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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 the first Dean of the School, appointed in August 1971. He was succeeded by Dr. William J. Gonyea in 1985. In 1988, Dr. Vernie A. Stembridge assumed duties as interim Dean. Dr. Gordon Green was appointed Dean in January 1991. In 2006, Dr. Raul Caetano became Dean and served until 2015. Dr. Jon Williamson was appointed Dean of the School in October 2015 after serving as interim Dean for nine months.

The School was renamed the UT Southwestern School of Health Professions in 2008. 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

Institutional accreditation for The University of Texas Southwestern Medical Center is contained within the "General" section of the catalog at:

(HYPERLINK)

Education Program Accreditations

The Master of Clinical Nutrition Coordinated Program is granted accreditation by the Accreditation Council for Education in Nutrition and Dietetics of the Academy of Nutrition and Dietetics.

The Master of Clinical Rehabilitation Counseling Program is accredited as a Rehabilitation Counseling Entry-Level Specialty Area by the Council for Accreditation of Counseling and Related Educational Programs.

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

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

The Master of Prosthetics-Orthotics Program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the National Commission on Prosthetic & Orthotic Education.

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

Academic Administration

Jon W. Williamson, Ph.D.
Dean

Kim Hoggatt Krumwiede, Ph.D., CMI
Associate Dean for Academic Affairs

Scott A. Smith, Ph.D.
Assistant Dean for Research
Acting Chair, Health Care Sciences

Jeffrey Browning, M.D.
Program Director, Clinical Nutrition

Robert Drake, M.S., CRC
Interim Program Director, Clinical Rehabilitation Counseling

Scott A. Smith, Ph.D.
Acting Chair, Health Care Sciences

Temple Howell-Stampley, M.D., MBA, FACP
Chair, Physician Assistant Studies

Ross G. Querry, P.T., Ph.D.
Chair, Physical Therapy

Leslie Gray, M.Ed., C.P.O., L.P.O., FAAOP

Program Director, Prosthetics-Orthotics

Kameka Rideaux, MBA, RT(R)(T),
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: post-baccalaureate certificate, masters, and doctorate. In doing so, its faculty also provides structured preparation for students in clinical settings, offers high-quality patient care and client services, and takes part in ongoing research and professional development.

The mission of the School of Health Professions is 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; and
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 on the third or fourth Monday in August. The spring semester begins on the first or second Monday in January. The summer term begins on 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 Enrollment Services publishes a detailed academic calendar each August. The student is urged to refer to it for current information.

Degree and Certificate Programs

The UT Southwestern School of Health Professions offers prospective students Programs leading to Doctor of Physical Therapy, Master of Clinical Nutrition, Master of Physician Assistant Studies, Master of Prosthetics-Orthotics, Master of Clinical Rehabilitation Counseling, and Post-Baccalaureate certificate in Radiation Therapy:

Program	Degree or Certificate
Clinical Nutrition	M.C.N.
Clinical Rehabilitation Counseling	M.C.R.C.
Physical Therapy	D.P.T.
Physician Assistant Studies	M.P.A.S.

Prosthetics-Orthotics
Radiation Therapy

M.P.O.
Post-B.S. Certificate

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.

The School of Health Professions building also houses the Dallas Regional Campus of the School of Public Health, a component of the UT Health Sciences Center at Houston. The public health school offers a Doctor of Philosophy in Epidemiology, a Doctor of Philosophy and a Doctor of Public Health in Behavioral Sciences, a Master of Public Health (generalist and in Epidemiology and Behavioral Sciences), a Master of Sciences in Epidemiology and in Behavioral Sciences, and a graduate certificate in General Public Health.

For more detailed information regarding Programs of the UT Southwestern School of Health Professions, call or write:

Clinical Nutrition

214-648-1520; email, CN.sshp@utsouthwestern.edu; ZIP code: 75390-8877

Clinical Rehabilitation Counseling

214-648-1740; email, RC.sshp@utsouthwestern.edu; ZIP code: 75390-9088

Physical Therapy

214-648-1551; email, PT.sshp@utsouthwestern.edu; ZIP code: 75390-8876

Physician Assistant Studies

214-648-1700; email, PA.sshp@utsouthwestern.edu; ZIP code: 75390-9090

Prosthetics-Orthotics

214-648-1580; email, PO.sshp@utsouthwestern.edu; ZIP code: 75390-9091

Radiation Therapy

214-648-1512; email, radtherapy.sshp@utsouthwestern.edu; ZIP code: 75390-9082

Office of the Dean

214-648-1500; email, recruit@utsouthwestern.edu; ZIP code: 75390-9082

Inquiries can be sent by email to addresses listed above, or 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).

STUDENT INFORMATION

Admissions

General information about the admissions process into the School of Health Professions, and into specific Programs can be found at:

<http://www.utsouthwestern.edu/education/school-of-health-professions/admissions.html>

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 competitive. Application must be approved by the academic Program and by the Admissions Committee in the intended major area of study.

Evaluation of Applicants

Admissions decisions will be made in accordance with UT Southwestern's institutional admissions policy, the School of Health Professions admissions policy, and established program-specific procedures, all of which are available through the Dean's Office.

The following 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 extracurricular activities;
- 5) Experience: work history (health-related or nonhealth-related), special honors, community service, and 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.

Use of Race or Ethnicity in Admissions

The School of Health Professions has an open admissions policy, which means all qualified applicants are considered. Race or ethnicity is not a factor in admissions or student financial assistance decisions. The School of Health Professions employs a variety of strategies and programs to achieve diversity in lieu of using race or ethnicity as a factor in admissions. The Affirmative Action Plan for the School of Health Professions is available through the Dean's Office.

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 Enrollment Services 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 or 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. 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 extremely 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.

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, with or without accommodations. Essential functions are the basic activities that a student must be able to perform to complete the Program's curriculum. No applicant who can perform the School's essential functions – either with or without reasonable accommodations – will be denied consideration for admission. Information regarding how to request reasonable accommodation due to disability and UT Southwestern's Learners with Disabilities Policy is available from the Dean's Office or Student Academic Support Services. This information is also included in the material sent to all accepted applicants.

Each School of Health Professions student must be able to perform the following essential functions, with or without accommodation, in addition to any essential functions specific to the particular program of study, which are listed in the Program sections.

- 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.

Entrance requirements

For prospective students, the "General Information" site of the catalog contains additional onboarding information, including:

Background Check
Policy Against Discrimination
Residency Defined
Active Military Service
Academic Fresh Start
Required Immunizations
AIDS, HIV and Hepatitis B Virus Policy
Bacterial Meningitis

Distance Learning

UT Southwestern Medical Center offers distance learning courses to on-campus and off-campus students enrolled for academic credit in the health professions or for continuing education.

Graduate courses are under development by UT Southwestern School of Health Professions faculty members. As courses are created, they will proceed through the usual phases of academic course review and approval. UT Southwestern does not offer, nor does it plan to offer at this time, full degree programs via distance education.

