, or 2301 and 2305, or 2301 and 2306, or 2305 and 2306	6
Social/Behavioral Science*	Courses with prefixes: ANTH, ECON, CRIJ, GEOG, PSYC, SOCI, SOCW	6
Total Credit Hours		64

*If an applicant has completed a specified core curriculum at a Texas public institution of higher education, this course is not required for admission to the Medical Technology Program.

** These courses must be completed with a grade of C or better.

Texas Common Course numbers are provided for guidance. Information is available online at www.tccns.org. Click on "The Academic Course Guide Manual." Applicants should contact academic advisers at their college or university to determine course equivalencies prevailing on their home campus. Applicants are encouraged to contact the UT Southwestern Admissions Office or the academic program about other courses that may satisfy core curriculum requirements.

■ POST-BACCALAUREATE CERTIFICATE

Course work in the Medical Laboratory Sciences program is the same for baccalaureate and post-baccalaureate students. Upon successful completion of the 19-month curriculum of professional study, the graduate is awarded the post-baccalaureate certificate in regular commencement ceremonies.

The Admissions Committee of the Medical Laboratory Sciences program determines the admissibility of an applicant into the program in accordance with the quality of his or her credentials. An interview is required. In addition to the general admission requirements specified in the Student Information chapter of this catalog, applicants to the Post-Baccalaureate Certificate in

Medical Laboratory Sciences program must satisfy the following requirements:

- 1) Bachelor's degree from a regionally accredited college or university;
- 2) Minimum cumulative grade-point average of 2.5 on a 4.0 scale;
- 3) Minimum GPA of 2.5 on a scale of 4.0 in natural sciences and mathematics courses (Science courses must be those offered for science majors.);
- 4) Organic chemistry, microbiology, and anatomy and physiology completed within seven years before admission;
- 5) Medical Laboratory Sciences program prerequisite courses specified in the chart below.

CURRICULUM

Medical laboratory sciences instruction begins in May and is composed of a didactic phase (first summer, fall and spring semesters) followed by directed clinical training at affiliated hospitals and blood centers (second summer and second

fall semesters) During the didactic phase, formal lectures are presented on the principles of blood banking (immunohematology), clinical chemistry, hematology, immunology, microbiology and body-fluid analysis in relation to normal and disease states. Laboratory sessions coordinated to lectures and covering the fundamentals of diagnostic laboratory procedures are included in the didactic phase.

During the clinical phase of instruction, training and supervision are provided in affiliated clinical laboratories and blood centers, including those at Baylor University Medical Center, Children's Medical Center Dallas, Dallas VA Medical Center, Medical Center of Plano, Medical City Dallas, Methodist Dallas Medical Center, Parkland Memorial Hospital, University Hospital - St. Paul and others. Clinical experiences in these institutions offer students the opportunity to achieve competence and confidence in performing a wide variety of laboratory procedures on patients' specimens.

MEDICAL LABORATORY SCIENCES POST-BACCALAUREATE ADMISSION REQUIREMENTS

COMPONENT AREAS	COMMON COURSE NUMBERS	CREDIT HOURS
Mathematics		
College Algebra*	MATH 1314 or higher level course	3
Natural Sciences		
General Chemistry with laboratory*	CHEM 1411 and 1412, or 1413 and 1414	8
Organic Chemistry with laboratory*	CHEM 2423 (It is strongly recommended, but not required, that applicants also take CHEM 2425.)	4
General Biology with laboratory*	BIOL 1406 and 1407, or equivalent	8
Microbiology with laboratory*	BIOL 2421 or equivalent	4
Anatomy and Physiology*	BIOL 2401 (It is strongly recommended, but not required, that applicants also take BIOL 2402.)	4
Total Credit Hours		31

* These courses must be completed with a grade of C or better.

Texas Common Course numbers are provided for guidance. Information is available online at www.tccns.org. Click on "The Academic Course Guide Manual." Applicants should contact academic advisers at their college or university to determine course equivalencies prevailing on their home campus. Applicants are encouraged to contact the UT Southwestern Admission Office or the academic program about other courses that may satisfy core curriculum requirements.

PROGRAM OF INSTRUCTION
Junior Year

SUMMER	HOURS
MT 3301 Introduction to Medical Laboratory Sciences	3
MT 3303 Immunology	3
MT 3310 Biochemistry of Human Metabolism	3
FALL	
MT 3302 Clinical Chemistry I	3
MT 3304 Hematology I	3
MT 3403 Clinical Immunology	4
MT 3405 Clinical Microbiology I	4
HCS 5106 Professional Development	1
SPRING	
MT 3404 Clinical Immunohematology	4
MT 4301 Clinical Chemistry II	3
MT 4406 Hematology II	4
MT 4407 Clinical Microbiology II	4

Senior Year

SUMMER	HOURS
MT 4308 Urinalysis	3
MT 4116 Phlebotomy Practicum	1
Clinical rotations	7
FALL	
MT 4210 Professional Issues in Medical Laboratory Sciences	2
Clinical rotations	11
<i>Total</i>	63
<i>Total clinical rotations</i>	18

SPECIAL REQUIREMENTS

Students are expected to maintain high academic performance and display appropriate professional and ethical behavior during all phases of their education and training. The Medical Laboratory Sciences program's academic policies are consistent with those of UT Southwestern School of Health Professions as stated in this catalog.

COURSE DESCRIPTIONS

For courses that do not start with MT, please refer to other sections of the catalog.

**MT 3301 INTRODUCTION TO MEDICAL LABORATORY SCIENCES
3 SEMESTER HOURS**

This course focuses on basic laboratory skills, including pipetting, preparing dilutions, laboratory mathematics, microscopy, microbiological isolation, instrumentation, quantitative methods, centrifugation and water quality. Safe laboratory practice and confidentiality of patient information and laboratory data are emphasized.

**MT 3302 CLINICAL CHEMISTRY I (LECTURE AND LABORATORY)
3 SEMESTER HOURS**

This course offers an introduction to the principles of biochemical physiology, including a metabolic study of chemical substances during normal and pathological processes of the human body. The relationship between disease states and chemical variations from normal is emphasized. Topics included are basic principles and practice of clinical chemistry; analytical techniques and instrumentation; quality control and statistics; carbo-



hydrates; lipids and lipoproteins; enzymes; cardiac function; gastrointestinal and pancreatic function; amino acids and proteins; electrolytes; blood gases; pH; and buffer systems. Laboratory sessions include selected chemical procedures that demonstrate the principles of analytical methods used in clinical chemistry laboratories.

MT 3303 IMMUNOLOGY

3 SEMESTER HOURS

This course provides a foundation in the theoretical basis of immunology. The course covers the components and mechanisms of non-specific immunity, specific immunity, humoral immunity and cell-mediated immunity. The processes of the immune system are examined in detail, and the interrelationships of those processes are analyzed. Immunologic interactions at the organism level, the cellular level and the molecular level are compared.

MT 3304 HEMATOLOGY I (LECTURE AND LABORATORY)

3 SEMESTER HOURS

This course offers an introduction to the human hematopoietic system and its relationship to health and disease. It considers both normal and abnormal morphology and function of blood in regard to red blood cells, white blood cells and platelets. Mechanisms of hemostasis and coagulation disorders are included. Laboratory sessions emphasize the identification and enumeration of normal blood cells, calculation of blood cell-derived parameters, and evaluation of hemostatic functions.

MT 3310 BIOCHEMISTRY OF HUMAN METABOLISM

3 SEMESTER HOURS

This course covers the synthesis and metabolism of proteins, carbohydrates and lipids. Also studied are membranes, transport, enzymes and cellular energetics.

MT 3403 CLINICAL IMMUNOLOGY (LECTURE AND LABORATORY)

4 SEMESTER HOURS

This course includes lectures on immunologic theory and concepts in relation to normal and pathological states in humans. Specific topics include antigen-antibody reaction, complement

and complement fixation, immunoassays, immunofluorescence, microbial serology, autoimmune diseases, and molecular diagnostic theory. The course includes laboratory exercises emphasizing the principles and procedures used in the laboratory diagnosis of infectious and immunologic diseases. Specific laboratory topics include immunoassays, immunofluorescence, microbial serology and molecular diagnostic application.

Prerequisite: MT 3303

MT 3404 IMMUNOHEMATOLOGY (LECTURE AND LABORATORY)

4 SEMESTER HOURS

This course covers genetics, characteristics, and clinical significance of blood group antigens and antibodies; antibody detection and identification; prenatal testing; pretransfusion testing; and transfusion therapy. The collecting, processing, storage, and pretransfusion testing of whole blood, its components and derivatives are covered. Laboratory sessions cover the laboratory analysis of blood group antigens and antibodies, antibody detection and identification; prenatal testing; pretransfusion testing; and transfusion therapy.

MT 3405 CLINICAL MICROBIOLOGY I (LECTURE AND LABORATORY)

4 SEMESTER HOURS

This course covers the medically significant bacteria, including emerging pathogens. Discussions emphasize taxonomy, epidemiology and laboratory methods used in the isolation and identification of major pathogenic bacteria. Emphasis also is given to major antibiotic groups, susceptibility testing and mechanisms of resistance to antibiotics. Students examine morphologic and biochemical characteristics of the major clinical pathogens. Major emphasis is placed on performance and interpretation of Gram stains.

MT 4210 PROFESSIONAL ISSUES IN MEDICAL SCIENCES

2 SEMESTER HOURS

Clinical correlations are presented to aid students' application of laboratory information to the diagnostic process, including proper selection of tests for laboratory diagnosis and interpretation of laboratory data. The case-history format is used, and students participate in the diagnostic process.

Biomedical ethics, management and principles of educational methodology are emphasized.

Prerequisite: Consent of instructor

MT 4301 CLINICAL CHEMISTRY II (LECTURE AND LABORATORY)

3 SEMESTER HOURS

This course introduces the principles of biochemical physiology, including metabolism of chemical substances during normal and pathological processes of the human body. The relationship between disease states and chemical variations from normal is emphasized. Topics include analytical techniques and instrumentation; point-of-care testing; renal function; trace elements; porphyrins and hemoglobin; hormones and immunoassays; therapeutic drug monitoring; toxicology; vitamins; inherited metabolic disorders; and tumor markers. Laboratory sessions include selected chemical procedures that demonstrate the principles of analytical methods used in clinical chemistry laboratories.

Prerequisite: MT 3302

MT 4308 URINALYSIS (LECTURE AND LABORATORY)

3 SEMESTER HOURS

This course covers the anatomy and physiology of the urinary tract, renal function, and the chemical and cellular composition of urine. Body fluids other than blood or urine also are discussed. The course emphasizes the laboratory procedures used in the chemical, physical and microscopic examination of urine. The cellular examination of body fluids also is practiced.

MT 4406 HEMATOLOGY II (LECTURE AND LABORATORY)

4 SEMESTER HOURS

This course continues the study of the human hematopoietic system and its relationship to health and disease. It considers both normal and abnormal morphology and function of blood in regard to blood cells and platelets and in regard to body fluids. Laboratory sessions emphasize the human hematopoietic system and its relationship to health and disease and consider both normal and abnormal morphology in correlation to disease and disorders.

Prerequisite: MT 3304

MT 4407 CLINICAL MICROBIOLOGY II (LECTURE AND LABORATORY)

4 SEMESTER HOURS

This course covers the medically significant fungi, parasites, viruses and mycobacteria. Discussions also include epidemiology and the pathogenic mechanisms of disease. Laboratory sessions emphasize methods and procedures used in isolating and identifying major pathogenic fungi and parasites.

Prerequisite: MT 3405

■ **CLINICAL ROTATIONS**

MT 4113 CLINICAL IMMUNOLOGY PRACTICUM
1 SEMESTER HOUR

Practical instruction and supervised experience are offered in the clinical immunology laboratory. Organization of work, interpretation of test results and quality control are included.

Prerequisite: MT 3303 and MT 3403

MT 4116 PHLEBOTOMY PRACTICUM
1 SEMESTER HOUR

In this course, students are offered the opportunity to acquire proficiency in phlebotomy (collection of blood from patients). Instruction takes place at an affiliated clinical institution following guidelines established by the Medical Laboratory Sciences program and the institution.

MT 4118 URINALYSIS PRACTICUM
1 SEMESTER HOUR

Practical instruction and supervised experience are offered in the clinical urinalysis laboratory. Interpretation of test results, organization of work, instrumentation and quality control are included.

Prerequisite: MT 4308

MT 4411 CLINICAL CHEMISTRY PRACTICUM
4 SEMESTER HOURS

Practical instruction and supervised experience are offered in the clinical chemistry laboratory. Organization of work, interpretation of test results, use and maintenance of instrumentation, and quality control are included.

Prerequisites: MT 3302 and MT 4301

**MT 4412 HEMATOLOGY PRACTICUM
4 SEMESTER HOURS**

Practical instruction and supervised experience are offered in the clinical hematology laboratory. Organization of work, interpretation of test results, instrumentation and quality control are included.

Prerequisites: MT 3304 and MT 4406

**MT 4414 IMMUNOHEMATOLOGY PRACTICUM
4 SEMESTER HOURS**

Practical instruction and supervised experience are offered in the clinical immunohematology laboratory. Performance of laboratory tests, interpretation of test results, instrumentation and quality control are included.

Prerequisite: MT 3404

**MT 4415 CLINICAL MICROBIOLOGY PRACTICUM
4 SEMESTER HOURS**

Practical instruction and supervised experience are offered in the clinical microbiology laboratory. Organization of work, interpretation of test results, instrumentation and quality control are included.

Prerequisites: MT 3405 and MT 4407

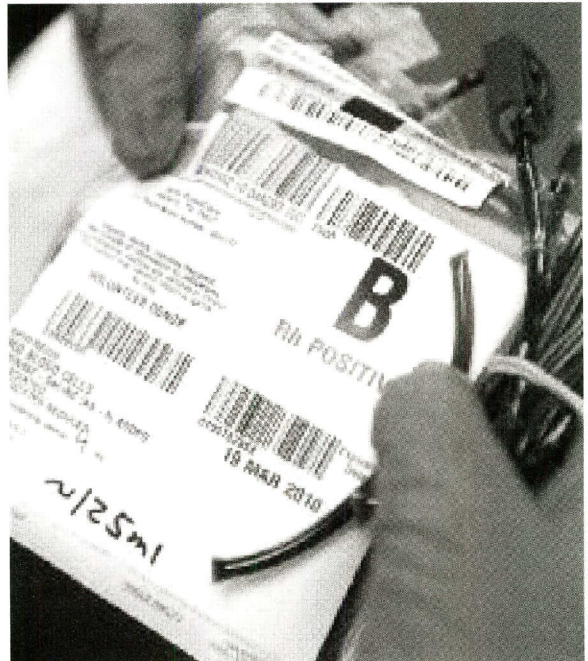
BLOOD BANK TECHNOLOGY PROGRAM

The primary objective of the Blood Bank Technology Program is to offer training to individuals who wish to pursue a career in immunohematology. Students are instructed through online courses and clinical practicums in subjects that include the theory of transfusion therapy, the principles of immunohematology and donor testing procedures, and the management strategies used in a transfusion service, immunohematology laboratory and donor center. The curriculum also includes a research component that offers the student experience in planning, conducting and presenting original research.

Graduates of the program are qualified as technical consultants, administrators, educators and clinical research scientists in immunohematology.

ACCREDITATION

The UT Southwestern Blood Bank Technology program is accredited by the Commission on



Accreditation of Allied Health Education Programs, (www.caahep.org), upon recommendation of the American Association of Blood Banks Committee on Accreditation of Specialist in Blood Bank Programs (Commission of Accreditation of Allied Health Programs, 1361 Park St., Clearwater, FL 33756, 727-210-2350). Graduates of the program are eligible to take the certification examination for specialist in blood bank technology administered by the Board of Registry of the American Society for Clinical Pathology.

REQUIREMENTS FOR ADMISSION

The Admissions Committee of the Medical Laboratory Sciences program determines the admissibility of an applicant into the program in accordance with the quality of his or her credentials. An interview is required. In addition to the general admission requirements specified in the Student Information chapter of this catalog, applicants to the Blood Bank Technology program must satisfy the following requirements:

- 1) Bachelor's degree from a regionally accredited college or university;

- 2) Certified medical laboratory scientist or one year of acceptable clinical laboratory experience;
- 3) Minimum of one year of acceptable experience in a blood center or transfusion service;
- 4) Minimum GPA of 2.5 on a scale of 4.0;
- 5) Required courses specified in the chart below.