TUITION, FEES

Information concerning the current cost of an education at UT Southwestern can be viewed at:

<http://www.utsouthwestern.edu/education/school-of-health-professions/cost-financial-support/index.html>

Students in doubt about their residency status for tuition purposes should consult the Residency Defined section in the “General Information” portion of the catalog.

The “General Information” site also describes the various fees and insurances needed by students at UT Southwestern. Contained within Student Information, these references include:

Designated Tuition
Tuition Installment Payments
Computer Usage and Technology Fees
Graduation Fee
Health Insurance
Disability Insurance

Incidental Fees
Laboratory Fee
Late Registration Fee
Malpractice Insurance Fee
Medical Services Fee
Returned Check Fee
Student Services Fee
Books and Equipment
Parking
Microscopes
Student Housing

Financial Aid

The “General Information” section of the catalog addresses the process of applying for and receiving financial aid. Information also can be viewed at:

<http://www.utsouthwestern.edu/about-us/administrative-offices/financial-aid/index.html>

PROGRAMS

(Individual sections that follow may include Chair and faculty, description, objectives, admission requirements, specific essential functions, curriculum, and common course descriptions)

Clinical Nutrition

Degree Offered
Master of Clinical Nutrition

Program Director

Jeffrey Browning, M.D., UT Southwestern, 1998

FACULTY

Professors

Jo Ann S. Carson, Ph.D., UT Austin, 2000
Gloria Lena Vega, Ph.D., Louisiana State University Medical Center, 1979

Assistant Professors

Linda Michalsky, Ph.D., University of Texas at Austin, 2002

Lona Sandon, Ph.D., Texas Woman's University, 2016

Hoda Yeganehjoo, Ph.D., Texas Woman's University

Susan G. Rodder, M.S., Texas Woman's University, 1991

Clinical Instructor

Lora Day, M.A., UT Austin, 1987

Faculty Associates

Tad Campbell, M.C.N., UT Southwestern School of Health Professions, 2012

Alicia Gilmore, M.S., Oklahoma State University, 2002

DESCRIPTION

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 their 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 Academy of Nutrition and Dietetics Accreditation Council for Education in Nutrition and Dietetics. Graduates of this Program are eligible to take the Registration Exam for Dietitians and to apply for licensure in Texas. They also are eligible for active membership in the Academy of Nutrition and Dietetics.

The second track, the Master of Clinical Nutrition for Health Professionals, is available to individuals who are already registered dietitian nutritionists 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 course work to provide 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 nutrition and health needs of society as registered dietitian nutritionists. Registered dietitian nutritionists individualize nutrition therapy to optimize management of such diseases as diabetes, hypertension, renal failure, obesity, and cancer. The Program uses the unique resources of the Medical Center to prepare graduates to become registered dietitian nutritionists 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 nutrition 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 nutrition support for patients with complex medical problems;
6. Provide culturally competent nutrition education to populations with diverse nutrition 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, long-term 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 or universities, community health programs, and industry.

ACCREDITATION

The Coordinated Program is granted accreditation with an emphasis in nutrition therapy by the Accreditation Council for Education in Nutrition and Dietetics of the Academy of Nutrition and Dietetics (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 Enrollment Services 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;
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 \$50 fee;
7. Official transcripts from all schools attended;
8. Three letters of recommendation;
9. Personal interview;
10. Personal statement of career goals; and
11. Description of 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 and prerequisite grade-point average;
3. The three letters of recommendation;
4. Personal interview;
5. Personal statement of career goals; and
6. Work experience.

INTERNATIONAL APPLICANTS

Foreign transcripts must be evaluated by a transcript evaluation agency; TOEFL or IELTS 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 nutrition 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 encompassing two years with six semesters. The curriculum includes both academic course work and supervised practice. Supervised practice and classroom courses are offered during the typical workday; some course work is available online.

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

Program of Instruction

Year One

Fall		Hours
CN 5105	Nutrition and Metabolism Current Issues	1
CN 5310	Nutrition Care Process	3

CN 5422	Nutrition in Health Promotion	4
CN 5331	Food Science and Technology	3
CN 5340	Nutrition in Metabolism	3
HCS 5106	Professional Development	*
CN 5250	Nutrition Care Process Practicum	2
Total		16

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
HCS 5106	Professional Development	1
Total		17

*Year-long course, completed in Spring

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
Total		9

Year Two		
Fall		Hours
CN 5313	Medical Nutrition Therapy in Pediatrics	3
CN 5353	Advanced Medical Nutrition Therapy Practicum	3
CN 5360	Education and Community Nutrition Practicum	3
CN 5370	Food Service Practicum	3
Total		12

Spring		Hours
CN 5223	Nutrition in Media Communications	2
CN 5233	Business of Health Care	2
CN 5954	Integrated Nutrition Practicum	9
Total		13

Summer		Hours
CN 5390	Nutrition Research	3
CN 5002	Special Topics	1
Total		4
Program total		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 actions 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 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 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 Enrollment Services.

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 participate in a graduate research 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 dietitian nutritionists and other licensed 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 people in America.

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 nutrition care in multiple health care settings, from pediatrics to geriatrics;
3. Collaborate within interdisciplinary teams to provide nutrition 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 15 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
Total	18

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 UT Health Science Center at Houston.

Sample Curriculum Sequence

Year One

Fall	Hours
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CN 5310	Nutrition Care Process	3
CN 5340	Nutrition in Metabolism	3
CN 5002	Special Topics	1
Total		7

Spring Hours

CN 5311	Medical Nutrition Therapy in Chronic Care	3
HCS 5330	Health Care Research	3
CN 5002	Special Topics	1
Total		7

Summer Hours

CN 5312	Medical Nutrition Therapy in Acute Care	3
CN 5002	Special Topics	1
Total		4

Year Two

Fall Hours

CN 5390	Nutrition Research	3
	Clinical Nutrition Elective	3
	General Elective	3
Total		9

Spring Hours

CN 5390	Nutrition Research	3
	General Electives	6
Total		9

Summer Hours

	General Elective	3
Total		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 5101 Applied Sports Nutrition

1 semester hour

This course covers the basic topics of sports nutrition within the scope of the registered dietitian nutritionist. Topics include fluids and electrolytes, carbohydrates, protein, weight management, vitamins and minerals, dietary supplements and ergogenic aids, and special population concerns such as vegetarianism and diabetes as applied to athletes and active individuals.

CN 5102 Advanced Sports Nutrition

1 semester hour

This course delves into current research topics in sports nutrition. Students have the opportunity to investigate sport specific nutrient requirements, evaluate sports nutrition supplements, and analyze current research related to macro or micronutrient intake and sports performance or recovery.

Prerequisite: CN 5101 or permission of instructor

CN 5103 Nutrition in Cancer Prevention

1 semester hour

This course will review current research related to nutrition and physical activity in cancer prevention with attention to the role of energy balance.

CN 5104 Nutrition Support: Current Issues

1 semester hour

This course will examine current evidence and practice guidelines for selected topics in the provision of enteral and parenteral nutrition.