CURRICULUM

The Blood Bank Technology program curriculum provides intensive professional study in both theoretical and applied educational areas. The theory portion includes online courses facilitated by faculty members. The clinical education experience is provided at a variety of institutions.

Upon successful completion of the program, graduates are awarded a post-baccalaureate certificate in blood bank technology.

PROGRAM OF INSTRUCTION

COURSE	HOURS
MT 5330 Immunology and Hematology	3
MT 5332 Serology	3
MT 5237 Serology Laboratory 1	2
MT 5538 Serology Laboratory 2	5

MT 5331 Human Blood Groups	3
MT 5139 Advanced Case Studies	1
MT 5341 Donor Center Operations	3
MT 5393 Donor Center Practice	3
MT 5335 Transfusion Therapy	3
MT 5340 Transfusion Service Practice	3
MT 5442 Management	4
MT 5494 Education and Research	4
<i>Total</i>	<i>37</i>

PART-TIME PROGRAM

The Blood Bank Technology program curriculum is designed to meet the needs of the working medical laboratory scientist.

SPECIAL REQUIREMENTS

Students are expected to maintain high academic performance and display appropriate professional and ethical behavior during all phases of their education and training. The academic policies of the Medical Laboratory Sciences program are consistent with those of UT Southwestern School of Health Professions as stated in this catalog.

BLOOD BANK TECHNOLOGY PROGRAM ADMISSION REQUIREMENTS

COMPONENT AREAS	COMMON COURSE NUMBERS	CREDIT HOURS
Mathematics		
College Algebra	MATH 1314 or higher level course	3
Natural Sciences		
General Chemistry with laboratory	CHEM 1411 and 1412, or 1413 and 1414	8
Organic Chemistry with laboratory	CHEM 2423 (It is strongly recommended, but not required, that applicants also take CHEM 2425.)	4
Biochemistry or other chemistry course	Upper division (junior/senior) course	4
General Biology with laboratory	BIOL 1406 and 1407, or equivalent	8
Microbiology with laboratory	BIOL 2421 or equivalent	4
Anatomy and Physiology	BIOL 2401 or other four-hour biology course	4
Total Credit Hours		35

Texas Common Course numbers are provided for guidance. Information is available online at www.tccns.org. Click on "The Academic Course Guide Manual." Applicants should contact academic advisers at their college or university to determine course equivalencies prevailing on their home campus. Applicants are encouraged to contact the UT Southwestern Admissions Office or the academic program about other courses that may satisfy core curriculum requirements.

COURSE DESCRIPTIONS

MT 5139 ADVANCED CASE STUDIES

1 SEMESTER HOUR

In this course the student demonstrates the application of theoretical knowledge to clinical situations in antibody and clinical case studies. The student presents solutions to unresolved problems. Additional testing is identified to contribute to the solution. Students also review serologic cases for thoroughness, accuracy and validity.

MT 5237 SEROLOGY LABORATORY I

2 SEMESTER HOURS

Students perform routine and complex antibody identification and explore methods used to resolve ABO discrepancies. A variety of blood bank techniques are used that illustrate basic and advanced serologic skills. This course is taken in conjunction with or after MT 5332. This course is a prerequisite for MT 5538.

MT 5330 IMMUNOLOGY AND HEMATOLOGY

3 SEMESTER HOURS

The fundamental aspects of the immune system response and hematology are covered in this course. Topics include the cells and tissues of the immune system, the nature of antigens and antibodies and their interactions, complement, and transplantation. Also presented are the histocompatibility antigens, nomenclature, relationship to transfusion and transplantation. Hematology includes discussion of hemoglobin structure and function; abnormal hemoglobin and red cell membrane defects; hemostasis; and platelet and white blood cell structure, function and disorders. The principles of red cell destruction are introduced and related to hemolytic anemias. Emphasis is placed on application of immunologic concepts to immunohematology. This course is a prerequisite or co-requisite for all subsequent courses.

MT 5331 HUMAN BLOOD GROUPS

3 SEMESTER HOURS

The conventional and International Society of Blood Transfusion nomenclature for the blood group antigens and other pertinent terminology is reviewed. The principles of genetics, biochem-

istry, immunology and serology as applied to blood group systems, collections and series are presented. The blood group antigens and their corresponding antibodies are addressed in relation to disease and transfusion therapy.

MT 5332 SEROLOGY

3 SEMESTER HOURS

This course presents methods used to resolve ABO discrepancies; to perform antibody detection, identification and crossmatch; and to perform antigen typing. The principle and use of potentiators, enzymes, thiol reagents and other special reagents are introduced. Patient history, initial serological findings, reticulocyte harvest, adsorption and elution techniques, as well as the solid phase and column methodologies, are applied to investigation of allo- and autoantibodies. This course is a prerequisite or co-requisite for MT 5237 and prerequisite for MT 5538.

MT 5335 TRANSFUSION THERAPY

3 SEMESTER HOURS

The regulations associated with practice and fundamental aspects of transfusion therapy are introduced in this course. The composition of blood and blood components and their infusion are discussed. Transfusion therapy for different clinical situations is presented, including the special-needs patient, neonatal/pediatric patient, and indications and use of special components. Transfusion complications are also addressed. This course is a prerequisite or co-requisite for MT 5340.

MT 5340 TRANSFUSION SERVICE PRACTICE

3 SEMESTER HOURS.

This clinical experience includes a rotation in one or more transfusion services. The student observes and/or participates in the application of the standards, regulations, and good manufacturing practices in patient identification, blood sample collection, component selection and preparation, pretransfusion testing, compatibility testing, inventory management, transfusion reaction work-ups, and prenatal and cord-blood testing. Automated testing, blood administration, therapeutic blood collection, donor look-back and transfusion-transmitted disease investigations are

discussed. Managerial and quality assurance aspects of a transfusion service are also addressed.

MT 5341 DONOR CENTER OPERATIONS

3 SEMESTER HOURS

The standards, regulations and fundamental aspects of good manufacturing practices associated with donor center operations are introduced. Topics include recruitment of blood donors and collection, preparation, processing, inventory management, storage and distribution of blood components. Donor deferrals and notification, donor reentry, donor look-back, and transfusion-transmitted disease investigations are discussed. The application of information management to document development, control and record management also is addressed. The course is a prerequisite or co-requisite for MT 5393.

MT 5393 DONOR CENTER PRACTICE

3 SEMESTER HOURS

This clinical experience includes rotations in a blood donor center as well as a processing laboratory. The student observes the application of the standards, regulations and good manufacturing practices in the recruitment of blood donors and the collection, preparation, processing, inventory management and storage of blood components. Managerial and quality assurance aspects of donor centers and processing laboratories are also addressed.

MT 5442 MANAGEMENT

4 SEMESTER HOURS

This course consists of didactic experience in management and laboratory information systems. Instruction is given in management theories, quality management and quality assurance techniques, administration, regulatory requirements, and accreditation requirements.

MT 5494 EDUCATION AND RESEARCH

4 SEMESTER HOURS

Application of the four domains of learning in preparation of objectives, teaching materials, audiovisual aids and evaluation tools for adult education is presented. The student also designs a research project in which data are collected and analyzed, based on guidance provided in the course. Significant results are presented in written and oral communication. Students are encouraged to submit their research findings for scholarship consideration and publication.

MT 5538 SEROLOGY LABORATORY 2

5 SEMESTER HOURS

Students are exposed to a variety of serologic situations in an effort to increase their problem-solving skills. Knowledge of blood group antigens and antibodies is reinforced. Students are given the opportunity to perform specialized testing that is unique to blood bank reference laboratories.



PROSTHETICS-ORTHOTICS

■ DEGREE OFFERED

Master of Prosthetics-Orthotics

■ PROGRAM DIRECTOR

Susan L. Kapp, M.Ed., C.P.O., L.P.O.

FACULTY AND ACADEMIC INTERESTS

Susan L. Kapp, Associate Professor

B.S., Texas A&M University, 1979; C.P.O., Northwestern University, 1980, 1990; M.Ed., University of Texas at Brownsville, 2005

Computer-aided design; computer-aided manufacture; new materials application.

Fan Gao, Assistant Professor

B.E., Beijing University of Aeronautics and Astronautics, 1996; M.S., Ph.D., Pennsylvania

State University, 2004, 2005

Hand biomechanics and motor control; orthopaedic biomechanics; muscle mechanics; development of rehabilitation device.

Leslie Gray, Assistant Professor

B.S., UT Southwestern Medical Center, 2002; M.Ed., University of Texas at Brownsville, 2007
Lower-extremity prosthetic management; education technology.

Miguel N. Mojica, Assistant Professor

B.S., C.P.O., UT Southwestern Medical Center, 1987

Orthotic management of the spine and upper extremity.

William A. Carlton, Instructor

C.O., Shelby State Community College, 1981; B.S., UT Southwestern Medical Center, 1983

Misty Judson, Clinical Instructor

B.S., UT Southwestern Medical Center, 2007

Kirsten Tulchin, Clinical Instructor
 B.S., Trinity College, 1998; M.S., Marquette University, 2001

Monica Schmieder, Assistant Clinical Instructor
 B.S., UT Southwestern Medical Center, 2008

■ **ADJUNCT FACULTY**

Frank A.D. Gottschalk, Professor
 M.D., University of Witwatersrand, South Africa, 1970

Mark W. Ashford, Clinical Instructor
 B.S., C.P., UT Southwestern Medical Center, 1984

Donald R. Cummings, Clinical Instructor
 B.S., C.P., UT Southwestern Medical Center, 1984

Kevin Felton, Clinical Instructor
 B.S., C.O., University of Washington, 1986

John R. Ferguson, Clinical Instructor
 B.A., California State University, 1985; C.P., University of California, 1986; C.O., Northwestern University School of Medicine, 1991

Cynthia R. Hooper, Clinical Instructor
 B.S., C.P.O., UT Southwestern Medical Center, 1994

Donald E. Katz, Clinical Instructor
 B.S., C.O., UT Southwestern Medical Center, 1985

Chris Lake, Clinical Instructor
 B.S., C.P.O., UT Southwestern Medical Center, 1995

Alan T. Sheppard, Clinical Instructor
 B.S., C.P.O., UT Southwestern Medical Center, 1996

Gary Strobel, Clinical Instructor
 A.A., Shelby State Community College, 1985

Anna Marie Vasquez, Clinical Instructor
 B.A., Arkansas State University, 1975; C.P.O., Northwestern University, 1995

OBJECTIVES

The objectives of the Prosthetics-Orthotics program are to offer a solid knowledge base in related sciences and to teach the professional and technical skills necessary to meet the needs of

patients requiring either replacement of a partially or totally absent limb or fitting of a brace to a disabled spine or limb.

Graduates of the program function as active members of the health care team, collaborating with other health care professionals in rehabilitating people with chronic disabling illnesses, injuries or birth defects.

REQUIREMENTS FOR ADMISSION

The Admissions Committee of the Prosthetics-Orthotics program determines the admissibility of an applicant into the program in accordance with the quality of his or her credentials. An interview is required. In addition to the general admission requirements specified in the Student Information section of this catalog, applicants to the program must satisfy the following requirements.

- 1) Complete a bachelor's degree from a regionally accredited institution;
- 2) Complete the 37 semester hours of specific prerequisite courses (listed below);
- 3) Earn the minimum recommended cumulative and science GPA of 3.0 on a 4.0 scale;
- 4) Submit a Graduate Record of Examination score;
- 5) Have visited, shadowed, volunteered or worked in a prosthetic-orthotic clinic; and
- 6) Submit three letters of recommendation (instructor, employer, undergraduate adviser, volunteer experience or leadership position supervisor, other academic/research mentor).

■ **MASTER OF PROSTHETICS-ORTHOTICS PREREQUISITE COURSES**

	HOURS
Biology with lab (for science majors)	8
Human Anatomy and Physiology with lab	8
Physics with lab (for science majors)	8
Chemistry with lab (for science majors)	4
College Algebra or higher	3
Statistics	3
Psychology (Human Growth and Development or Abnormal)	3
<i>Total Credit Hours</i>	<i>37</i>

Recommended: Business Management, Ethics

The prerequisite courses must be completed with a grade of C or better. Prerequisite courses are not offered at UT Southwestern. Classes begin in late May each year.

■ ESSENTIAL FUNCTIONS

In addition to essential functions for all students (see Entrance Requirements in the Student Information chapter), each student in the Prosthetics-Orthotics program must be able to:

- 1) Participate in supervised clinical activities for eight-hour days;
- 2) Demonstrate sufficient vision to perform such tasks as (but not limited to) interpreting a medical record, inspecting wounds and determining gait deviations;
- 3) Physically and visually utilize chemicals and power tools while following all appropriate safety precautions;
- 4) Demonstrate the physical capability to work in a prosthetics and orthotics laboratory for four-hour periods;
- 5) Demonstrate sufficient arm strength, balance, coordination and sensation to perform such activities as (but not limited to) patient casting, manual muscle testing, range-of-motion testing, and soft-tissue and bony evaluations.

CURRICULUM

The Prosthetics-Orthotics program curriculum leads to a master's degree with academic eligibility to take the certification examinations of the American Board for Certification in Orthotics and Prosthetics.

The faculty combines educational, professional and technical skills in a coordinated approach to the academic and clinical aspects of the student's education, offering an opportunity to attain the basic competencies necessary for an entry-level prosthetist and orthotist. Students also engage in research projects and community service as a part of their learning experience.

■ PROGRAM OF INSTRUCTION

First Year

SUMMER		HOURS
HCS 5308	Human Anatomy (Lecture)	3

HCS 5309	Human Anatomy Dissection Laboratory	3
HCS 5407	Human Physiology	4
HCS 5207	Introduction to Neuroscience	2
MPO 5101	Introduction to Laboratory Skills and Materials in Prosthetics and Orthotics	1
<i>Total</i>		13

FALL

MPO 5102	Clinical Evaluation Tools	1
HCS 5306	Introduction to Pathology	3
MPO 5203	Biomechanics of Human Movement I	2
MPO 5504	Orthotic Management of the Lower Limb I	5
MPO 5505	Prosthetic Management of the Lower Limb I	5
HCS 5106	Professional Development	1
<i>Total</i>		17

SPRING

MPO 5106	Biomechanics of Human Movement II	1
MPO 5407	Orthotic Management of the Lower Limb II	4
MPO 5308	Orthotic Management of the Spine	3
MPO 5409	Prosthetic Management of the Lower Limb II	4
HCS 5230	Health Care Research	2
<i>Total</i>		14

Second Year

SUMMER		HOURS
MPO 5310	Prosthetic Management of the Upper Limb	3
MPO 5411	Clinical Experience	4
MPO 5112	Clinical Research I	1
<i>Total</i>		8
FALL		
MPO 5313	Orthotic Management of the Upper Limb	3
MPO 5214	Interdisciplinary Aspects of Prosthetics and Orthotics	2
MPO 5115	Clinical Research II	1
MPO 5316	Contemporary Practice and Synthesis	3
<i>Total</i>		9
<i>Total Hours</i>		61

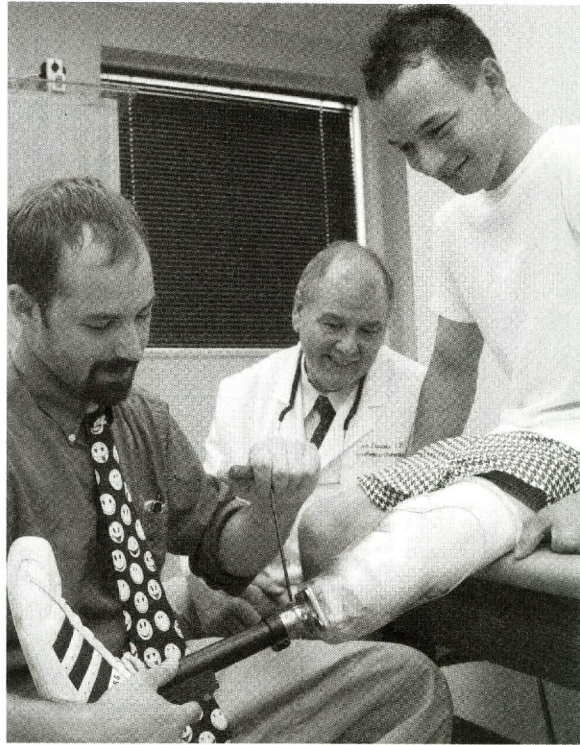
GRADUATION REQUIREMENTS

A candidate for the degree of Master of Prosthetics-Orthotics must meet all the following requirements:

- 1) The student must demonstrate a high order of scholarly achievement in prosthetics-orthotics, including appropriate professional competencies. The program's Student Progress Committee determines whether adequate mastery has been acquired.
- 2) The student must complete satisfactorily a minimum of 61 semester hours at UT Southwestern School of Health Professions.
- 3) The student must discharge all financial obligations to the medical center. In the event of nonpayment, one or more actions may be taken by the dean: a) readmission may be denied; b) the student's grades and official transcript may be withheld; and c) the degree to which the student would otherwise be entitled may be withheld.
- 4) The student must maintain at least a 2.5 cumulative grade-point average, have no academic deficiencies and have no incompletes.
- 5) The student must complete the academic requirements listed on his or her degree plan, including completion of any academic deficiencies in prerequisite courses, by the times stated in the student's official letter of acceptance. The student is responsible for submitting official documentation of successful completion of the prerequisites to the Office of the Registrar.
- 6) The student must pay a graduation fee designated to partially offset the costs associated with diploma and diploma cover production, regalia and the commencement ceremony. All students completing a degree or certification must pay the fee whether they attend the commencement ceremony or not.