Prerequisite: CN 5312 or permission of instructor

CN 5105 Nutrition and Metabolism Current Issues

1 semester hour

As current research studies in nutrition and metabolism are explored, students develop skills in reading research critically and writing scientific reports. Concurrent enrollment with CN 5340

CN 5422 Nutrition in Health Promotion

4 semester hours

This course will explore theories that explain health- and nutrition-related behaviors coupled with strategies for promoting behavior change among varying age groups. Students will also build skills in interpreting health and nutrition data for assessing, planning, implementing, and evaluating health and nutrition interventions at the community level. Public health nutrition surveillance systems and food programs will be emphasized.

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 sociocultural 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 is 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.

Prerequisites: CN 5312 and CN 5341, or consent of instructor

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 breast-feeding and to learn how to promote breast-feeding 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

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, CN5422

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, ongoing 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.

Prerequisites: CN 5313, CN 5351, CN 5360, CN 5370

Clinical Rehabilitation Counseling

Degree offered

Master of Clinical Rehabilitation Counseling

Interim Program Director, Robert Drake

FACULTY

Professor

C. Munro Cullum, Ph.D., UT Austin, 1986

Associate Professors

Karen Brewer-Mixon, Ph.D., UT Southwestern Medical Center, 1994

Gerald Casenave, Ph.D., UT Southwestern Medical Center, 1990

Assistant Professors

Robert Drake, M.S., UT Southwestern Medical Center, 2001

Lindsey Rose, M.S., UT Southwestern Medical Center, 2010

Special Faculty

Ted Asay, Clinical Assistant Professor
Ph.D., Brigham Young University, 1984

Carlos W. Davis, Clinical Instructor
Ph.D., University of Georgia, 1978

Michael Gottlieb, Clinical Instructor
Ph.D., Texas Tech University, 1972

Jennifer Guerrero, Clinical Instructor
Ph.D., Sam Houston State University, 2013

Grant Holland, Clinical Instructor
Ph.D., Southern Methodist University, 2014

Rupa Naidu, Clinical Instructor
Ph.D., UT Southwestern Medical Center, 1997

Kimberly Roaten, Associate Professor
Ph.D., UT Southwestern Medical Center, 2008

Shannon Juengst, Assistant Professor
Ph.D., University of Pittsburg, 2012

Jennifer Guerrero, Clinical Instructor
Ph.D. Sam Houston State University, 2013

MASTER IN CLINICAL REHABILITATION COUNSELING

MISSION

The mission of the Master's Program in Clinical Rehabilitation Counseling is to provide its students with the highest quality of training in the relevant concepts and skills needed in vocational and adjustment counseling for people with disabilities and chronic illness, and to provide Program graduates with the academic and clinical experiences necessary for national certification as a Certified Rehabilitation Counselor (CRC) and state licensure as a Licensed Professional Counselor (LPC) and/or Licensed Psychological Associate (LPA).

OBJECTIVES

In order to fulfill the mission of the Master's Program in Clinical Rehabilitation Counseling, the Program seeks to meet the following objectives:

- To offer academic content and clinical practicum and internship experiences that will meet or exceed standards necessary for obtaining relevant accreditation, certification, and licensure.
- To ensure that all Program graduates have demonstrated mastery of core academic content.
- To ensure that all Program graduates have demonstrated essential skills in clinical rehabilitation counseling, psychological assessment, and vocational planning.
- To ensure that Program graduates have demonstrated knowledge of the professional identities expected of a Certified Rehabilitation Counselor, Licensed Professional Counselor, and Licensed Psychological Associate.

ACCREDITATION

The Clinical Rehabilitation Counseling Program is accredited as a Rehabilitation Counseling Entry-Level Specialty Area by the Council for Accreditation of Counseling and Related Educational Programs (CACREP). A special effort has been made to offer course work in areas of study relative to certification as a rehabilitation counselor in addition to licensure as a psychological associate and/or a licensed professional counselor in the state of Texas.

REQUIREMENTS FOR ADMISSION

There are three minimum requirements that must be met to be considered for admission to this Program:

1. A baccalaureate degree from an accredited U.S. institution or proof of equivalent training at a foreign university;
2. Satisfactory grades (recommended minimum overall GPA of 3.0) in undergraduate and graduate course work.
3. A recommended minimum combined score of 300 on the Graduate Record Examination General Test.

Applicants must request that the GRE scores be sent directly to the Office of Enrollment Services. The code number for UT Southwestern Medical Center is 6686.

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; individual exceptions for applicants with non-behavioral sciences degrees will be judged by the Department. The applicant is required to demonstrate proficiency in basic statistics prior to admission.

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 June 15; however, it is to the advantage of the applicant to apply earlier as classes may fill. Applications are accepted as early as the preceding November 1. Students are admitted to the Program only in the fall term.

ESSENTIAL FUNCTIONS

In addition to essential functions for all students (see Entrance Requirements in the “Student Information” page), each student in the Master of Clinical Rehabilitation Counseling Program must be able to:

1. Measure, calculate, reason, analyze, synthesize, integrate, and apply oral and written information in the process of evaluation and problem-solving

2. Demonstrate the emotional health required to fully use his/her intellectual abilities such as exercising good judgment, promptly completing all responsibilities required by the Program, or attendant to the diagnosis and care of clients
3. Develop mature, sensitive, and effective relationships
4. Tolerate demanding workloads and to function effectively under stress
5. Adapt to changing environment, to display flexibility, and to learn to function in the face of uncertainties and ambiguities inherent in the clinical problems of many clients
6. Demonstrate professional demeanor and behavior, and perform activities in an ethical manner in all dealings with peers, faculty, staff, and clients

CURRICULUM

The Master of Clinical Rehabilitation Counseling Program is a full-time, two-year post-baccalaureate program that begins in August. The 60-hour curriculum focuses on knowledge and skills of counseling and rehabilitation for persons with physical and/or psychiatric disabilities. The program also provides students with significant clinical experience in working with people with various disabilities through practicum and internship. To maximize faculty and student interaction, all academic training takes place in a traditional classroom setting, Monday through Friday during business hours. Clinical experiences also take place during regular business hours. The order of courses is subject to change.