COURSE DESCRIPTIONS

See other departmental listings in this catalog for descriptions of courses that do not begin with the prefix MPO.



MPO 5101 INTRODUCTION TO LABORATORY SKILLS AND MATERIALS IN PROSTHETICS AND ORTHOTICS

1 SEMESTER HOUR

This course introduces equipment and tools used in the fabrication of prostheses and orthoses. Proper safety techniques and operating procedures in the laboratory environment are stressed. Prosthetic and orthotic material characteristics are introduced.

MPO 5102 CLINICAL EVALUATION TOOLS

1 SEMESTER HOUR

This course provides an overview of clinical evaluation tools commonly used to develop treatment plans and assess outcomes for patients with orthopaedic and neurologic impairments. Students have the opportunity to become proficient in selected measurement techniques and evaluation tools through lecture, lab and clinical experience.

MPO 5106 BIOMECHANICS OF HUMAN MOVEMENT II

1 SEMESTER HOUR

This course is a continuation of MPO 5203 and is designed to develop a fundamental understanding

of the anatomical, neuromuscular and biomechanical principles of human movement. Emphasis is on the importance of mechanical principles in relation to analysis of the human body at rest and in motion, in both normal and pathological conditions.

MPO 5112 CLINICAL RESEARCH I
1 SEMESTER HOUR

Students, with an assigned faculty mentor, develop a project proposal to answer a defined clinical question. The project may be an in-depth literature review or an experimental research pilot project. Students also may be assigned to ongoing projects. This course focuses on identifying and critically analyzing the literature, using skills learned in the HCS 5230 course. Guidelines for research involving human subjects also are covered.

MPO 5115 CLINICAL RESEARCH II
1 SEMESTER HOUR

This course is a continuation of MPO 5112. Students summarize their findings to form conclusions to their clinical questions. This capstone project results in a final scientific paper summarizing the project and a formal presentation to develop communication skills further.

MPO 5203 BIOMECHANICS OF HUMAN MOVEMENT I
2 SEMESTER HOURS

This course is designed to develop a fundamental understanding of the anatomical, neuromuscular and biomechanical principles of human movement. Emphasis is on the importance of mechanical principles in relation to analysis of the human body at rest and in motion, in both normal and pathological conditions.

MPO 5214 INTERDISCIPLINARY ASPECTS OF PROSTHETICS AND ORTHOTICS
2 SEMESTER HOURS

This course covers medical, psychological and social conditions and needs of the patient requiring orthotic or prosthetic management. It expands on topics presented in other prosthetic-orthotic courses and includes experts in related fields. Topics include ethics, the interdisciplinary team concept, gerontology, wound care, pain management and co-morbidities affecting care. An integral part of this course is a review of classic and current literature, with respect to evidence-based practice models.

MPO 5308 ORTHOTIC MANAGEMENT OF THE SPINE
3 SEMESTER HOURS

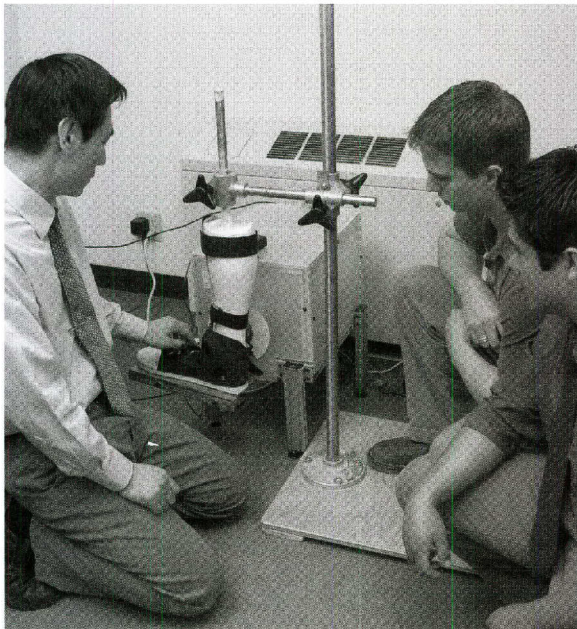
This course provides a comprehensive study of short- and long-term spinal orthotic patient management. It includes evaluation, treatment-plan formulation, biomechanics and orthotic design for the spine. Fabrication and fitting of selected orthoses are presented.

MPO 5310 PROSTHETIC MANAGEMENT OF THE UPPER LIMB
3 SEMESTER HOURS

This course provides a comprehensive study of the short- and long-term upper-limb prosthetic patient management. It includes evaluation, treatment-plan formulation, biomechanics and prosthetic design. Fabrication and fitting of selected prostheses are presented.

MPO 5313 ORTHOTIC MANAGEMENT OF THE UPPER LIMB
3 SEMESTER HOURS

This course provides a comprehensive study of short- and long-term upper-limb orthotic patient management. It includes evaluation, treatment-



plan formulation, biomechanics and orthotic design. Fabrication and fitting of selected orthoses are presented.

MPO 5316 CONTEMPORARY PRACTICE AND SYNTHESIS

3 SEMESTER HOURS

This course presents prosthetic and orthotic practice within the context of current health care. Three distinct areas of focus are presented: practice management, advanced technology, and clinical reasoning and synthesis. It emphasizes documentation and coding skills and includes regulations related to reimbursement by federal, state and private payers, patient confidentiality, quality assurance and accountability, health care economics, marketing, codes of professional responsibilities, and licensure and certification. It also covers professional organizations, international service, and life-long personal and professional development. Resumé development and interviewing skills for securing a residency position are included. This course also builds on current prosthetic and orthotic design principles by introducing additional available technologies and research trends. It includes computer-aided design, myoelectric prosthetic and orthotic control, functional electrical stimulation, micro-processor-controlled joints, management of the high-activity individual, advanced prosthetic socket design and suspension, complex orthotic gait and device design, targeted reinnervation, and osseointegration. This course is offered in the final semester to further prepare the student for the role of prosthetic-orthotic resident. Prior course work is synthesized and facilitated through patient interaction, case studies and other means to enhance patient management and problem-solving skills.

MPO 5407 ORTHOTIC MANAGEMENT OF THE LOWER LIMB II

4 SEMESTER HOURS

This course provides a comprehensive study of short- and long-term lower-limb orthotic patient management and proximal to the knee. It includes evaluation, treatment-plan formulation, biomechanics and orthotic design. Fabrication and fitting of selected orthoses are presented.

MPO 5409 PROSTHETIC MANAGEMENT OF THE LOWER LIMB II

4 SEMESTER HOURS

This course provides a comprehensive study of short- and long-term lower-limb prosthetic patient management at and proximal to the knee. It includes evaluation, treatment-plan formulation, biomechanics and prosthetic design. Fabrication and fitting of selected prostheses are presented.

MPO 5411 CLINICAL EXPERIENCE

4 SEMESTER HOURS

This course provides the opportunity to apply learned skills during a multi-week clinical experience. It may occur in a general practice setting or a specialty practice such as upper-limb prosthetics, pediatrics, acute management, Department of Defense facility or Veterans Administration facility.

MPO 5504 ORTHOTIC MANAGEMENT OF THE LOWER LIMB I

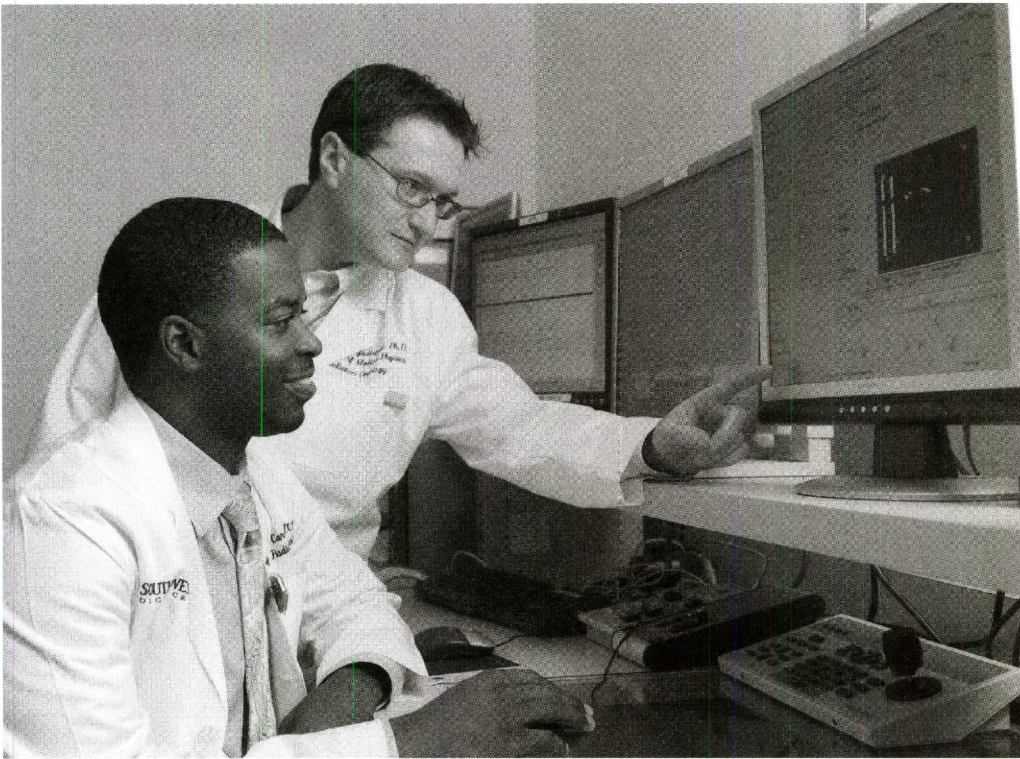
5 SEMESTER HOURS

This course provides a comprehensive study of short- and long-term lower-limb orthotic patient management distal to the knee. It includes evaluation, treatment-plan formulation, biomechanics and orthotic design. Fabrication and fitting of selected orthoses are presented, including material characteristics. International standards and product failure also are discussed.

MPO 5505 PROSTHETIC MANAGEMENT OF THE LOWER LIMB I

5 SEMESTER HOURS

This course provides a comprehensive study of short- and long-term lower-limb patient management distal to the knee. It includes evaluation, treatment-plan formulation, biomechanics and prosthetic design. Fabrication and fitting of selected prostheses are presented, including material characteristics. International standards and product failure also are discussed.



RADIATION THERAPY

DEGREE OFFERED

Bachelor of Science
Post-Baccalaureate Certificate

PROGRAM DIRECTOR

Carol Scherbak, M.S.R.S., R.T.(T)

FACULTY AND ACADEMIC INTERESTS

Carol Scherbak, Assistant Professor

M.S.R.S., R.T.(T), Midwestern State University, 2005

Radiation therapist and student interactions in the clinical environment.

Strahinja Stojadinovic, Assistant Professor

Ph.D., Kent State University, 2004

Development of tools for evaluating animal cancer models.

Marissa Johnson, Instructor

B.S.R.T., R.T. (T) University of Oklahoma, 2002
Stereotactic body radiotherapy.

Martha Schecter, Adjunct Instructor

J.D., University of Louisville School of Law, 1970;
L.L.M., Columbia University School of Law, 1974
Health care law.

OBJECTIVES

The Radiation Therapy program offers a didactic and clinical education to prepare the graduate for a career in radiation therapy. Students gain experience in all major areas of radiation therapy practice, including treatment delivery, medical dosimetry, simulation and patient care. Students may pursue either a Bachelor of Science or, for those who already hold a bachelor's degree, a post-baccalaureate certificate. The curriculum is designed to support a competency-based clinical education to prepare the graduate to perform as an entry-level radiation therapist. The junior-level courses introduce the

student to the health care industry, patient care, oncologic pathology, radiobiology, medical physics and dosimetry. The senior-level courses integrate these ideas into more advanced concepts concerning treatment planning, treatment delivery and simulation.

The clinical aspect of the program combines the didactic material with simulated and actual patient care and treatment. Clinical experience is located in the Moncrief Radiation Oncology Center at UT Southwestern, where students can experience state-of-the-art cancer treatment under the supervision of faculty and staff. Students also rotate through the Annette Simmons Stereotactic Center at UT Southwestern University Hospital - Zale Lipshy. The clinical setting allows the student to achieve clinical competency and confidence in the treatment of patients with ionizing radiation. Graduates of the program may apply to take the National Registry Exam in Radiation Therapy administered by the American Registry of Radiologic Technologists.

■ ACCREDITATION

The Radiation Therapy program is accredited by the Joint Review Committee on Education in Radiologic Technology (20 North Wacker Dr., Suite 2850; Chicago, IL 60606-3182; 312-704-5300).

REQUIREMENTS FOR ADMISSION

■ BACHELOR OF SCIENCE

The Admissions Committee for the Radiation Therapy program determines the admissibility of an applicant in accordance with the quality of his or her credentials. The application process consists of submitting all application materials, completing 16 hours of clinical observations and attending an interview with the Admissions Committee. In addition to the minimum requirements listed in the Student Information chapter, applicants must satisfy the following requirements:

- 1) Minimum of 60 semester hours of college credit, not including physical education or military science courses;
- 2) Minimum cumulative grade-point average of 2.5 on a 4.0 scale;
- 3) Minimum cumulative GPA of 2.5 on a 4.0 scale in natural science and mathematics courses;
- 4) A grade of C or better on all prerequisite courses;
- 5) Radiation Therapy prerequisite courses as specified in the chart on the following page.

■ TEXAS CORE CURRICULUM POLICY

The state of Texas requires students to complete a core curriculum in order to receive a bachelor's degree from a public college or university. Using guidelines provided by the state, each institution designates its own core curriculum. The UT Southwestern School of Health Professions Core Curriculum consists of 42 semester credit hours in specified component areas. The core curriculum requirements and courses that may be used to satisfy them are listed in the Student Information chapter under Core Curriculum and are included in the admission requirements tables shown in this section. Bachelor's degree applicants who have completed the core curriculum of another Texas public college or university are not required to complete the UT Southwestern core curriculum.

Applicants who attended non-public or out-of-state institutions of higher education or applicants who attended Texas public institutions without completing that institution's core curriculum must complete the UT Southwestern School of Health Professions Core Curriculum prior to enrolling here. Core curriculum courses are not offered at UT Southwestern.

College Level Examination Program (CLEP) and Advanced Placement (AP) credit may be accepted for core curriculum requirements as long as such credit has previously been accepted and indicated on the applicant's transcript by a previously attended college or university.