First Year

FALL

COURSE		HOURS
MRC 5410	Fundamentals of Assessment	4
MRC 5311	The Profession of Rehabilitation Counseling: Issues and Practices	3
MRC 5312	Psychopathology	3
MRC 5336	Counseling Theories in Rehabilitation	3
HCS 5106	Professional Development	*
Total		13

SPRING

MRC 5301	Human Development	3
MRC 5332	Occupational Information, Vocational Analysis, and Placement	3
MRC 5335	Counseling Techniques in Rehabilitation	3
MRC 5303	Medical and Psychosocial Aspects of Disability	3

MRC 5339	Abnormal Human Behavior	3
HCS 5106	Professional Development	1
Total		16

*Year-long course, completed in Spring

SUMMER

MRC 5204	Advanced Counselor Ethics	2
MRC 5337	Research Methods and Techniques in Rehabilitation	3
MRC 5338	Theories and Methods of Cognitive Behavioral Therapy	3
MRC 5188	Pre-Clinical Seminar in Rehabilitation Counseling	1
MRC 5202	Counseling Family Systems	2
Total		11

Second Year

FALL

COURSE		HOURS
MRC 5340	Introduction to Group Counseling Techniques	3
MRC 5189	Practicum in Rehabilitation Counseling	3
MRC 5096	Special Topics	1
Total		7

SPRING

MRC 5343	Social and Cultural Issues in Rehabilitation Counseling	3
MRC 5234	Addictions Counseling	2
MRC 5090	Internship in Rehabilitation Counseling	4
Total		9

SUMMER

MRC 5090	Internship in Rehabilitation Counseling	4
Total		4

GRADUATION REQUIREMENTS

To graduate from the Master of Clinical Rehabilitation Counseling Program, a candidate must:

1. Demonstrate a high order of scholarly achievement in rehabilitation counseling, including appropriate professional competencies.

2. Complete the academic requirements listed in the degree plan, including completion of any conditions imposed by the Graduate Studies Committee.
3. Complete satisfactorily a field examination, independent of course grades and internship evaluations, in the required time frame.
4. Meet minimum professional competencies as determined by the Graduate Studies Committee.
5. 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. Discharge all financial obligations to the Medical Center.

COURSE DESCRIPTIONS

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 5303 Medical and Psychological Aspects of Disability

3 semester hours

This course is an introduction to the medical aspects of disability, which includes a survey of physical, psychiatric, cognitive, sensory, and developmental disabilities. The course examines the human body system, medical terminology and diagnosis, assistive technology, classification and evaluation of function as well as psychological dynamics related to self-identity, growth, and adjustment.

Prerequisite: Consent of instructor

MRC 5204 Advanced Counselor Ethics

2 semester hours

This course reviews the ethical codes for rehabilitation counselors, licensed professional counselors, and licensed psychological associates and applies the ethical concepts in these codes to clinical case examples.

Prerequisite: Consent of instructor

MRC 5301 Human Development

3 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 5410 Fundamentals of Assessment

4 semester hours

This course explores basic concepts of assessment and use of assessment in diagnostic and intervention planning services in rehabilitation counseling. Students will become familiar with various assessment instruments and ethical and culturally relevant strategies for selecting, administering, and interpreting test results. Students will be trained in basic concepts of standardized and non-standardized testing, norm- and criterion-referenced assessments, and group and individual assessments. The course consists of one three-hour didactic session per week with a one-hour laboratory in which students learn to administer the assessment instruments described in didactics. Students will practice their interpretation skills toward the goal of becoming competent consumers of evaluation reports.

MRC 5311 The Profession of Rehabilitation Counseling: Issues and Practices

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 5312 Psychopathology

3 semester hours

This course outlines the etiological, emotional, and behavioral characteristics in syndromes of psychopathology. This course includes instruction about DSM-5 diagnostic criteria, disease-related epidemiological information, treatment considerations, and prognosis for independent functioning.

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 5233 Addictions Counseling

2 semester hours

This course provides a comprehensive overview of different types of addictions individuals may experience. These include, but are not limited to substances such as alcohol and drugs, gambling, and sex addiction. Students will learn about identifying addictions as well as evidence-based treatment for addictions.

Prerequisite: Consent of instructor

MRC 5335 Counseling Techniques in Rehabilitation

3 semester hours

This course introduces applied techniques from various theoretical approaches to explore, understand, and develop courses of action for individuals dealing with rehabilitation issues. In-class demonstration, practice, and analysis of skills are utilized as part of the learning process.

Prerequisites: MRC 5336 or consent of instructor and the Graduate Studies Committee

MRC 5336 Counseling Theories in Rehabilitation

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.

Prerequisite: consent of instructor

MRC 5337 Research Methods and Techniques in Rehabilitation

3 semester hours

This course reviews research methodologies, including statistical analyses and designs that are necessary for a professional counselor's access to the more technical behavioral, rehabilitation, and social science literature. The epidemiological aspects of evidence-based practice also is presented.

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: MRC 5336 or consent of instructor and the Graduate Studies Committee

MRC 5339 Abnormal Human Behavior

3 semester hours

This course builds on MCRC 5312, providing students with a fuller understanding of concepts of psychopathology. It focuses on understanding what the range of normal human behavior is, the ways in which behavior becomes disturbed, and how different personality/psychotherapy theories explain the ways in which disturbed behavior is effectively treated.

Prerequisites: MRC 5312 or consent of instructor and the Graduate Studies Committee

MRC 5340 Introduction to Group Counseling Techniques

3 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 5336 or consent of instructor

MRC 5343 Social and Cultural Issues in Rehabilitation Counseling

3 semester hours

Studies of change, ethnic groups, subcultures, gender issues, 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 cultural 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 Graduate Studies Committee

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 Graduate Studies Committee

MRC 5188 Pre-Clinical Seminar in Rehabilitation Counseling

1 semester hour

This course is designed to familiarize students with essential clinic policies and procedures prior to initiation of clinical client contact which begins in the following semester. Students will receive training on clinical documentation requirements, client safety procedures, billing policies, file management policies, and assessment procedures. Student will be asked to demonstrate basic counseling skills.

MRC 5189 Practicum in Rehabilitation Counseling

Practicum in Rehabilitation Counseling is the student's introduction to clinical practice. This course contributes to the development of student's counseling skills through completion of at least 40 hours of direct service with actual clients. In addition to practicum site responsibilities, students will meet weekly for group supervision, site supervision, and individual counseling supervision.

Prerequisite: Admission to candidacy and consent of Graduate Studies Committee

MRC 5090 Internship in Rehabilitation Counseling

The clinical internship affords students the opportunity to provide supervised clinical rehabilitation counseling services directly to individuals with disabilities in a variety of settings. Clinical rehabilitation counseling services may include individual psychotherapy, traditional vocational rehabilitation counseling, psychological assessment, case management, and participation in interdisciplinary case conferences.

Prerequisite: Admission to candidacy and consent of Graduate Studies Committee

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 Graduate Studies Committee

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.

Prerequisite: Consent of Graduate Studies Committee

Health Care Sciences

Acting Chair

Scott A. Smith, Ph.D.

FACULTY

Professors

Gordon Green, M.D., UT Southwestern Medical Center, 1968

Charles McConnel, Ph.D., University of Southern California, 1970

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

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

Associate Professor

Kim Hoggatt Krumwiede, Ph.D., University of North Texas, 2016

Assistant Professors

Christopher Faulkner, Ph.D., University of North Texas, 2015

Palma Longo, Ph.D., Columbia University, 2001

Masaki Mizuno, Ph.D., Waseda University, Japan, 2005

Instructor

Mu Huang, Ph.D., Southern Methodist University, Dallas, 2017

Faculty Associates

Jay Gibson, Ph.D., University of Rochester, 1995

Kyle Molberg, M.D., University of Texas Medical School at Houston, 1985

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

OBJECTIVES

This Department provides basic and interdisciplinary courses available to all health professions Programs. In addition, it serves as an administrative base for the Prosthetics-Orthotics and Radiation Therapy Programs, along with 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 Division directs and supports interdisciplinary education and research, not only between UT Southwestern 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 advisors or the Office of the Dean.

COURSE DESCRIPTIONS

Basic Biomedical Sciences

HCS 5207 Introduction to Neuroscience

2 semester hours

This course consists of lectures and small-group laboratory sessions. It is offered by Neurology and Neurotherapeutics 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. Admission to HCS 5207 is limited to students enrolled in the Radiation Therapy, Physician Assistant Studies, Physical Therapy, and Prosthetics-Orthotics Programs.

HCS 5230/5330 Health Care Research

2-3 semester hours

Instruction 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. Small-group sessions with research advisors emphasize practical application of research concepts and foster project

development. Admission to HCS 5230/5330 is limited to students enrolled in the Radiation Therapy, Physical Therapy, Physician Assistant Studies, Clinical Nutrition, and Prosthetics-Orthotics Programs.

HCS 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 Radiation Therapy, Physician Assistant Studies, Physical Therapy, and Prosthetics-Orthotics Programs.

HCS 5308 Human Anatomy (Lecture)

3 semester hours

Instruction 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 HCS 5308 is limited to students enrolled in degree-granting Programs at UT Southwestern including Physical Therapy, Physician Assistant Studies, and Prosthetics-Orthotics Programs.

Prerequisite: Concurrent enrollment in HCS 5309.

HCS 5309 Human Anatomy (Dissection Laboratory)

3 semester hours

This course presents an advanced study of the human body and includes cadaver dissection. Admission to HCS 5309 is limited to Physical Therapy, Physician Assistant Studies, and Prosthetics-Orthotics Programs.

Prerequisite: Concurrent enrollment in HCS 5308.

HCS 5407 Human Physiology

4 semester hours

A comprehensive study of the basic functions of the body systems and their interrelationships is offered in this course. Admission to HCS 5407 is limited to students enrolled in the Radiation Therapy, Physical Therapy, Physician Assistant Studies, and Prosthetics-Orthotics Programs.

Behavioral Sciences and Other Courses

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 interpersonal effectiveness, verbal and nonverbal communication, building teams, managing conflict, behavioral change, and ethics.

Physical Therapy

Degree Offered

Doctor of Physical Therapy

Chair

Ross Query, PT, Ph.D.

Vice Chair

Beth Deschenes, PT, DPT, OCS

FACULTY

Professors

Edward Mulligan, PT, DPT, OCS, SCS, ATC, Regis University, 2008

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

Associate Professors

Julie DeVahl, PT, DPT, OCS Texas Tech University Health Science Center, 2014

Karen McCain, PT, DPT, NCS Regis University, 2006

Susan Simpkins, PT, Ed.D., Columbia University, 1999

Jason Zafereo, PT, Ph.D., OCS, FAAOMPT, Texas Women's University, 2015

Assistant Professors

Traci Betts, DPT, CCS, UT Southwestern Medical Center, 2010

Beth Deschenes, PT, DPT, OCS, Arcadia University, 2012

Tara Dickson, DPT, OCS, Duke University, 2012

Leslie Nelson, MPT, OCS UT Southwestern Medical Center, 2003

Staci Shearin, MPT, NCS, University of North Carolina, 2006

Instructors

Emily Middleton, DPT, OCS, SCS, UT Southwestern Medical Center, 2011

Erin Perez, DPT, NCS, Washington University, 2011

Faculty Associate

Egle Bauzaite, DPT, NCS, UT Southwestern Medical Center, 2013

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 autonomous 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 neuromuscular, cardiopulmonary, musculoskeletal, and integumentary systems. School of Health Professions 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. Earn credit in the following prerequisite courses with a grade of C or better prior to entrance into the Program;
3. Complete and submit scores for the Graduate Record Examination (completed in last five years);
4. Complete the application process through PTCAS; and
5. Submit at least three letters of recommendation.

Prerequisite Courses

Course	Hours
College Algebra	3
Statistics (must include hypothesis testing)	3
Physics (must be for science majors and include lab)	8
Chemistry (must be for science majors and include lab)	8
General Psychology*	3
Abnormal or developmental psychology*	3
Biology (general lower or upper division)	8
Human Anatomy	4
Human Physiology**	4

* 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, prerequisite courses GPA, GRE scores, and individual qualities ascertained through the application, letters of recommendations, and an interview. Selection for admission to the Physical Therapy Program is highly competitive and is based on the criteria outlined in the Evaluation of Applicants section in the Student Information page.

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.

The curriculum offers professional education for students majoring in physical therapy. Students admitted to the Program are candidates for a Doctor of Physical Therapy degree (DPT) 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 education courses provide an opportunity to integrate professional knowledge and skills in a clinical setting. These experiences are offered by more than 200 affiliated institutions located throughout the United States but predominately in Texas. Each affiliated institution has a center coordinator for clinical education. Three eight-week and one 12-week full-time clinical experiences provide students a broad exposure to 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

Courses may be exchanged between semesters or terms without any published notice.

First Year

Summer

Course		Hours
HCS 5308	Human Anatomy Lecture	3
HCS 5309	Human Anatomy Dissection Laboratory	3
HCS 5407	Human Physiology	4
DPT 5139	Clinical Correlation	1
HCS 5207	Introduction to Neuroscience	2
Total		13

Fall

HCS 5106	Professional Development	*
HCS 5306	Introduction to Pathology	3
DPT 5140	Elements of Pharmacology for the Physical Therapist	1
DPT 5151	PT Procedures	1
DPT 5150	Professional Practice Development I	1
DPT 5302	Therapeutic Interventions I	3
DPT 5320	Tests and Measures	3
DPT 5351	Clinical Kinesiology	3

Total **15**

Spring

HCS 5106	Professional Development	1
DPT 5138	Integumentary Patient/Client Management	1
DPT 5236	Evidence-Based Clinical Research I	2
DPT 5237	Pathokinesiology	2
DPT 5257	Professional Practice Development II	2
DPT 5431	Musculoskeletal Patient/Client Management I	4
DPT 5304	Geriatric Patient/Client Management	3

Total **15**

* Year-long course, completed in Spring

Second Year

Summer

Course		Hours
DPT 5133	Human Development	1
DPT 5330	Musculoskeletal Patient/Client Management II	3
DPT 5335	Therapeutic Intervention II	3
DPT 5340	Neurological Patient/Client Management I	3
DPT 5134	Service Learning (Camp John Marc)	1
Total		11

Fall

DPT 5137	Evidence-Based Clinical Research II	1
DPT 5242	Neuromuscular Patient/Client Management II	2
DPT 5306	Pediatric Patient/Client Management	3
DPT 5342	Prevention, Health Promotion, Fitness and Wellness	3
DPT 5401	Clinical Experience I	4
Total		13

Spring

DPT 5132	Evidence-Based Clinical Research III	1
DPT 5218	Assistive Technology in Rehabilitation	2
DPT 5305	Medical Practice Management	3
DPT 5316	Professional Practice Management	3

DPT 5317	Advanced Therapeutic Techniques	3
DPT 5344	Cardiovascular and Pulmonary Patient/Client Management	3
Total		15

Third Year

Summer

Course		Hours
DPT 5402	Clinical Experience II (8 weeks)	4
DPT 5403	Clinical Experience III (8 weeks)	4
Total		8

Fall

DPT 5604	Clinical Experience IV (12 weeks)	6
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Program Total		96
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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 C and must maintain a cumulative GPA of at least 3.0, have no academic deficiencies, and have no incompletes. The student is advised to consult the policy statement of the Department upon admission to the Program.