■ POST-BACCALAUREATE CERTIFICATE

The Admissions Committee for the Radiation Therapy program determines the admissibility of an applicant in accordance with the quality of his

RADIATION THERAPY BACHELOR DEGREE PREREQUISITE COURSES

COMPONENT AREAS	COMMON COURSE NUMBERS	CREDIT HOURS
Communication		
English Composition	ENGL 1301, 1302, 2311, 2321, 2326, or equivalent	6
Speech/Communication	SPCH 1311 or equivalent	3
Mathematics		
Pre-calculus	MATH 2412 or higher level course	3
Natural Sciences		
General Chemistry with laboratory	CHEM 1405	8
Physics with laboratory	PHYS 1401, 1402	8
Anatomy and Physiology	BIOL 2401, 2402	8
Humanities and Visual/Performing Arts		
Visual and Performing Arts*	Courses with prefixes: ARTS, DANC, MUAP, MUEN, MUSI, DRAM, or equivalent	3
Other Humanities*	Courses including literature, philosophy, religion, modern or classical languages or literature, and cultural studies	3
Social and Behavioral Sciences		
U.S. History* (may include 3 hours of Texas history)	HIST 1301 and 1302 or 1301 and 2301	6
Political Science* (must include study of Texas Constitution)	GOVT 2301 and 2302, or 2301 and 2305, or 2301 and 2306, or 2305 and 2306	6
Social/Behavioral Science*	PSYC 2301, SOCI 1301	6
Computer Science		
Computer Science	COSC 1300, 1401	3
Mathematics or Natural Science elective		
	Courses with prefix of MATH, CHEM, BIOL, PHYS	3
Total Credit Hours		62

*If an applicant has completed a specified core curriculum at a Texas public institution of higher education, this course is not required for admission to the Radiation Therapy program.

Texas Common Course numbers are provided for guidance. Information is available online at www.tccns.org. Click on "The Academic Course Guide Manual." Applicants should contact academic advisers at their college or university to determine course equivalencies prevailing on their home campus. Applicants are encouraged to contact the UT Southwestern Admissions Office or the academic program about other courses that may satisfy core curriculum requirements.

or her credentials. The application process consists of submitting all application materials, completing 16 hours of clinical observations and attending an interview with the Admissions Committee. Post-baccalaureate certificate students must meet all of UT Southwestern School of Health Professions general admission requirements and satisfy the following:

- 1) Bachelor's degree from a regionally accredited college or university;
- 2) Minimum cumulative grade-point average of 2.5 on a 4.0 scale;
- 3) Minimum cumulative GPA of 2.5 on a 4.0 scale in natural science and mathematics courses;
- 4) Radiation therapy prerequisite courses as specified on the chart on following page; and
- 5) A grade of C or better on all prerequisite courses.

■ RADIATION THERAPY POST-BACCALAUREATE PREREQUISITE COURSES

COMPONENT AREAS	TEXAS COMMON COURSE NUMBERS	CREDIT HOURS
Communication		
English Composition	ENGL 1301, 1302, 2311, 2321, 2326 or equivalent	3
Speech	SPCH 1311 or equivalent	3
Mathematics*		
Pre-calculus	MATH 2412 or equivalent	3
Natural Sciences		
Chemistry*	CHEM 1405 or equivalent	4
Physics*	PHYS 1401, 1402 or equivalent	8
Anatomy and Physiology	BIOL 2401, 2402, or equivalent	8
Computer Science*		
Computer Science	COSC 1300, 1401 or equivalent	3

*Higher level courses may be substituted. For example, calculus can be substituted for pre-calculus.

■ ESSENTIAL FUNCTIONS

In addition to essential functions for all students (see Entrance Requirements in the Student Information chapter), each student in the Radiation Therapy program must be able to:

- 1) Participate in supervised clinical activities, including walking and standing, for eight-hour days;
- 2) Demonstrate sufficient vision acuity to monitor patients, input data, read computer monitors and distinguish markings in dim lighting;
- 3) Demonstrate sufficient strength to lift, carry and move items weighing up to 40 pounds;
- 4) Distinguish and interpret audio signals from equipment; and
- 5) Demonstrate sufficient upper- and lower-body strength to move, lift and transport patients.

CURRICULUM
■ FIRST YEAR

FALL COURSE	HOURS
RT 3301 Oncology Nursing and Patient Care	3
RT 3302 Introduction to Radiation Therapy	3
RT 3303 Medical Imaging and Processing	3
HCS 3101 Medical Terminology	1

RT 3310 Legal and Ethical Issues in Radiation Therapy	3
HCS 5106 Professional Development	1

SPRING

RT 3211 Pathology	2
RT 3212 Sectional Anatomy	2
RT 3412 Radiation Biology	4
RT 3413 Radiation and Therapy Physics	4
RT 3304 Clinical Education I	3

SUMMER

RT 3421 Principles and Practices of Radiation Therapy I	4
RT 3314 Medical Dosimetry I	3
RT 3405 Clinical Education II	4

■ SECOND YEAR

FALL COURSE	HOURS
RT 4422 Principles and Practices of Radiation Therapy II	4
RT 4315 Medical Dosimetry II	3
HCS 4301 Introduction to Research Methodology	3
RT 4406 Clinical Education III	4
SPRING	
RT 4316 Quality Assurance and Operational Issues	3
HCS 4302 Directed Research	3
RT 4323 Registry Review	3
RT 4407 Clinical Education IV	4

COURSE DESCRIPTIONS

See other departmental listings in this catalog for courses that do not begin with the prefix RT.

**RT 3211 PATHOLOGY
2 SEMESTER HOURS**

This course covers both general pathology and neoplasia. The general pathology section covers basic disease concepts and pathophysiology, while the second part discusses neoplastic transformation and neoplasia.

**RT 3212 SECTIONAL ANATOMY
2 SEMESTER HOURS**

Topographic, sectional and radiographic anatomy are studied through the use of various diagnostic images, including plain films, nuclear medicine scans, sonograms, computer tomography, magnetic resonance images and other imaging modalities.

**RT 3301 ONCOLOGY NURSING AND PATIENT CARE
3 SEMESTER HOURS**

Content is designed to provide the student with foundation concepts and competencies in assessment and evaluation of the patient for both external beam and brachytherapy procedures. Psychological and physical needs and factors affecting treatment outcome are presented and examined. Routine and emergency care procedures are discussed.

**RT 3302 INTRODUCTION TO RADIATION THERAPY
3 SEMESTER HOURS**

The course offers an overview of cancer and the specialty of radiation therapy. The medical, biological and pathological aspects, as well as the physical and technical aspects, are discussed. The history, roles and responsibilities of the radiation therapist are presented. University and program policies are discussed as well.

**RT 3303 MEDICAL IMAGING AND PROCESSING
3 SEMESTER HOURS**

This course is designed to establish a knowledge base in factors that govern and influence the production and recording of radiographic images.

Both diagnostic and radiation therapy imaging equipment are discussed.

**RT 3304 CLINICAL EDUCATION I
3 SEMESTER HOURS**

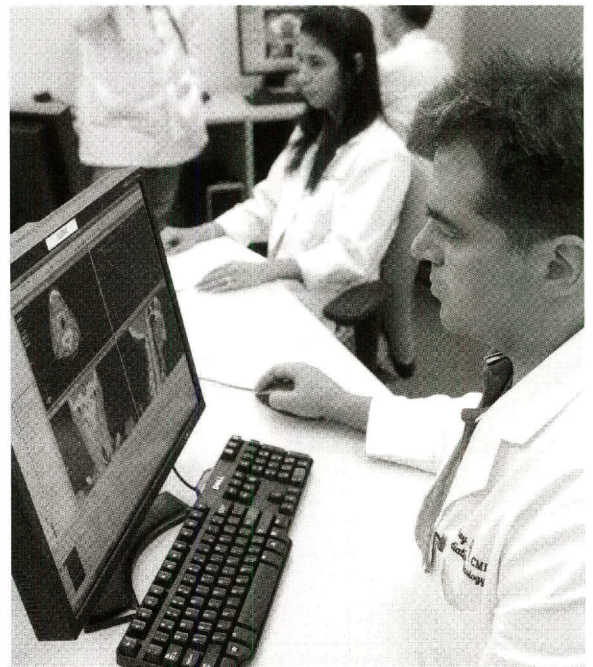
Student begin to gain skill in clinical procedures, interactions with patients and professional personnel as they apply didactic knowledge to the clinical setting of radiation therapy and become familiar with each section of the radiation therapy department.

**RT 3310 LEGAL AND ETHICAL ISSUES IN RADIATION THERAPY
3 SEMESTER HOURS**

Legal and ethical issues as they pertain to health care and the field of radiation therapy are discussed.

**RT 3314 MEDICAL DOSIMETRY I
3 SEMESTER HOURS**

This course covers the basic concepts in treatment planning, including treatment accessories and their relationship to dose distribution. Derivations and definitions of dosimetric terms and basic treatment calculations are presented. Treatment planning computerized systems are introduced.



RT 3405 CLINICAL EDUCATION II**4 SEMESTER HOURS**

Students gain additional skills through clinical procedures and interactions with patients and professional personnel.

RT 3412 RADIATION BIOLOGY**4 SEMESTER HOURS**

This course examines the effects of radiation on the cell, tissue and whole body. The biological consequences of ionizing radiation on living tissue, as well as tolerance doses and fractionation schemes, also are discussed.

RT 3413 RADIATION AND THERAPY PHYSICS**4 SEMESTER HOURS**

This course reviews basic concepts in radiation physics concerning atomic structure, production and characteristics of ionizing radiation. The quality of ionizing radiation and measuring equipment also are presented. Linear accelerator design and radiation protection are discussed.

RT 3421 PRINCIPLES AND PRACTICES OF RADIATION THERAPY I**4 SEMESTER HOURS**

This course examines the etiology, epidemiology, detection, diagnosis and treatment rationale of a multidisciplinary approach for the management of neoplastic disease. Specific topics address the radiation therapist's role in patient education, simulation and treatment delivery.

RT 4315 MEDICAL DOSIMETRY II**3 SEMESTER HOURS**

This course continues the concepts presented in RT 3314 with intensity-modulated radiation therapy, brachytherapy, stereotactic techniques

and nontraditional fractionation schemes studies. New treatment modalities and their impact on dose distribution are presented.

RT 4316 QUALITY ASSURANCE AND OPERATIONAL ISSUES**3 SEMESTER HOURS**

This course focuses on the evolution of quality management programs and continuing quality improvements in radiation oncology. Human resources, coding and billing, insurance, and departmental budgets are discussed as they apply to the radiation oncology department.

RT 4323 REGISTRY REVIEW**3 SEMESTER HOURS**

Students review all course material in preparation for the national board examination in radiation therapy.

RT 4406 CLINICAL EDUCATION III**4 SEMESTER HOURS**

This course is a continuation of RT 3304 and RT 3405. Students continue to improve their skills in clinical procedures by interacting with patients and professional personnel. Students gain clinical experience in dosimetry and medical physics.

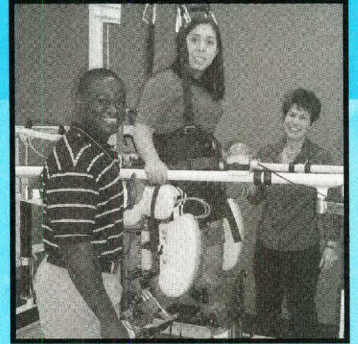
RT 4407 CLINICAL EDUCATION IV**4 SEMESTER HOURS**

This course continues the clinical education sequence. Students apply didactic knowledge to their clinical experience.

RT 4422 PRINCIPLES AND PRACTICES OF RADIATION THERAPY II**4 SEMESTER HOURS**

This course is a continuation of RT 3421.

PHYSICAL THERAPY • biomedical communications • clinical
nutrition • emergency medicine education • health care sciences •
medical laboratory sciences • physician assistant studies •
prosthetics-orthotics • radiation therapy • rehabilitation counseling



PHYSICAL THERAPY■ **DEGREE OFFERED**

Doctor of Physical Therapy

■ **CHAIR**

Patricia Smith, P.T., Ph.D., N.C.S.

■ **VICE CHAIR**

Patricia Blau, P.T., Ph.D.

FACULTY AND ACADEMIC INTERESTS**Patricia Smith, Professor**

Ph.D., Texas Woman's University, 2006
Neurological disorders, with emphasis on stroke and quality-of-life measures.

Patricia Blau, Associate Professor

Ph.D., University of Texas at Dallas, 2002
Neurological disorders, with emphasis on vestibular dysfunction and facial nerve re-education.

Ross Querry, Associate Professor

Ph.D., University of North Texas Health Science Center, 1999
Neurological control of blood pressure regulation during exercise; quantitative clinical gait measures.

Susan Simpkins, Associate Professor

Ed.D., Columbia University, 1999
Postural control and balance in the pediatric population.

Scott Smith, Associate Professor

Ph.D., University of North Texas Health Science Center, 1999
Neurocardiovascular control during exercise in health and disease.

Julie DeVahl, Assistant Professor

M.S., University of Minnesota, 1984
Clinical education; electrotherapy and orthopaedics.

Karen McCain, Assistant Professor

D.P.T., Regis University, 2006
Stroke rehabilitation and locomotor retraining.

Edward Mulligan, Assistant Professor

D.P.T., Regis University, 2008
Orthopaedic therapy.

Jason Zafereo, Assistant Professor

M.P.T., UT Southwestern Medical Center, 2001
Orthopaedic manual therapy.

Leslie Nelson, Faculty Associate

M.P.T., UT Southwestern Medical Center, 2003
Orthopaedic therapy and muscular dystrophy.

Beth Deschenes, Clinical Assistant Professor

M.S., University of Kansas Medical Center, 1996
Orthopaedic manual therapy; fitness and wellness.

OBJECTIVES

The faculty of the Department of Physical Therapy at UT Southwestern School of Health Professions is committed to providing students with the highest quality of academic and clinical education, sufficient to attain licensure and yield graduate physical therapists who are independent clinical practitioners with a generalist background. Graduates from this program will be prepared to assume leadership roles in rehabilitation services, prevention and health maintenance programs, and professional and community organizations.

The fundamental objective is to graduate students who will provide optimal physical therapy care for communities, groups and individuals. To achieve the primary professional objective of facilitating the individual's optimal function within the community, the physical therapist must master substantial breadth and depth of knowledge in the basic and applied sciences, incorporate critical thinking skills, exercise humility, demonstrate integrity and professional behaviors, and bridge theory with practice.

The graduate must be able to examine, evaluate, diagnose, prognose and intervene accurately in the management of impairments, functional limitations and disabilities of the cardiopulmonary, musculoskeletal and integumentary systems. Our graduates should be capable of preservation and restoration of movement and physical function through evidence-based clinical practice, interdisciplinary research and professional education. Of equal importance, our graduates focus on promoting health and wellness as a means for improving the quality of life of their patients and clients.

■ ACCREDITATION

The program is accredited by the Commission on Accreditation in Physical Therapy Education.

REQUIREMENTS FOR ADMISSION

Applicants for the Physical Therapy program must:

- 1) Complete a baccalaureate degree in any field prior to admission with a recommended GPA of at least 3.0;
- 2) Submit at least three letters of recommendation;
- 3) Complete and submit scores for the Graduate Record Examination;
- 4) Submit application fee; and
- 5) Earn credit in the following prerequisite courses with a grade of C or better prior to entrance into the program.

■ PREREQUISITE COURSES

College algebra	3 hours
Statistics (must include hypothesis testing)	3 hours
Physics (must be for science majors and include a lab)	8 hours
Chemistry (must be for science majors and include a lab)	8 hours
General psychology	3 hours
Abnormal or developmental psychology*	3 hours
Biology (general lower or upper division)	8 hours
Two-semester sequential anatomy and physiology**	7 hours
A&P I and II (totaling 8 hours) OR human anatomy (4 hours) and human physiology (3 hours)	

* Child psychology or child developmental psychology will not satisfy the prerequisite.

** Exercise physiology will not satisfy the prerequisite. For Dallas, Tarrant and Collin county colleges, BIOL 2401 and BIOL 2402 will satisfy both anatomy and physiology prerequisites.

■ RECOMMENDED COURSES

Medical terminology
 Exercise physiology (does not fulfill the human physiology requirement)
 Kinesiology

Neurophysiology
 Child psychology

The Physical Therapy program accepts only full-time students. Factors considered for selection among applicants include cumulative GPA, last 60 hours GPA and prerequisite courses GPA. Also considered are individual qualities ascertained through application, letters of recommendation and an in-person interview. Selection for admission to the Physical Therapy program is highly competitive and is based on the criteria outlines in the Evaluation of Applicants section in the Student Information chapter.

■ ESSENTIAL FUNCTIONS

In addition to essential functions for all students (see Entrance Requirements in the Student Information chapter), each student in the Physical Therapy program must be able to:

- 1) Participate in supervised clinical activities for eight-hour days;
- 2) Demonstrate sufficient vision to perform such tests as interpreting a medical record, inspecting and debriding wounds, and determining gait deviations;
- 3) Demonstrate sufficient arm strength, coordination and sensation to perform such activities as (but not limited to) manual muscle testing, palpation, soft-tissue mobilization, joint mobilization and cardiopulmonary resuscitation; and
- 4) Demonstrate sufficient problem-solving skills to learn to make a differential diagnosis, establish appropriate treatment plans, determine effectiveness of those plans and make appropriate modifications.

CURRICULUM

The curriculum is a 31-month program that begins in May and consists of a summer term, fall and spring semester, a second summer term and fall and spring semesters, and a final summer term and fall semester devoted to clinical education.

The curriculum offers professional education for students majoring in physical therapy. Students admitted to the program are candidates for

a doctoral degree in physical therapy conferred by UT Southwestern Medical Center.

The academic experiences consist of theory in the basic, clinical and professional sciences and professional skills. To be eligible to enter the clinical-education phase of the program, a student must have satisfactorily completed all previous courses.

The clinical experiences offer an opportunity to integrate professional knowledge and skills in a clinical setting. These experiences are offered by more than 240 affiliated institutions located throughout the United States but predominately in Texas. Each affiliated institution has a center coordinator for clinical education. During the last two clinical experiences, the students rotate through 14 weeks of full-time clinical affiliations that offer broad experiences in both general and specialty areas of physical therapy.

Graduates of this program are eligible to take the national licensure examination given by the Federation of State Boards of Physical Therapy.

■ PROGRAM OF INSTRUCTION

The possibility exists that some of these courses may be exchanged between semesters or terms without any published notice.

First Year

SUMMER		HOURS
COURSE		
HCS 5308	Human Anatomy Lecture	3
HCS 5309	Human Anatomy Dissection Laboratory	3
HCS 5407	Human Physiology	4
DPT 5139	Clinical Correlation	1
DPT 5151	Physical Therapy Procedures	1
DPT 5150	Professional Practice Development I	1
<i>Total</i>		13
FALL		
HCS 5306	Introduction to Pathology	3
DPT 5140	Elements of Pharmacology for the Physical Therapist	1
DPT 5257	Professional Practice Development II	2
DPT 5302	Therapeutic Intervention I	3
DPT 5320	Tests and Measures	3

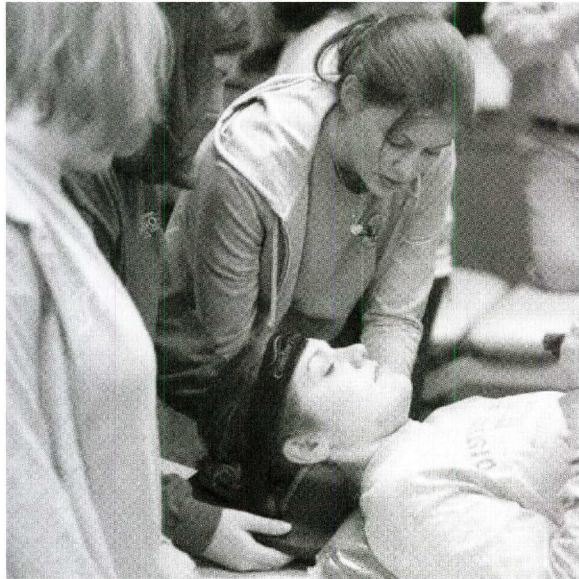
DPT 5351	Clinical Kinesiology	3
<i>Total</i>		15

SPRING

HCS 5106	Professional Development	1
HCS 5207	Introduction to Neuroscience	2
DPT 5235	Therapeutic Intervention II	2
DPT 5236	Evidence-Based Clinical Research I	2
DPT 5237	Pathokinesiology	2
DPT 5240	Neuromuscular Patient/Client Management I	2
DPT 5330	Musculoskeletal Patient/Client Management I	3
<i>Total</i>		14

Second Year

SUMMER		HOURS
COURSE		
DPT 5134	Service Learning	1
DPT 5135	Therapeutic Intervention III	1
DPT 5137	Evidence-Based Clinical Research II	1
DPT 5138	Integumentary Patient/Client Management	1
DPT 5216	Professional Practice Management I	2
DPT 5304	Geriatric Patient/Client Management	3
DPT 5306	Pediatric Patient/Client Management	3
<i>Total</i>		12
FALL		
DPT 5305	Medical Practice Management	3
DPT 5341	Neuromuscular Patient/Client Management II	3
DPT 5431	Musculoskeletal Patient/Client Management II	4
DPT 5344	Cardiovascular and Pulmonary Patient/Client Management	3
<i>Total</i>		13
SPRING		
DPT 5132	Evidence-Based Clinical Research III	1
DPT 5136	Professional Practice Management II	1
DPT 5241	Prevention, Health Promotion, Fitness and Wellness	2
DPT 5217	Advanced Therapeutic Techniques	2



DPT 5218	Assistive Technology in Rehabilitation	2
DPT 5445	Clinical Internship I (8 weeks)	4
<i>Total</i>		<i>12</i>

Third Year

SUMMER		
COURSE		HOURS
DPT 5702	Clinical Internship II (14 weeks)	7
FALL		
DPT 5701	Clinical Internship III (14 weeks)	7
<i>Program total</i>		<i>93</i>

SPECIAL REQUIREMENTS

The curriculum is sequenced; therefore, all courses included in each semester or term are considered prerequisites to any course in the following semester. A student must complete each course with a minimum grade of B and must maintain a GPA of at least 3.0. The student is advised to consult the policy statement of the department upon admission to the program.

GRADUATION REQUIREMENTS

A candidate for the degree of doctor of physical therapy in UT Southwestern School of Health Professions must meet all of the following requirements:

- 1) The student must demonstrate a high order of scholarly achievement in physical therapy, including appropriate research and professional competencies. The program’s Student Progress Committee determines whether adequate mastery has been acquired.
- 2) The student must complete satisfactorily a minimum of 93 semester hours at UT Southwestern School of Health Professions.
- 3) The student must discharge all financial obligations to the medical center. In the event of nonpayment, one or more actions may be taken by the dean: a) readmission may be denied; b) the student’s grades and official transcript may be withheld; and c) the degree to which the student would otherwise be entitled to may be withheld.
- 4) The student must maintain at least a 3.0 cumulative grade-point average, have no academic deficiencies and have no incompletes.
- 5) The student must complete the academic requirements listed in his or her degree plan, including completion of any academic deficiencies in prerequisite courses, by the times stated in the student’s official letter of acceptance. The student is responsible for submitting official documentation of successful completion of the prerequisites to the Office of the Registrar.
- 6) The student must complete all required courses in the degree plan with a grade of B or higher (P for Pass/Fail courses), receive practical evaluations reflecting an acceptable level of performance and professional conduct, and successfully complete all clinical affiliations.

COURSE DESCRIPTIONS

See other departmental listings in this catalog for descriptions of courses that do not begin with the prefix DPT.

**DPT 5132 EVIDENCE-BASED CLINICAL RESEARCH III
1 SEMESTER HOUR**

This final course offers students the opportunity to further develop their written and oral communication skills and improve their use of technology through a formal presentation of research

findings at a scientific symposium. A scientific paper summarizing the research project and findings is submitted.

DPT 5134 SERVICE LEARNING

1 SEMESTER HOUR

This course integrates previous didactic and psychomotor skills with a community-based service opportunity. Students work closely with community organizations and special patient populations that require rehabilitation and daily care. Students are provided specific learning objectives focused on the needs of the community organization and professional practice expectations. Students also participate in a self-assessment on how community service impacts the profession of physical therapy.

DPT 5135 THERAPEUTIC INTERVENTION III

1 SEMESTER HOUR

This course builds on the knowledge and skills acquired in DPT 5302, DPT 5235 and DPT 5236. This course prepares the student for safe, effective and appropriate use of electrotherapeutic modalities. The pertinent physical and physiological principles are reviewed. Case studies emphasizing clinical examination, evaluation, decision making and application related to pain, neuromuscular and tissue-healing management are presented. The concept of evidence-based practice is reinforced by examining and evaluating current literature, preparing the student to judge the evidence for clinical practice. The student receives laboratory exposure to and experience with electrotherapeutic procedures.

DPT 5136 PROFESSIONAL PRACTICE

MANAGEMENT II

1 SEMESTER HOUR

This is the last of four courses addressing professional practice issues in physical therapy. Students prepare professional resumes and practice interview skills. Preparation strategies for the licensure examination are presented. Self-assessment using core values and generic abilities promotes lifelong personal and professional development. Integration of prior clinical experience and course work is facilitated through case studies that enhance problem solving. This course helps prepare

the student for the role of the physical therapist in autonomous practice.

DPT 5137 EVIDENCE-BASED CLINICAL RESEARCH II

1 SEMESTER HOUR

This course is a continuation of DPT 5236. It allows the student to determine appropriate information sources and databases and apply literature search skills to develop a research topic. In collaboration with a faculty mentor, the student develops a project proposal, a faculty-assisted research project or a faculty-mentored, in-depth review of the literature on a defined clinical question. Students make a critical analysis of current literature appropriate for the projects.

DPT 5138 INTEGUMENTARY PATIENT/CLIENT MANAGEMENT

1 SEMESTER HOUR

This course discusses the basis and rationale for evaluating and treating patients with pathology or impairments of the integumentary system. The class stresses the concepts of universal precautions and infection control as students learn to identify primary prevention/risk factors and impairments and apply appropriate interventions for disorders of the integumentary system and soft-tissue dysfunction. Laboratory sessions allow students to gain experience in the techniques used in clinical practice.

DPT 5139 CLINICAL CORRELATION

1 SEMESTER HOUR

This seminar accompanies HCS 5308 Human Anatomy and HCS 5309 Human Anatomy Dissection Laboratory and integrates the basic sciences into clinical applications in physical therapy. This course emphasizes basic clinical skills such as muscle and bony landmark palpation, dermatome identification, DTR testing and motor screening. Muscle origin, insertion and action is presented concurrently with the appropriate psychomotor skill of palpation.

DPT 5140 ELEMENTS OF PHARMACOLOGY FOR THE PHYSICAL THERAPIST

1 SEMESTER HOUR

This course provides instruction in general pharmacologic principles, effects of commonly prescribed medications and over-the-counter

drugs. Additional information on potential drug interactions and physical therapy interventions, indications, contraindications and side effects is presented. This course introduces electronic resources and current texts that facilitate clinical screening in clinical practice.

DPT 5150 PROFESSIONAL PRACTICE

DEVELOPMENT I

1 SEMESTER HOUR

This is the first of four courses dedicated to practice management. Students investigate professionalism as it relates to accountability, altruism, compassion/caring, integrity, communication and education in practice. Students are introduced to legal and ethical issues related to physical therapy. Principles of teaching and learning are explored and practiced. Foundations of communication – verbal, nonverbal and written – are introduced. This lecture and seminar course offers an overview of the physical therapist's role in the health-care delivery system, using the *Guide to Physical Therapist Practice*.

DPT 5151 PHYSICAL THERAPY PROCEDURES

1 SEMESTER HOUR

Physical Therapy Procedures covers introductory clinical skills that focus on body mechanics, positioning and draping, basic wheelchair management, transfers, bed mobility, and gait training. These topics are addressed regarding safety in a variety of settings. Additional topics are special patient populations (i.e., ICU equipment/patient management) and proper assessment of vital signs, including blood pressure, respiratory rate, pulse and temperature. Students have the opportunity to practice the *Guide to Physical Therapist Practice*-based approach to physical therapy practice and documentation.

DPT 5216 PROFESSIONAL PRACTICE

MANAGEMENT I

2 SEMESTER HOURS

This course is the third of four courses dedicated to professional practice of the physical therapist in the 21st century. Students study methods to develop and manage a PT practice in accordance with legal and regulatory requirements and organizational structure, while balancing fiscal management, personnel management, marketing and

public relations, information systems, and quality assurance. Students also learn to accept responsibility for supervision and direction of personnel and tasks related to PT practice within legal and ethical guidelines.

DPT 5217 ADVANCED THERAPEUTIC TECHNIQUES
2 SEMESTER HOURS

In this course students investigate and further develop intervention techniques for neurological and orthopaedic patients. Students evaluate current literature for clinical evidence supporting specialty intervention techniques that are available and utilized in clinical practices. Students have the opportunity to develop skill in manual techniques based on patient case models and scenarios.

DPT 5218 ASSISTIVE TECHNOLOGY IN
REHABILITATION

2 SEMESTER HOURS

This course exposes students to assistive technology for individuals of all ages with dysfunction in the musculoskeletal and integumentary systems. Topics presented include prosthetics, orthotics, wheelchair prescription, seating systems and environmental control systems. Case studies enhance learning. Patient models during laboratory sessions and community clinical experiences allow integration of the material.

DPT 5235 THERAPEUTIC INTERVENTION II
2 SEMESTER HOURS

This course applies previous basic exercise knowledge and techniques to an integrated patient intervention program, using exercise programming and progression for upper/lower extremities and the spine. Students are introduced to the use of selected physical agents, including thermotherapy, actinotherapy and deep thermotherapy. Factors such as stage of tissue healing, surgical procedures, patient medical history, impairments and functional limitations are considered for exercise programming. Basic principles of operation of therapeutic instruments and recognition of indications/contraindications/ precautions in the clinical application of these agents are discussed. This course offers a foundation needed in clinical decision making regarding patient care and recovery. Evidence of efficacy is addressed with all

interventions. Concepts are presented in lecture and practiced in the laboratory.

DPT 5236 EVIDENCE-BASED CLINICAL RESEARCH I
2 SEMESTER HOURS

This lecture course offers an overview of the research process, with a focus on evidence-based clinical research. Students study the principles of measurement, reliability, validity, errors, specificity, sensitivity, hypothesis testing, research design and common statistical analyses. Students conduct online literature searches and learn about appropriate information sources.

DPT 5237 PATHOKINESIOLOGY
2 SEMESTER HOURS

This course examines the concepts of pathokinesiology. Emphasis is placed on recognizing and describing abnormal posture, movement and gait patterns in the laboratory. Also included are fractures and orthopaedic radiology.

DPT 5240 NEUROMUSCULAR PATIENT/CLIENT
MANAGEMENT I
2 SEMESTER HOURS

Theory and evidence of motor control, motor learning and neuroplasticity provide a framework for a series of lectures on management of the neurological patient, including examination, evaluation, diagnosis, prognosis and plan of care. Emphasis is placed on problem solving and the use of evidence to support clinical decision making when formulating interventions. Case studies are used to reinforce integration of the material. Laboratory sessions and clinical experiences afford an opportunity to practice examination and intervention skills.

DPT 5241 PREVENTION, HEALTH PROMOTION,
FITNESS AND WELLNESS
2 SEMESTER HOURS

This course addresses the concepts of health promotion and wellness across the age span and the role of the physical therapist in health promotion. Theoretical basis of health behaviors and methodology for changing behavior are discussed. Community-based laboratory experiences afford students the opportunity to design, implement and promote wellness and injury-prevention programs.

DPT 5257 PROFESSIONAL PRACTICE
DEVELOPMENT II
2 SEMESTER HOURS

This is the second of four professional practice courses addressing physical therapy practice. This course builds on documentation skills, emphasizing the elements from the *Guide to Physical Therapist Practice*. Skills studied include planning, organizing and implementing a plan of care that incorporates primary, secondary and tertiary care provided by physical therapists and other practitioners as appropriate. Students review various systems of reimbursement for services. Community members share information relating to marketing, reimbursement, quality assurance and standard of care, productivity, coordination of care with other providers, and health-care trends/issues in a variety of settings. Current legislative and public-health issues relating to physical therapy practice are examined, and advocacy is promoted.

DPT 5302 THERAPEUTIC INTERVENTION I
3 SEMESTER HOURS

This course presents anatomical and physiological principles to allow students to develop integrated exercise therapeutic interventions. Students have the opportunity to acquire an understanding of the physiological responses to various types of training and to develop skills in prescription, implementation and modeling of exercise programs. Exercise components of strength, aerobic/anaerobic conditioning, flexibility, balance and stage of healing/rehabilitation are examined. Evidence of appropriate, safe and effective exercise design and proper exercise biomechanics and prescription parameters are addressed with all interventions. Exercise considerations for special populations and across the age span are covered. Concepts are presented in lecture and practiced in the laboratory.