GRADUATION REQUIREMENTS

A candidate for the Doctor of Physical Therapy degree in the 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 satisfactorily complete a minimum of 96 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 Enrollment Services.

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 5133 Human Development

1 semester hour

This course provides a focused overview of early childhood development that provides a foundation for pediatric physical therapist practice. Changes in physical, motor, cognitive, language and social-emotional development are examined from infancy through late childhood. Students gain practical experience observing developmental skills in typically developing young children. The perspective that human development is strongly influenced by a dynamic interaction between the individual, the environment and the task creates as foundation for this course and for Pediatric Patient/Client Management later in the curriculum.

DPT 5134 Service Learning

1 semester hour

A service learning experience takes place when a community agency has a well-defined need that can be met by a professional education entity. Both participating entities receive benefits in a service learning experience. For this experience the Muscular Dystrophy Association (MDA) realizes the significant impact of using professional physical therapy students as counselors in

the camp environment. The physical therapy students have opportunities to reinforce new knowledge and skills in a real life situation with a specialized population, children with neuromuscular diseases. The cognitive knowledge and psychomotor skills needed to be successful in the environment are taught in traditional classroom and laboratory sessions prior to the service learning experience. Students, daily in the camp environment, must display professionalism, demonstrate empathy, resolve conflict, perform visual assessments, and practice basic functional skills with a pediatric population. There is time allotted during and after camp for reflection and to serve in a consultative fashion for the camp facility and the MDA regarding changes in the environment or the type and flow of activities for the upcoming year.

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 an 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 prepares students for clinical practice by providing the basis and rationale for evaluating and treating patients with pathology or impairments of the integumentary system. The class will also introduce the concepts of universal precautions and infection control. Students will 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 the student to gain experience in the techniques utilized 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 and dermatome identification. The cognitive knowledge of 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 prepares physical therapists for their role as autonomous practitioners by providing instruction in general pharmacologic principles, drug 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 will be presented. This course introduces the student to 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 three 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. 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 is an introductory clinical skills course that focuses on body mechanics, positioning and draping, basic wheelchair management, transfers, bed mobility, and gait training of patients referred to physical therapy. These topics will be addressed in the context of patient care in a variety of settings. Additional topics will address special patient populations and introductory techniques and principles of massage and equipment management in critical care.

DPT 5218 Assistive Technology in Rehabilitation

2 semester hours

This course is designed to provide students with entry-level knowledge of orthotic and prosthetic management of their patients. This course also provides the students with an opportunity to learn the basic principles of wheelchair prescription.

DPT 5236 Evidence-Based Clinical Research I

2 semester hours

This course provides an overview of the research process with a focus on evidence-based health care research. Lecture topics include the evidence-based medicine approach, critical appraisal of medical literature, study design, reliability, validity, statistical analysis and its interpretation. Students will also work in small group journal club based sessions with assigned

faculty will emphasize practical utilization and application of the evidence-based approach to the appraisal of discipline specific literature.

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 5341 Prevention, Health Promotion, Fitness and Wellness

3 semester hours

The American Physical Therapy Association recognizes that physical therapists are uniquely qualified to assume leadership positions in efforts to prevent injury and disability, and fully supports the positive roles that physical therapists and physical therapist assistants play in the promotion of healthy lifestyles, wellness, and injury prevention. **HOD P06-93-25-5** This course is designed to present concepts and information to allow students to develop skills necessary to assess, evaluate, design and implement interventions to promote wellness, fitness and prevention of disease and impairments to individuals, groups and communities.

DPT 5242 Neuromuscular Patient/Client Management II

2 semester hours

This course addresses the rehabilitation management of adult patients with neurological dysfunctions. Physical therapy examination, evaluation, diagnosis, prognosis and plan of care for specific adult diseases are covered in lecture and laboratory experiences. Clinical opportunities enhance the development of clinical competence with the physical therapy management of this patient population.

DPT 5257 Professional Practice Development II

2 semester hours

This is the second of three professional practice courses addressing physical therapy practice. This course builds documentation skills, emphasizing the elements from the *Guide to Physical Therapist Practice* and components of the *International Classification of Functioning, Disability and Health (ICF)* model. Student skills include planning, organizing, and documenting a plan of care that incorporates primary, secondary, and tertiary care provided by PT and other practitioners as appropriate. Students are presented various models of health care and systems of reimbursement for PT services. Students explore current issues influencing physical therapist practice.

DPT 5302 Therapeutic Intervention I

3 semester hours

This course is designed to present anatomical and physiological principles to allow students to develop integrated therapeutic exercise interventions. Students will develop an acquired understanding of physiological responses to various types of training and develop skills in prescription, implementation, and modeling of exercise programs. Exercise components of strength, aerobic/anaerobic conditioning, flexibility, balance and stage of healing/rehabilitation will be examined. Evidence of appropriate, safe and effective exercise design and proper exercise biomechanics and prescription parameters will be addressed with all interventions. Exercise consideration for special populations and across the age span will be covered. Concepts are presented in lecture and practiced in the laboratory.

DPT 5304 Geriatric Patient/Client Management

3 semester hours

This is an active learning experience in Geriatrics for students in the DPT curriculum. The team-based, case-based format for the course affords students time to discuss readings, integrate lectures and ask their own relevant questions. Environmental, psychological and physiological changes for the aging adult from diverse backgrounds are addressed. Students have hands on opportunities for practicing geriatric interviews, assessments and program planning. There are multiple opportunities for the student to demonstrate their academic and clinical competency with the physical therapy health care management of the aging adult.

DPT 5305 Medical Practice Management

3 semester hours

Medical Practice Management is designed to teach students how to perform a medical screening as well as well as how to make sound clinical decisions regarding treatment, treatment and referral, or referral. A systems approach will be used to study the signs and symptoms associated with selected medical conditions. Students will be introduced to a variety of medical conditions and their management that are not easily categorized into musculoskeletal, neurological, cardiopulmonary, and integumentary disorders.