DPT 5304 GERIATRIC PATIENT/CLIENT
MANAGEMENT
3 SEMESTER HOURS

This course is an overview of adult development, including physical as well as psychological issues. Topics include theories of aging, attitudes toward aging and the older adult health-care needs, long-

term care, and family/caregiver issues. Lectures also address age-related changes and common pathologies to help students identify appropriate physical therapy management of this patient population. Community-based activities enhance the integration of this material.

**DPT 5305 MEDICAL PRACTICE MANAGEMENT
3 SEMESTER HOURS**

Students are exposed to the medical screening process and have the opportunity to learn how to integrate clinical expertise of when to treat, when to refer patients to appropriate practitioners, and when to consult for additional expertise. A systems approach is used to study the signs and symptoms associated with selected medical conditions. Students are introduced to a variety of medical conditions that are not easily categorized in musculoskeletal, neurological, cardiopulmonary, and integumentary disorders and to the management of such conditions.

**DPT 5306 PEDIATRIC PATIENT/CLIENT
MANAGEMENT
3 SEMESTER HOURS**

This course addresses both the medical and rehabilitation management of the pediatric patient. Foundation lectures on normal development and psychological issues provide a model to use when studying pediatric pathologies, assessments and interventions. Students gain experience with this patient population through laboratory and clinical opportunities.

**DPT 5320 TESTS AND MEASURES
3 SEMESTER HOURS**

This course introduces the concepts of measurement for people with dysfunctions. Valid and reliable outcome measures for individuals with impairments, functional limitations and disabilities associated with dysfunction in the neurological, musculoskeletal, cardiopulmonary, and integumentary systems are presented. Students have the opportunity to become proficient in the administration of these outcome measurements through lecture, lab and clinical experience.

**DPT 5330 MUSCULOSKELETAL PATIENT/CLIENT
MANAGEMENT I
3 SEMESTER HOURS**

This course addresses the medical rehabilitation

management of patients with appendicular musculoskeletal dysfunctions. Emphasis is placed on the use of evidence-based practice to support current practice in clinical decision making when formulating interventions that are diagnosis-specific. Laboratory sessions allow students to practice and apply concepts presented in lectures and aid students in developing critical-thinking and problem-solving skills, as well as orthopaedic manual therapy skills, such as manipulation. Didactic material is continually integrated and reinforced through study of actual patient cases as an exercise in differential diagnosis, prognosis and proper management. Physician lectures are included for a medical perspective on surgical and postoperative management of patients with upper- and lower-extremity dysfunctions.

**DPT 5341 NEUROMUSCULAR PATIENT/CLIENT
MANAGEMENT II
3 SEMESTER HOURS**

This course is a continuum of DPT 5240 and addresses both the medical and rehabilitation management of adult patients with neurological dysfunctions. Lectures on adult neurological pathologies cover both diagnosis and medical management. Physical therapy examination, evaluation, diagnosis, prognosis and plans of care for specific diseases are covered in lecture and laboratory experiences. Case studies provide the opportunity to integrate current evidence with practice. Clinical opportunities enhance the development of clinical competence.

**DPT 5344 CARDIOVASCULAR AND PULMONARY
PATIENT/CLIENT MANAGEMENT
3 SEMESTER HOURS**

This course is designed to develop examination and evaluation techniques and therapeutic interventions specific to the cardiovascular and pulmonary systems. Emphasis is on impairments related to primary or secondary dysfunction of the heart and lungs. Topics include a medical overview of the related pathologies, cardiovascular and pulmonary rehabilitation strategies in patients with co-morbidities, and related cardiovascular and pulmonary dysfunction. Interventions include prevention and health promotion, medical and pharmacological care, and

appropriate exercise prescription and progression techniques. This course includes a laboratory portion for developing evaluation and intervention skills.

DPT 5351 CLINICAL KINESIOLOGY
3 SEMESTER HOURS

Biomechanical principles of human movement are presented. Physics, physiology and anatomy are integrated to investigate normal and abnormal movement of the spine and extremities. Osteokinematics and arthrokinematics are included. Gait, posture and movement are analyzed in laboratory settings to enhance the lectures.

DPT 5431 MUSCULOSKELETAL PATIENT/CLIENT MANAGEMENT II
4 SEMESTER HOURS

This course is a continuum of DPT 5330 and addresses the medical and rehabilitation management of patients with axial musculoskeletal and pelvic dysfunctions. Emphasis is placed on the use of scientific inquiry and evidence-based practice to support current practice in clinical decision making when formulating interventions and diagnosis by classification of a patient's signs and symptoms. Laboratory sessions allow for practice and application of lecture content and are designed to aid students in developing critical-thinking and problem-solving skills as well as orthopaedic manual-therapy skills, including manipulation. Didactic material is continually integrated and reinforced through study of actual patient cases as an exercise in differential diagnosis, prognosis and proper management. Physician lectures are included for a medical perspective on surgical and postoperative management of patients with spinal dysfunctions.

DPT 5445 CLINICAL INTERNSHIP I
4 SEMESTER HOURS

This first, full-time, eight-week clinical experience provides students with the opportunity to integrate and practice their didactic knowledge with clinical decision making. The emphasis of this experience is on patient examination, evaluation, treatment planning, goal setting and delivery of interventions. The *PT Mastery and Assessment of Clinical Skills* is used to plan learning oppor-

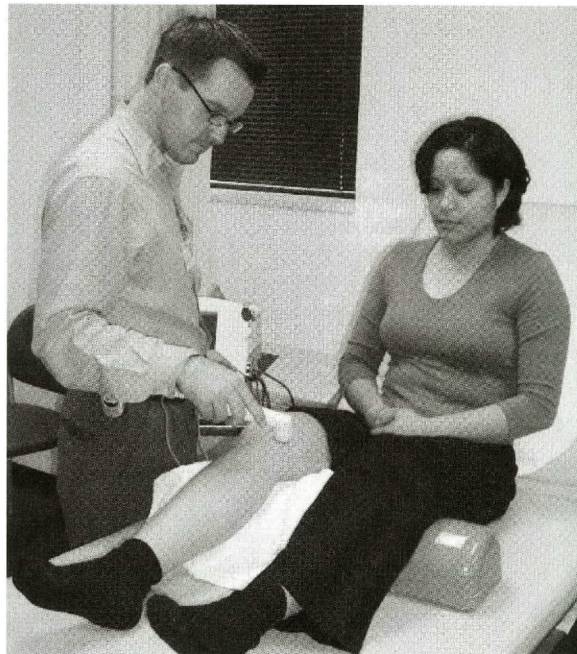
tunities and assess student performance. Self assessment at the end of this experience provides opportunity for students to set goals for the next clinical experience.

DPT 5701 CLINICAL INTERNSHIP III
7 SEMESTER HOURS

Entry-level performance on all aspects of patient/client management in a selected practice setting is the expected outcome following a 14-week, full-time clinical experience. In addition, competence in practice-management skills is expected. The *PTMACS* is used to assess student performance based on safe and effective practice. Cognitive, affective and psychomotor skills are assessed in a clinical setting.

DPT 5702 CLINICAL INTERNSHIP II
7 SEMESTER HOURS

Entry-level performance in all aspects of patient/client management in a selected practice setting is the expected outcome following a 14-week, full-time clinical experience. The *PTMACS* is used to assess student performance based on safe and effective practice. Cognitive, affective and psychomotor skills are assessed in a clinical setting.



PHYSICIAN ASSISTANT STUDIES • biomedical communications

• clinical nutrition • emergency medicine education • health care

sciences • medical laboratory sciences • physical therapy •

prosthetics-orthotics • radiation therapy • rehabilitation counseling



PHYSICIAN ASSISTANT STUDIES■ **DEGREE OFFERED**

Master of Physician Assistant Studies

■ **CHAIR**

P. Eugene Jones, Ph.D., PA-C

■ **MEDICAL DIRECTOR**

Laurette K. Dekat, M.D., M.P.H.

FACULTY AND ACADEMIC INTERESTS**P. Eugene Jones, Distinguished Teaching Professor**

Ph.D., Claremont Graduate University, 1991
Physician assistant education; nonphysician clinicians; faculty workforce; postgraduate specialty training.

Laurette K. Dekat, Clinical Assistant Professor

M.D., University of Texas Health Science Center at Houston, 1993; M.P.H., Johns Hopkins Bloomberg School of Public Health, 1987
Adolescent medicine; school-based health.

Cristina M. González, Assistant Professor

M.A., Texas A&M University, 1993
Medical linguistics; cultural competency.

Jennie A. Hocking, Assistant Professor

M.P.A.S., UT Southwestern Medical Center, 2003
Curriculum design and evaluation methodology; cardiopulmonary surgical outcome; cardiothoracic medicine.

David J. Klocko, Assistant Professor

B.S.P.A., King's College, 1986; M.P.A.S., University of Nebraska, 1998
Clinical performance evaluation; access to health care; emergency medicine.

Patti Pagels, Assistant Professor

M.P.A.S., University of Nebraska Medical Center, 1998
Cultural competency for health care providers; health literacy; care for the underserved; global health; health care for the homeless.

Sophia Serrano, Assistant Professor

M.P.A.S., UT Southwestern Medical Center, 2004
Physician assistant education; evidence-based medicine; physician assistant workforce.

■ **ADJUNCT FACULTY****Mary Bell DeCardenas, Clinical Assistant Professor**

M.P.A.S., UT Southwestern Medical Center, 2003

Alexander I. Glogau, Adjunct Assistant Professor

M.D., Downstate Medical Center, State University of New York, 1984

Tina M. Kaufman, Adjunct Assistant Professor

Ph.D., University of California, San Francisco, 1987

Janet E. Maffei, Clinical Assistant Professor

M.P.A.S., UT Southwestern Medical Center, 2004

Heather R. Gilbreath, Clinical Instructor

M.P.A.S., UT Southwestern Medical Center, 2006

Rebecca Inmon-Hardesty, Adjunct Instructor

PA-C, UT Southwestern Medical Center, 1999

Kristine J. Kucera, Clinical Instructor

Dr.H.Sc., Nova Southeastern University, 2006

OBJECTIVES

The Department of Physician Assistant Studies was established to prepare broadly trained health professionals to carry out patient-care functions traditionally performed only by a physician. Successful graduates of this program will have had the opportunity to prepare themselves for conducting a sophisticated medical interview and physical examination, for analyzing laboratory data, and for organizing and integrating these findings. From the results, he or she should be able to make assessments, diagnoses and therapeutic plans to present to the physician both orally and in writing so that the physician and the physician assistant can perceive the medical problems and determine appropriate diagnostic and therapeutic steps. Graduates of this program should be capable of assisting physicians by performing diagnostic and therapeutic procedures, prescribing medications, and coordinating the services of community-health agencies in order to serve the needs of the patient.

It is emphasized that a physician assistant functions under the general supervision and responsibility of the physician although he or she might, under specially defined rules and circumstances, operate away from the immediate supervision of the physician. To perform properly at this level of responsibility, a physician assistant must be trained by and for physicians in order to assure that the patient-care functions carried out by the physician assistant are equivalent in quality to those of the physician who delegates them.

Graduates of this program are eligible to take the national certification examination given by the National Commission on Certification of Physician Assistants.

■ ACCREDITATION

This program is accredited by the Accreditation Review Commission on Education for the Physician Assistant.

REQUIREMENTS FOR ADMISSION

Applicants to the Physician Assistant Studies program are required to have a baccalaureate degree from a regionally accredited institution prior to matriculation. Internationally acquired degrees will be considered on a case-by-case basis following formal transcript reviews for semester-hour transferability. All prerequisite courses must be completed by Dec. 31 of the year of application with a grade of C or higher. All applicants are required to demonstrate either professional or substantial volunteer “hands-on” health-care experience prior to matriculation. Three letters of reference are required with the application. The Graduate Record Examination and a recommended minimum grade-point average of 3.0 science and 3.0 overall are required for admission, along with the following prerequisite course work:

COURSE	HOURS
Anatomy*	4
Physiology*	4
Genetics	3
General chemistry*	8
Organic chemistry*	4
Microbiology*	4

Psychology	3
Mathematics (college algebra or higher)	3

*Science courses must be for science majors and include a laboratory.

■ RECOMMENDED ELECTIVES

Pharmacology	Immunology
Spanish	Medical terminology
Biochemistry	Human sexuality
Cellular biology	Statistics

Factors considered for selection of applicants are cumulative grade-point average, science grade-point average, consistency or improvement in academic performance, demonstrated empathetic attitude, communication skills, leadership, and personal qualities such as maturity and career motivation. Direct patient-care experience is required, from either a paid professional role or from volunteer service in a health-care setting.

Admission to the Physician Assistant Studies program is competitive and is based on the criteria outlined in the Evaluation of Applicants section of Student Information.

■ ESSENTIAL FUNCTIONS

In addition to essential functions for all students (see Entrance Requirements in the Student Information chapter), each student in the Physician Assistant Studies program must be able to:

- 1) Participate in supervised clinical activities for extended periods of time, including rotations that require overnight call;
- 2) Demonstrate sufficient vision to perform tasks such as (but not limited to) interpretation of medical records, inspection of patients, and inspection of wounds and skin lesions;
- 3) Demonstrate sufficient hearing to perform auscultation of the heart and vessels, breath sounds, and abdominal sounds;
- 4) Demonstrate sufficient upper- and lower-body strength, coordination, dexterity and sensation to perform such activities as (but not limited to) prolonged standing, complete physical examination, and surgical and clinical procedures such as suturing, casting, venipuncture, emergency procedures and cardiopulmonary resuscitation;

- 5) Demonstrate sufficient problem-solving skills to learn to make a differential diagnosis, establish appropriate treatment plans, determine effectiveness of those plans and make appropriate modifications.

CURRICULUM

This 31-month professional course is composed of four didactic semesters of lecture and bedside demonstration in basic medical and behavioral sciences and four semesters of clinical rotations in various clinical disciplines.

During the clinical phase of the curriculum, students participate in the activities of a health care team in order to apply medical principles of patient care and to gain experience in actual patient care. Clinical training occurs in the following hospitals, all of which are teaching hospitals with formal affiliations with UT Southwestern Medical Center: Parkland Memorial Hospital, Dallas Veterans Affairs Medical Center, Scott and White Hospital, Methodist Dallas Medical Center, Methodist Charlton Medical Center and Texas Health Presbyterian Hospital Dallas.

PROGRAM OF INSTRUCTION

Didactic Instruction

Because the program is structured as a continuous sequence, where each semester requires sequential completion of previous semesters, all students progress on the same timetable.

SUMMER		
COURSE		HOURS
MPA 5101	Professional Practice Issues I	1
HCS 5207	Introduction to Human Neuroscience	2
HCS 5308	Human Anatomy (Lecture)	3
HCS 5309	Human Anatomy Dissection Lab	3
HCS 5407	Human Physiology	4
<i>Total</i>		13
FALL		
MPA 5102	Integration Skills I	1
MPA 5215	Pharmacology I	2
MPA 5305	Patient Evaluation I	3
MPA 5509	Clinical Medicine I	5

MPA 5221	Medical Spanish I	2
HCS 5306	Introduction to Pathology	3
<i>Total</i>		16

SPRING

MPA 5103	Integration Skills II	1
MPA 5130	Evidence-Based Medicine	1
MPA 5204	Clinical Prevention and Population Health	2
MPA 5206	Patient Evaluation II	2
MPA 5216	Pharmacology II	2
MPA 5510	Clinical Medicine II	5
MPA 5222	Medical Spanish II	2
HCS 5106	Professional Development	1
<i>Total</i>		16

SUMMER

MPA 5208	Clinical Skills	2
MPA 5231	Psychiatry	2
MPA 5307	Patient Evaluation III	3
MPA 5511	Clinical Medicine III	5
MPA 5123	Medical Spanish III	1
<i>Total</i>		13
<i>Total didactic hours</i>		58

Clinical Instruction

COURSE		HOURS
MPA 5251	Long-Term Care/Community Health Practice Experience	2
MPA 5350	Professional Practice II	3
MPA 5428	Elective Clinical Rotation	4
MPA 5429	Clinical Selective	4
MPA 5430	Psychiatry	4
MPA 5432	Emergency Medicine	4
MPA 5433	Surgery	4
MPA 5450	Directed Study	4
MPA 5451	Infectious Disease	4
MPA 5622	Obstetrics and Gynecology	6
MPA 5623	Pediatrics	6
MPA 5830	Internal Medicine	8
MPA 5831	Family Medicine	8
<i>Total clinical hours</i>		61
<i>Total combined hours</i>		119

SPECIAL REQUIREMENTS

Students are expected to maintain a high academic performance and display appropriate professional and ethical behavior during all phases of their education.

Students must maintain a cumulative GPA of

2.75 or better in all first-year courses in order to participate in clinical rotations. Adequate clinical knowledge and judgment and appropriate professional behavior are factors determining satisfactory performance. All academic and professional behavior policies are detailed in the *Physician Assistant's Student Guidelines*.

GRADUATION REQUIREMENTS

A candidate for the degree of Master of Physician Assistant Studies at UT Southwestern School of Health Professions must meet all of the following requirements.

- 1) The student must demonstrate a high order of scholarly achievement, including appropriate research and professional competencies. The program's Student Progress Committee determines whether adequate mastery has been acquired.
- 2) The student must complete satisfactorily a minimum of 119 semester hours at UT Southwestern School of Health Professions.
- 3) The student must discharge all financial obligations to the medical center. In the event of nonpayment, one or more actions may be taken by the dean: a) readmission may be denied; b) the student's grades and official transcript may be withheld; and c) the degree to which the student would otherwise be entitled may be withheld.
- 4) The student must complete the academic requirements listed on his or her degree plan, including completion of any academic deficiencies in prerequisite courses, by the times stated in the student's official letter of acceptance. The student is responsible for submitting official documentation of successful completion of the prerequisites to the Office of the Registrar.
- 5) The student must pay a graduation fee designated to partially offset the costs associated with the diploma and diploma cover production, regalia, and the commencement ceremony. All students completing a degree or certificate must pay the fee whether they attend the commencement ceremony or not.
- 6) The student must complete all required courses in the degree plan, have no academic deficiencies and have no incompletes. For courses with letter grades, a grade of C or higher must be maintained, with the exception of Clinical Medicine I, II and III (MPA 5509, MPA 5510 and MPA 5511, respectively), in which minimum grades of B must be maintained. A cumulative grade-point average of 2.75 must be maintained. For courses graded Pass/Fail, a grade of Pass must be achieved. The student must successfully complete all clinical rotations. Clinical evaluations must reflect an acceptable level of performance and professional conduct.
- 7) The student must complete and submit the PACKRAT examinations following completion of the didactic curriculum and again after completion of the majority of clinical rotations.
- 8) The student must successfully complete a graduate project as approved by program faculty.

COURSE DESCRIPTIONS

See other departmental listings in this catalog for descriptions of courses that do not begin with the prefix MPA.

■ DIDACTIC COURSES

MPA 5101 PROFESSIONAL PRACTICE ISSUES I **1 SEMESTER HOUR**

This course introduces the physician assistant profession, including local, state, and national professional organizations and roles. Current licensure, certification and recertification requirements are described, as well as issues facing the PA profession. Introduction to the concepts of various health-care teams and delivery systems is included, with particular emphasis on the physician-PA team relationship.

MPA 5102 INTEGRATION SKILLS I **1 SEMESTER HOUR**

Small-group tutorials utilize case-based learning strategies to emphasize integration of material presented during the semester.

MPA 5103 INTEGRATION SKILLS II
1 SEMESTER HOUR

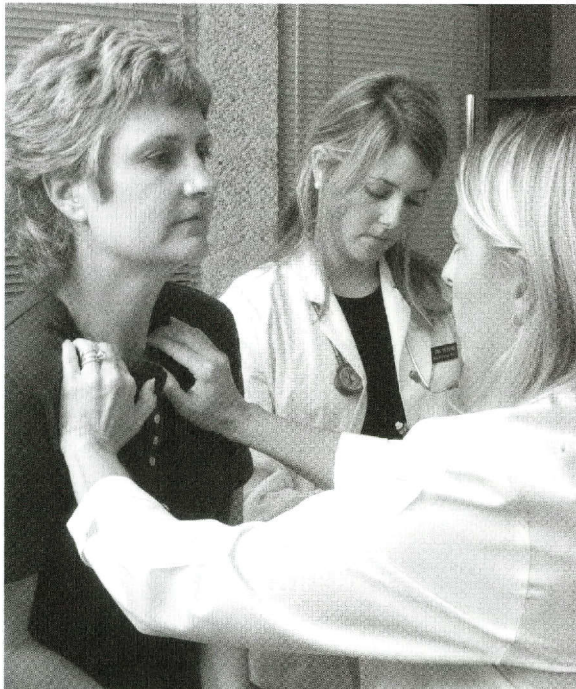
Small-group tutorials utilize case-based learning strategies to emphasize integration of material presented during the semester.

MPA 5123 MEDICAL SPANISH III
1 SEMESTER HOUR

This course is a conversational course in which each student practices being the provider and the patient.

MPA 5130 EVIDENCE-BASED MEDICINE
1 SEMESTER HOUR

This course provides an overview of the research process and evidence-based health care research. Lecture topics include critical literature evaluation, research theory, measurement, design, statistical analysis and interpretation. Small-group sessions with research advisers emphasize practical application of research concepts and foster project development. The class emphasizes the practical utilization and application of the evidence-based approach to the appraisal of discipline-specific literature.



MPA 5204 CLINICAL PREVENTION AND POPULATION HEALTH
2 SEMESTER HOURS

This course introduces the practice of disease prevention and population health. Through course readings, lectures, discussions and panel presentations, the student is exposed to an evidence-based approach to disease screening and methods for promoting health behavior in diverse populations.

MPA 5206 PATIENT EVALUATION II
2 SEMESTER HOURS

This course is an extension of MPA 5305 Patient Evaluation I.

MPA 5208 CLINICAL SKILLS
2 SEMESTER HOURS

Techniques in clinical procedures are introduced and include injections, EKG rhythm strip interpretation, gowning and gloving in the operating room, sterile technique, venipuncture, casting, CPR, and suturing.

MPA 5215 PHARMACOLOGY I
2 SEMESTER HOURS

This course offers an analytic approach to pharmacologic agents, including indications, contraindications, actions, toxic effects and relationship to other treatments. Also included are preparation, selection, classification and control of drugs.

MPA 5216 PHARMACOLOGY II
2 SEMESTER HOURS

This course is an extension of Pharmacology I, with added emphasis on the systems approach to pharmacologic management of disease processes and therapeutic modalities.

MPA 5221 MEDICAL SPANISH I
2 SEMESTER HOURS

This course provides introductory instruction on the four basic skills necessary for language acquisition (speaking, aural comprehension, reading and writing) through a systematic study of basic Spanish grammar, medical terminology and culture.

MPA 5222 MEDICAL SPANISH II
2 SEMESTER HOURS

This course provides further instruction on the four basic skills necessary for language acquisition

(speaking, aural comprehension, reading and writing) through a systematic study of more advanced Spanish grammar, medical terminology and culture.

MPA 5231 PSYCHIATRY

2 SEMESTER HOURS

This course offers an overview of human behavior and psychopathology, including clinical evaluation and neurological assessment of patients, human sexuality, organic mental disorders, substance abuse and dependency, mood disorders, personality disorders, anxiety disorders and adjustment disorders. Psychotherapy and pharmacotherapy options to treat the various disorders are discussed.

MPA 5305 PATIENT EVALUATION I

3 SEMESTER HOURS

Instruction is given in the elicitation and presentation of patient histories and the performance of a complete physical examination.

MPA 5307 PATIENT EVALUATION III

3 SEMESTER HOURS

This course is an extension of Patient Evaluation I and II. In weekly small-group tutorials, students concentrate on the critical-thinking skills relevant to developing and defending differential diagnoses and treatment plans on hospitalized patients following the elicitation of a complete history and physical examination, providing verbal and written feedback to faculty. Students also perform focused, objective-structured clinical exams to assess ability to perform problem-focused assessment. Developing differential diagnoses and cost-effective treatment plans are emphasized.

MPA 5509 CLINICAL MEDICINE I

5 SEMESTER HOURS

This course offers a systematic study of the epidemiology, presentation, differential diagnosis, diagnosis and management of disease processes based on the most current test blueprint disease lists for the Physician Assistant National Certifying Examination.

MPA 5510 CLINICAL MEDICINE II

5 SEMESTER HOURS

This course is an extension of Clinical Medicine I.

MPA 5511 CLINICAL MEDICINE III

5 SEMESTER HOURS

This course is an extension of Clinical Medicine I and II.

■ **CLINICAL COURSES**

MPA 5251 LONG-TERM CARE/COMMUNITY

HEALTH PRACTICE EXPERIENCE

2 SEMESTER HOURS

This two-week rotation consists of a one-week experience with the Dallas Area Health Education Center and one week in a long-term care facility in the Dallas area. The community-health portion offers the student an opportunity to work with various community-based health organizations to experience programs that educate the public on prevention of disease, health care and community health care resources. The long-term care week exposes the student to the management of patients requiring extended care within a long-term care setting.

MPA 5350 PROFESSIONAL PRACTICE II

3 SEMESTER HOURS

This three-week, full-time course occurs near the end of the clinical rotation cycle of the program. Students are offered an opportunity to acquire knowledge and skills specifically to enhance clinical practice knowledge, including elements of accountability, proper diagnostic coding and reimbursement issues, scope of practice, state law for licensure and certification, credentialing, professional liability, and the commitment to life-long learning. A one-week national certification exam review occurs the week before graduation.

MPA 5428 ELECTIVE CLINICAL ROTATION

4 SEMESTER HOURS

This four-week rotation may be completed in any field of medicine chosen by the student.

MPA 5429 CLINICAL SELECTIVE

4 SEMESTER HOURS

This four-week rotation may be completed in selected medicine or surgical subspecialties chosen by the student.

MPA 5430 PSYCHIATRY**4 SEMESTER HOURS**

This four-week rotation consists of either a two-week experience in a psychiatry emergency room and in inpatient facilities or a four-week experience at the clinic at the Dallas County jail. Students are offered opportunities to obtain practical experience and assume patient-care responsibilities in the continuing care of patients in a psychiatric setting. Students study the basics of DSM-IV diagnostic criteria and psychiatric nosology, and the clinical presentation and treatment of psychiatric disorders.

MPA 5432 EMERGENCY MEDICINE**4 SEMESTER HOURS**

This four-week rotation emphasizes the roles and functions of the emergency department. The student has the opportunity to gain experience in the evaluation and management of trauma situations and emergency intervention from both the medical and surgical aspects. The student also has the opportunity to experience management and treatment of patients triaged to urgent care and fast tracks for health care delivery.

MPA 5433 SURGERY**4 SEMESTER HOURS**

This four-week rotation explores practical experience with general surgical problems. The student participates in the management of hospitalized patients, including assisting in surgery, preoperative and postoperative care, and daily ward rounds. This rotation also requires attendance at structured teaching conferences and tutorials.

MPA 5450 DIRECTED STUDY**4 SEMESTER HOURS**

This course offers the student the opportunity to analyze and report results of a study conducted by the student to satisfy the graduate-project requirement for graduation.

MPA 5451 INFECTIOUS DISEASE**4 SEMESTER HOURS**

This four-week rotation offers the student the opportunity to experience the evaluation and treatment of patients infected with HIV and other infectious diseases. The student is directly involved in the multidisciplinary approach and manage-

ment of patients diagnosed with infectious diseases in both inpatient and outpatient settings.

MPA 5622 OBSTETRICS AND GYNECOLOGY**6 SEMESTER HOURS**

This six-week rotation is divided into two three-week experiences in maternal health/family planning and labor and delivery. The student has an opportunity to become familiar with the management of labor and delivery, well-woman gynecologic exams, family planning, and outpatient prenatal and postpartum care.

MPA 5623 PEDIATRICS**6 SEMESTER HOURS**

This six-week outpatient rotation in general pediatrics includes both well- and sick-child care encountered in ambulatory outpatient settings. The student is expected to acquire proficiency in normal child development and anticipatory guidance.

MPA 5830 INTERNAL MEDICINE**8 SEMESTER HOURS**

During this eight-week inpatient rotation, students become integral members of the medical team providing patient care in an inpatient setting. Each student is expected to acquire proficiency in gathering medical data and making tentative assessments and plans while participating in the management of patients on general medicine wards.

MPA 5831 FAMILY MEDICINE**8 SEMESTER HOURS**

This eight-week rotation is designed to provide a practical clinical patient-care experience in a primary-care setting. Students are provided the opportunity to deliver acute care and continuing care and to address health maintenance issues in keeping with the primary-care philosophy and under the supervision of an internist or family practitioner. During the course of this rotation, students should demonstrate the skills to practice evidence-based medicine and complete an evidence-based research project.

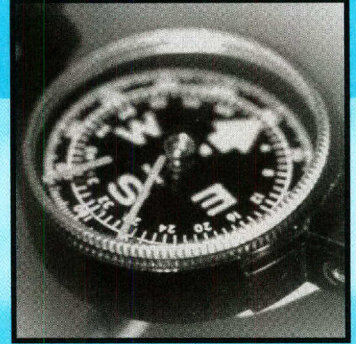
REHABILITATION COUNSELING • biomedical communications •

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physician assistant studies • prosthetics-orthotics • radiation

therapy



REHABILITATION COUNSELING

■ ACTING CHAIR AND CO-CHAIR, GRADUATE PROGRAM

Gerald Casenave, Ph.D.

■ CO-CHAIR, GRADUATE PROGRAM

Cheryl H. Silver, Ph.D.

■ DEGREE OFFERED

Master of Rehabilitation Counseling

FACULTY AND ACADEMIC INTERESTS

C. Munro Cullum, Professor

Ph.D., University of Texas at Austin, 1986
Adult neuropsychology; aging and dementia; recovery from neurologic insult.

Robert J. Gatchel, Clinical Professor

Ph.D., University of Wisconsin, 1973
Health psychology and behavioral medicine; psychophysiology of stress and emotion; clinical application of stress-management techniques; assessment and treatment of chronic-pain disability.

Carroll W. Hughes, Professor

Ph.D., University of Missouri, 1973
Psychosocial rehabilitation of individuals with chronic mental illness; childhood, adolescent and adult depression and diagnosis.

Cheryl H. Silver, Professor

Ph.D., University of Texas at Austin, 1986
Pediatric neuropsychology; learning disability and ADHD assessment.

Gerald Casenave, Clinical Associate Professor

Ph.D., UT Southwestern Medical Center, 1990
Economics of disability; philosophy of psychology; chronic pain; psychology and spirituality; clinical ethics.

Chung-Yi Chin, Assistant Professor

Ph.D., University of Wisconsin, 2009
Health promotion; psychosocial aspects of chronic illness and disability; health disparities; quality of life and assistive technology.

Robert Drake, Assistant Professor

M.S., UT Southwestern Medical Center, 2001
HIV/AIDS population in a rehabilitation setting.

Jacqueline Stephens, Assistant Professor

Ph.D., University of North Texas, 1983
Integrated health care (mental health in primary care); medical family therapy; organizational consulting.

■ SPECIAL FACULTY

Marty Lumpkin, Clinical Associate Professor

Ph.D., Texas Tech University, 1971
Psychotherapy.

Ted Asay, Clinical Assistant Professor

Ph.D., Brigham Young University, 1984
Group psychotherapy.

Dana Bernstein, Clinical Assistant Professor

Ph.D., University of North Texas, 2004
Health psychology.

Karen Brewer, Assistant Professor

Ph.D., UT Southwestern Medical Center, 1994
Acquired brain injury; aging/dementia; care giving and chronic neurological illness; neuropsychology of psychiatric disorders.

Jean-Claude Wakim, Clinical Assistant Professor

Ph.D., UT Southwestern Medical Center, 1993
Individual, marital and family therapy; psychological assessment; medical/psychological consultation.

Robin Binnig, Lecturer

Ph.D., UT Southwestern Medical Center, 1998
Psychological assessment; psychotherapy.