DPT 5306 Pediatric Patient/Client Management

3 semester hours

This course is designed to develop a student's ability to provide evidence-based physical therapy, family-centered care to children and families in a variety of practice settings. Students learn about common pediatric neuromuscular, musculoskeletal and cardiopulmonary disorders, including associated impairments in body structure and function, activity limitations and participation restrictions. Pediatric tests and measures are introduced in class and practiced

during lab sessions with typically developing children. Laboratory sessions also offer students experience in developing intervention programs for children with a range pediatric conditions.

DPT 5316 Professional Practice Management

3 semester hours

This practice management course addresses the “business” of physical therapy and introduces the student to the day-to-day operations of a physical therapy facility. This course builds on the on the principles of patient/client management and professional ethics presented in the previous professional practice development curriculums. Students will develop an appreciation for autonomous business ownership and develop the skills and resources necessary to establish, manage, and/or supervise a business or department that provides physical therapy related services or products. Students will develop an executive business plan and be exposed to community members to inquire about best practice development and management protocols and trends. Students will subsequently present their business plan to their classmates detailing their business concept, marketing strategies, organizational structure, and financial considerations. The students will be responsible for providing critical analysis of the business structure and feedback on the likelihood of success. The class will allow the students to build a professional resume and experience “mock” interviews for job opportunities. The students will take a practice licensing examination to identify areas of deficit and attend an overview provided by the state licensing board on the application and maintenance process for their license as well as the rules and regulation that govern the practice of physical therapy in the state of Texas. Preparation strategies and practice opportunities for the licensure will be offered. Involvement in district, state, and national physical therapy issues and conference will be encouraged and culminate in a capstone presentation from the student’s professional portfolio activities.

DPT 5317 Advanced Therapeutic Techniques

3 semester hours

This course will provide students with the opportunity to investigate and further develop intervention techniques for neurological and orthopaedic patients. Students will evaluate current literature for clinical evidence supporting specialty intervention techniques that are available and utilized in clinical practices. Students will have the opportunity to develop skill in techniques based on patient case models and scenarios. The final six weeks of the course will be devoted to one of four topics selected by each student: neuro interventions, pediatric interventions, sports medicine, and women’s health.

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 II

3 semester hours

This course prepares students for clinical practice by providing the basis and rationale for evaluating and treating patients with pathology or impairments of the peripheral musculoskeletal system. The principles and rationale for physical therapy examination, evaluation, diagnosis, prognosis and intervention for upper extremity and lower extremity dysfunctions are presented. Laboratory sessions are related to lecture content and are designed to aid students in integrating didactic material with actual patient cases while also acquiring specific hands on skills. These specific neuromusculoskeletal examination and treatment skills include: performing a client interview, manual muscle testing, reflex testing, sensory examination, joint assessment, joint mobilization, joint manipulation, soft tissue assessment and treatment, palpation, and performance of special tests.

DPT 5335 Therapeutic Intervention II

3 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, electrotherapy, 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 5340 Neuromuscular Patient/Client Management I

3 semester hours

In order to manage the patient/client with a neurologic disorder, students must understand the foundations of neurologic physical therapist practice. The first part of the course focuses on the pathophysiology and medical management of persons with progressive and non-progressive neurologic diagnoses. Presentations on these diagnoses are made by physicians and physical

therapists who are experts in care of persons with neurologic conditions. In the second part of the course, students learn about the motor control problems associated with neurologic injuries that contribute to abnormal postural control and mobility, using a case-based approach. An integrated framework for making decisions in neurologic physical therapists practice is presented and applied to issues in patient management. In lab sessions, students learn about selected examination tools commonly used to quantify and qualify the motor control problems associated with a range of neurologic disorders. Literature on neuroplasticity is examined and concepts relevant to patient/client management are emphasized. Students are introduced to the evidence-based principles of motor learning that have been shown to influence the rate of motor recovery after neurologic injury. This course prepares the student for NPM II, which focuses on evidence-based approaches to the examination and treatment of patients with progressive and non-progressive neurologic disorders.

DPT 5344 Cardiovascular and Pulmonary Patient/Client Management

3 semester hours

This course will cover principles of pathology, exercise physiology, and physical therapy interventions for the treatment of patients with cardiopulmonary conditions. This course includes instruction of examination and evaluation of the cardiac and pulmonary systems and integration into physical therapy practice.

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 I

4 semester hours

This course addresses the rehabilitative and medical management of patients with axial and pelvic musculoskeletal dysfunction. Classroom sessions allow for the integration of reading assignments, current best evidence, and the instructor's experience to support a framework for clinical decision-making during classification (diagnosis) and treatment of patients with spinal dysfunctions. Lab sessions allow for practice and application of classroom content, namely: history taking, objective examination testing, exercise training, traction application, and the use of manual therapy, including thrust manipulation. Learning is reinforced and tested through the use of actual patient cases as a means of developing critical thinking and problem solving in the areas of differential diagnosis, prognosis, and management planning. Guest physician lectures

are included for a medical perspective on diagnosis and non-op/surgical/post-op management of patients with spinal dysfunctions.

DPT 5401 Clinical Experience 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 clinical experience is on patient examination, evaluation, treatment planning, goal setting, and delivery of interventions in the orthopedic outpatient setting. The Physical Therapist Manual for the Assessment of Clinical Skills (PT MACS) is used to plan learning opportunities and assess student performance. Self-assessment at the end of this experience provides opportunity for students to set goals for the next clinical experience. (Travel and living expenses are the responsibility of the student.)

DPT 5402 Clinical Experience II

4 semester hours

Entry-level performance on all aspects of patient/client management in a selected practice setting is the expected outcome following an eight-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. (Travel and living expenses are the responsibility of the student.)

DPT 5403 Clinical Experience III

4 semester hours

Entry-level performance in all aspects of patient/client management in a selected practice setting is the expected outcome following an eight-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. (Travel and living expenses are the responsibility of the student.)

DPT 5604 Clinical Experience IV

6 semester hours

Entry-level performance in all aspects of patient/client management in a selected practice setting is the expected outcome following a 12-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. Students gaining experience in a more specialized area of physical therapy practice are expected to meet the standards considered entry-level in that setting. (Travel and living expenses are the responsibility of the student.)

Physician Assistant Studies

Degree Offered

Master of Physician Assistant Studies

Chair

Temple Howell-Stampley, M.D., M.B.A., F.A.C.P.

Medical Director

Laurette K. Dekat, M.D., M.P.H.

FACULTY

Professors

Temple Howell-Stampley, M.D., M.B.A., F.A.C.P.

M.D., East Carolina University School of Medicine, 1993; MBA, UT Dallas, 2015

P. Eugene Jones, Ph.D.

Professor Emeritus, Distinguished Teaching Professor

Ph.D., Claremont Graduate University, 1991

Associate Professors

David Klocko, MPAS

Distinguished Teaching Professor

MPAS, University of Nebraska Medical Center, 1998

Venetia L. Orcutt, Ph.D., M.B.A., B.S.