OBJECTIVES

The program leading to the Master of Rehabilitation Counseling offers the opportunity for students to learn the concepts and skills needed in vocational and adjustment counseling for people with disabilities. Rehabilitation counseling specialists work in a variety of settings, often assisting those with physical and psychosocial disabilities achieve their highest level of adjustment. They are involved in client/consumer assessment, counseling and guidance, obtaining medical and training services, and placement in the work environment. Many rehabilitation counselors are employed with state and federal rehabilitation agencies, rehabilitation centers,

employment services, prisons, hospitals, clinics, welfare offices, educational facilities, and in research settings. The program offers opportunities for interested students to specialize in counseling individuals with disabilities related to chronic pain, brain injury, dementia, epilepsy, cancer and psychiatric disorders. Opportunities for specialization in neuropsychological assessment also exist.

An administrative link exists between this program and the Clinical Psychology doctoral program on this campus. As a result, there is access to certain faculty, and there may be access to psychology course work.

■ ACCREDITATION

The Rehabilitation Counseling program is accredited by the Commission on Rehabilitation Education. A special effort has been made to offer, whenever possible, course work in areas of study relative to certification as a rehabilitation counselor and to certification as a psychological associate and/or a licensed professional counselor in the state of Texas.

FACILITIES

In addition to the medical center campus facilities, students may elect various internship experiences within special facilities in the Dallas area. For example, students may see clients/consumers from the Department of Assistive and Rehabilitative Services and the Parkland Health & Hospital System.

The Rehabilitation Counseling program maintains space and equipment to teach counseling and assessment skills. The department also operates the University Rehabilitation Service, a comprehensive vocational rehabilitation facility that provides a locus for the practicum and internship phases of the program. It provides a range of rehabilitation diagnostic and treatment services to people with disabilities in the Dallas/Fort Worth area. These include psychological evaluation, neuropsychological evaluation, psychological counseling and psychosocial skills training services.

As a university-based rehabilitation facility,

the URS also serves as a clinical training facility for advanced students in rehabilitation counseling and a research facility for developing, implementing and studying the effectiveness of various innovative rehabilitation evaluation protocols and behavior change/counseling modalities. In addition, a pediatric neuropsychology service provides training and research opportunities. Practicum and internship students provide services under the supervision of faculty and are involved in seminars and case conferences on a regular basis. The program facilitates the professional practice of rehabilitation counseling on this campus and enhances the integration of service, teaching and research. It also offers opportunities to create links with various departments of UT Southwestern Medical School and UT Southwestern School of Health Professions.

Research under way includes investigations of effective consumer-counselor interactions in vocational rehabilitation, supportive community networks for people with mental illness, the prediction of successful rehabilitation of chronic disability from low-back pain and neuropsychological functioning in older adults and in children with learning disabilities.

REQUIREMENTS FOR ADMISSION

There are two minimum requirements that must be met to be considered for admission to this program:

- 1) A bachelor's degree or its equivalent from an accredited institution in the United States or proof of equivalent training at a foreign university;
- 2) Satisfactory grades (generally a minimum overall grade-point average of 3.0) in undergraduate and graduate course work.

In addition, the applicant must submit the score on the Graduate Record Examination Aptitude Test and request that the GRE scores be sent directly to the Admissions Office. The code number for UT Southwestern Medical Center is R6686-0.

Applicants must have taken the GRE within five years preceding the expected date of

enrollment. GRE scores older than five years will not be accepted unless the applicant has recently been engaged in graduate study at this or another university.

Applicants should have an undergraduate major in the behavioral sciences, such as psychology, sociology or gerontology; education and business administration also are acceptable. The applicant is required to demonstrate proficiency in basic statistics prior to admission. Individual exceptions will be judged by the department.

The Admissions Committee uses a number of criteria in evaluating applicants:

- 1) High-order intellectual abilities, with particular emphasis on those skills necessary for counseling and psychological practice;
- 2) Good academic background in psychology, counseling and rehabilitation-related courses;
- 3) Personal suitability for a career in rehabilitation counseling as evidenced by ability to relate to others, warmth, empathy and a sincere interest in psychological processes;
- 4) Motivations, expectations and career aspirations congruent with the nature of this program;
- 5) Successful experience in rehabilitation, counseling and/or psychology-related activities.

In addition, in order to maximize inclusiveness, the committee will consider applicants whose backgrounds reflect socioeconomic hardship, successful prior careers in another field, and significant research or work experience.

Applicants are evaluated on a competitive basis. Efforts are made to assemble a group of students with the goal of producing professionals equipped to serve our changing communities effectively. All admissions are subject to approval of the Graduate Studies Committee.

The deadline for submitting completed applications is July 1; however, it is to the advantage of the applicant to apply earlier as classes may fill. Applications are accepted as early as the preceding Nov. 1. Students are admitted to the program only in the fall term.

CURRICULUM

The program is designed to offer students the opportunity to learn the relevant theory and basic skills important to the profession of rehabilitation counseling: 1) rehabilitation history; 2) psychological assessment; 3) counseling theory and techniques; 4) behavioral approaches to personality change; 5) personality dynamics and theory; 6) occupational information and vocational appraisal; 7) community organization and resources; 8) cultural diversity; and 9) family and group interventions.

Practicum and internship sites and research projects can be organized to enhance basic course work. Students can orient their training toward people with severe disabilities, including head injury, psychiatric illness and developmental disabilities. Faculty members with neuropsychology expertise also help guide research projects and develop skills in these growing areas.

The following is an outline of courses for the two-year curriculum. Limited substitution of courses may be made with prior permission of the Graduate Studies Committee. Elective courses are offered, and the student may take electives from other area institutions with prior permission of the Graduate Studies Committee. A minimum of 60 credit hours is required for a degree even if a student has advanced standing. The order of courses is subject to change.

■ FIRST YEAR

FALL		HOURS
COURSE		
MRC 5310	Introduction to Assessment	3
MRC 5311	The Profession of Rehabilitation Counseling: Issues and Practices	3
MRC 5212	Psychopathology	2
MRC 5236	Counseling Techniques in Rehabilitation	2
HCS 5106	Professional Development*	1
<i>Total</i>		<i>11</i>
SPRING		
MRC 5201	Human Development	2
MRC 5332	Occupational Information, Vocational Analysis and Placement	3

* HCS 5106 Professional Development is taken in the fall and spring semesters of the first year.

MRC 5233	Techniques of Assessment and Evaluation	2
MRC 5335	Counseling Theory and Techniques	3
MRC 5337	Research Methods and Techniques in Rehabilitation	3
<i>Total</i>		13

SUMMER

MRC 5202	Counseling Family Systems	2
MRC 5203	Medical/Psychological Aspects of Disability	2
MRC 5338	Theories and Methods of Cognitive Behavioral Therapy	3
MRC 5098	Thesis Research	3
<i>Total</i>		10

■ **SECOND YEAR****FALL**

COURSE	HOURS
MRC 5240 Introduction to Group Counseling Techniques in Rehabilitation	2
MRC 5098 Thesis Research	3
MRC 5090 Internship in Rehabilitation Counseling	4
<i>Total</i>	9

SPRING

MRC 5343	Social and Cultural Issues in Rehabilitation Counseling	3
MRC 5098	Thesis Research	3
MRC 5090	Internship in Rehabilitation Counseling	4
<i>Total</i>		10

SUMMER

MRC 5098	Thesis Research	3
MRC 5090	Internship in Rehabilitation Counseling	4
<i>Total</i>		7

GRADUATION REQUIREMENTS

A candidate for the degree of Master of Rehabilitation Counseling at UT Southwestern School of Health Professions must meet all of the following requirements:

1) The student must demonstrate a high order of scholarly achievement in rehabilitation counseling, including appropriate professional

competencies. The program's Student Progress Committee determines whether adequate mastery has been acquired.

- 2) The student must complete satisfactorily a minimum of 60 semester hours at UT Southwestern School of Health Professions.
- 3) The student must discharge all financial obligations to the medical center. In the event of nonpayment, one or more actions may be taken by the dean: a) readmission may be denied; b) the student's grades and official transcript may be withheld; and c) the degree to which the student would otherwise be entitled may be withheld.
- 4) The student must maintain at least a 3.0 cumulative grade-point average (on a 4.0 scale), have no deficiencies and have no incompletes.
- 5) The student must complete the academic requirements listed on his or her degree plan, including completion of any academic deficiencies in prerequisite courses, by the times stated in the student's official letter of acceptance. The student is responsible for submitting official documentation of successful completion of the prerequisites to the Office of the Registrar.
- 6) The student must pay a graduation fee designated to partially offset the costs associated with diploma and diploma cover production, regalia, and the commencement ceremony. All students completing a degree or certification must pay the fee whether they attend the commencement ceremony or not.
- 7) Admission to candidacy is typically granted at the end of the second semester of the first year in the program. In order to be admitted to candidacy, a student must obtain a minimum GPA of 3.0 in course work. If this condition is not met, the student will not be recommended for admission to candidacy.
- 8) Each student must complete a field examination independent of course grades and internship evaluations. This examination is an important landmark in the student's education and must be completed in the required timeframe.



- 9) A completed thesis must be submitted to the Department of Rehabilitation Counseling. The deadline for submission in any given semester is the university's semester deadline for completion of the electronic theses.

COURSE DESCRIPTIONS

See other departmental listings in this catalog for descriptions of courses that do not start with the prefix MRC.

MRC 5201 HUMAN DEVELOPMENT 2 SEMESTER HOURS

This course provides the foundation for understanding normal child, adolescent and adult development. Emphasis is placed on determinants of cognitive and personality factors that can impact the rehabilitation process.

Prerequisite: Consent of instructor

MRC 5202 COUNSELING FAMILY SYSTEMS 2 SEMESTER HOURS

This course provides a survey of important theories and models relating to interventions with families. Emphasis is placed on the family system and on the reciprocal interactions within the

system that can affect the rehabilitation process.

Prerequisite: Consent of instructor

MRC 5203 MEDICAL AND PSYCHOLOGICAL ASPECTS OF DISABILITY 2 SEMESTER HOURS

This course is an introduction to medical and psychological terminology and practices in rehabilitation. It is a survey of body systems, basic functions, therapeutic services and restorative techniques. It also examines the psychological effects that illness has on function and that poor function has on the psychology of the individual.

Prerequisite: Consent of instructor

MRC 5212 PSYCHOPATHOLOGY 2 SEMESTER HOURS

This course outlines the etiological, emotional and behavioral characteristics in syndromes of psychopathology. Included is a discussion of treatment and prognosis for independent functioning.

Prerequisites: Consent of instructor and the Graduate Studies Committee

MRC 5233 TECHNIQUES OF ASSESSMENT AND EVALUATION 2 SEMESTER HOURS

This course continues the study of group and individual tests of intelligence, aptitude, interest and personality. Students may administer and score tests under supervision to gain experience in observational methods.

Prerequisites: MRC 5310 or consent of instructor and the Graduate Studies Committee

MRC 5236 COUNSELING TECHNIQUES IN REHABILITATION 2 SEMESTER HOURS

This course presents applied techniques and tape analysis of counseling skills used in exploring, understanding and developing courses of action for rehabilitation client problems.

Prerequisite: Consent of instructor

MRC 5240 INTRODUCTION TO GROUP COUNSELING TECHNIQUES IN REHABILITATION 2 SEMESTER HOURS

This course introduces principles of group process and techniques of group counseling. The course offers students an opportunity to develop skills in

group leadership, problem resolution and vocational exploration.

Prerequisite: MRC 5335 or consent of instructor

**MRC 5310 INTRODUCTION TO ASSESSMENT
3 SEMESTER HOURS**

This course introduces the concepts of assessment and evaluation. It defines the elements of comprehensive evaluation for the purpose of guiding the rehabilitation process. Clinical interviewing is taught, along with the use of mental-status examination and behavioral observation. Testing of intelligence and basic academic achievement is covered in this course.

Prerequisite: Consent of instructor

**MRC 5311 THE PROFESSION OF REHABILITATION
COUNSELING: ISSUES AND PRACTICE
3 SEMESTER HOURS**

This course offers students an orientation to the field of rehabilitation counseling, including a survey of history, philosophy, counseling and economics of the system. Students study the process of rehabilitation, the goals and objectives of the professional organizations, the code of ethics, the standards of preparation, and certification. Techniques of using community resources for rehabilitation service delivery such as counseling, evaluation, work adjustment and job placement are surveyed.

Prerequisite: Consent of instructor

**MRC 5332 OCCUPATIONAL INFORMATION,
VOCATIONAL ANALYSIS AND PLACEMENT
3 SEMESTER HOURS**

Information presented in this course covers areas of vocational history and the structure of society; career and/or occupational choice processes and career development, or decision and exploration techniques; skills and physical- or emotional-demands analysis; job analysis, job modification and placement; resources of occupational and/or educational information; and practice in communicating the world of work in group and individual counseling. Skill training and field experience in job placement techniques are emphasized.

Prerequisite: Consent of instructor

**MRC 5335 COUNSELING THEORY AND
TECHNIQUES**

3 SEMESTER HOURS

This course studies historical and current approaches to individual counseling with application to the field of rehabilitation. Students have the opportunity to develop basic counseling skills used in exploring, understanding and taking action on client problems.

Prerequisites: MRC 5236 or consent of instructor

**MRC 5337 RESEARCH METHODS AND TECHNIQUES
IN REHABILITATION**

3 SEMESTER HOURS

This course reviews basic statistics and their application to behavioral sciences. Research design and methodology are presented, offering students the opportunity to develop individual research projects during the semester. Using research findings also is stressed.

Prerequisite: Consent of instructor

**MRC 5338 THEORIES AND METHODS OF
COGNITIVE BEHAVIORAL THERAPY**

3 SEMESTER HOURS

This course includes a review of theories and methods of cognitive behavioral therapy and their applications to clinical problems.

Prerequisites: One graduate-level counseling course or consent of instructor

**MRC 5343 SOCIAL AND CULTURAL ISSUES IN
REHABILITATION COUNSELING**

3 SEMESTER HOURS

Studies of change, ethnic groups, subcultures, sexism and changing roles of women in American society are discussed. Emphasis is placed on concepts of social change, adaptation and future trends in the American social structure. The impact of social issues on rehabilitation counseling practice also is emphasized.

Prerequisite: Consent of instructor

**MRC 5352 DIRECTED READINGS IN
REHABILITATION**

3 SEMESTER HOURS

This course offers students the opportunity to pursue, under faculty guidance, academic work not available in other courses.

Prerequisite: Consent of instructor

MRC 5391 INDEPENDENT STUDY**3 SEMESTER HOURS**

This course offers an intensive study of a selected topic or problem in rehabilitation with critical reference to appropriate literature.

Prerequisite: Consent of the Graduate Studies Committee.

MRC 5061 PRACTICUM IN REHABILITATION

This practicum includes supervised individual interviewing and counseling, participation in case conferences and client staffing, an introduction to case-management techniques, and the evaluation of vocational potential.

Prerequisite: Consent of instructor.

MRC 5090 INTERNSHIP IN REHABILITATION COUNSELING

Students are offered the opportunity to do supervised fieldwork in a selected rehabilitation facility. The internship experience may include counseling, case studies, contacts with community social agencies, and the vocational training and placement of clients with disabilities.

Prerequisite: Admission to candidacy.

MRC 5093 SEMINAR IN REHABILITATION

This course includes reading, reports and discussion of special areas of rehabilitation. May be repeated for credit.

Prerequisite: Consent of instructor.

MRC 5094 RESEARCH IN REHABILITATION

This course offers students the opportunity to conduct laboratory or field research under supervision of a faculty member.

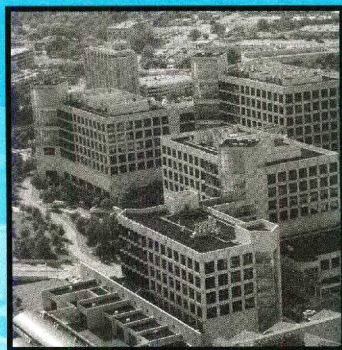
MRC 5096 SPECIAL TOPICS

Contemporary topics in rehabilitation counseling are presented by special arrangement. Students also may elect to conduct an in-depth investigation of an area of research or professional interest on an independent study basis.

MRC 5098 THESIS RESEARCH

Students are offered the opportunity to design and conduct a research project and write a scholarly thesis under the direct supervision of a faculty member in Rehabilitation Counseling.

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