Distinguished Teaching Professor

Ph.D., University of North Texas, 2007; M.B.A, University of Dallas, 1994; B.S., UT Southwestern Medical Center, 1984

Assistant Professors

Carolyn Bradley-Guidry, MPAS, University of Nebraska Medical Center, 2006

Veronica Coleman, MPAS, LSU Health Sciences Center Shreveport, 2012

Laurette K. Dekat, M.D., UT Health Science Center at Houston, 1993; M.P.H., Johns Hopkins Bloomberg School of Public Health, 1987

Kassidy James, MHS, Drexel University, 2006

John Kane, MPAS, University of North Texas Health Science Center, 2007

Tiffany Kindratt, MPH, UT Health Science Center Houston, 2009

Daytheon Sturges, MPAS, LSU Health Sciences Center Shreveport, 2012

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 determine appropriate diagnostic and therapeutic steps. Graduates of this Program participate on the health care team by performing diagnostic and therapeutic procedures, prescribing medications, assisting in surgery, and coordinating the services of community-health agencies in order to serve the needs of the patient.

It is emphasized that a physician assistant (PA) is a nationally certified and state-licensed medical professional who practices medicine on health care teams with physicians and other providers. They practice and prescribe medication in all 50 states, the District of Columbia, the majority of the U.S. territories, and the uniformed services.

Graduates of this Program are eligible to take the national certification examination given by the National Commission on Certification of Physician Assistants.

ACCREDITATION

The Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) has granted Accreditation-Continued to the Physician Assistant Program sponsored by UT

Southwestern. Accreditation-Continued is an accreditation status granted when a currently accredited program is in compliance with the ARC-PA Standards.

Accreditation remains in effect until the Program closes or withdraws from the accreditation process or until accreditation is withdrawn for failure to comply with the Standards. The approximate date for the next validation review of the Program by the ARC-PA will be March, 2023. The review date is contingent upon continued compliance with the Standards and ARC-PA policy.

REQUIREMENTS FOR ADMISSION

Applicants to the Physician Assistant Studies Program are required to have a baccalaureate degree from a regionally accredited U.S. or Canadian institution prior to matriculation. Three letters of reference are required with the application. Applicants must submit official scores from the Graduate Record Examination (GRE) in order to be received by Sept. 1 of the year of application submission. The GRE is not required of applicants who have a U.S.-acquired master's degree or higher. A minimum grade-point average of 3.0 in science courses and 3.0 overall are required for admission, along with the following prerequisite course work:

Course	Hours
Human Anatomy*	4
Human Physiology*	4
Genetics	3
General Chemistry*	8
Organic Chemistry*	4
Microbiology*	4
General Psychology	3
Mathematics (college algebra or higher)	3

*Science courses must be for science majors and include a laboratory.

All prerequisite courses must be completed with a grade of C or better and within the past 10 years. Additionally, all prerequisite courses must be completed by the date the application is submitted.

Recommended Electives

Pharmacology
Spanish
Biochemistry
Cellular Biology

Immunology
Medical Terminology
Human Sexuality
Statistics

Factors considered for selection of applicants are cumulative grade-point average, science grade-point average, consistency or improvement in academic performance, attitude, communication skills, leadership, and personal qualities such as maturity, empathy, and career motivation. Direct patient-care experience in a health care setting is highly recommended.

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 degree candidates, each degree candidate in the Physician Assistant Studies Graduate 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) wound care and skin lesion identification.
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 Basic and Advanced Cardiac Life Support.
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;
6. Demonstrate professional demeanor and behavior; perform in an ethical manner in all dealings with peers, faculty, staff, and patients.

CURRICULUM

This 30-month professional curriculum 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 a diverse mixture of outpatient facilities across the Dallas/Fort Worth area and in teaching hospitals with formal affiliations with UT Southwestern Medical Center to include William P. Clements Jr. University Hospital, Zale Lipshy University Hospital, and Parkland Memorial Hospital.

Instructional Phase

Didactic Phase

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 Neuroscience	2
HCS 5308	Human Anatomy (Lecture)	3
HCS 5309	Human Anatomy Dissection Lab	3
HCS 5407	Human Physiology	4
Total		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
HCS 5306	Introduction to Pathology	3
HCS 5106	Professional Development	*
Total		14

Spring

MPA 5103	Integration Skills II	1
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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
HCS 5106	Professional Development	1
Total		14

Summer

MPA 5208	Clinical Skills	2
MPA 5231	Psychiatry	2
MPA 5307	Patient Evaluation III	3
MPA 5511	Clinical Medicine III	5
Total		12
Total didactic hours		53

*Year-long course, completed in Spring

Clinical Phase

Course		Hours
MPA 5350	Professional Practice Issues II	3
MPA 5422	Women's Health	4
MPA 5423	Pediatrics	4
MPA 5428	Clinical Elective	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 5830	Internal Medicine	8
MPA 5831	Family Medicine	8
MPA 5832	Primary Care Preceptorship	8
Total combined hours		112

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 didactic phase 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 Department of 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 in the Department of Physician Assistant Studies, 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 112 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) 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 GPA, have no academic deficiencies, and have no incompletes. An "F" (or failure to pass) in any required subject must be removed prior to graduation.
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 Enrollment Services.
6. 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 certification must pay the fee without regard to whether they attend the commencement ceremony or not.

7. The student must complete all required courses in the degree plan. For courses with letter grades, a grade of C or higher must be maintained in every letter grade course, with the exception of MPA 5509, MPA 5510 and MPA 5511, in which minimum grades of B must be maintained. For courses graded Pass/Fail, a grade of Pass must be achieved. 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.
8. The student must complete and submit a Physician Assistant Clinical Knowledge Rating and Assessment Tool (PACKRAT) examination following completion of the didactic curriculum and again after completion of the majority of clinical rotations.
9. The student must successfully complete all required summative assessments at the end of the clinical curriculum.
10. The student must successfully complete a graduate project as approved by program faculty.
11. The student must complete all requirements for graduation within five consecutive years of the original date of matriculation

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 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. Class sessions emphasize practical application of research concepts and foster graduate project development. The class emphasizes the practical utilization and application of the evidence-based approach to the appraisal of discipline-specific literature, quality improvement and patient safety.

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 5208 Clinical Skills

2 semester hours

Techniques in basic radiology and clinical procedures are introduced to include injections, EKG 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 and systems-based approach to pharmacologic agents, including classifications, indications, contraindications, actions, toxic effects, and monitoring of pharmacotherapeutic regimens.

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 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 5206 Patient Evaluation II

2 semester hours

This course is an extension of MPA 5305 Patient Evaluation I.

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 5350 Professional Practice II**

3 semester hours

This two-week course occurs near the end of the clinical phase of the Program. Students are provided the 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 lifelong learning.

MPA 5422 Women's Health

4 semester hours

This four-week rotation integrates both inpatient and outpatient clinical experiences. The student has an opportunity to become familiar with the management of labor and delivery, outpatient gynecology, family planning, and outpatient prenatal and postpartum care.

MPA 5423 Pediatrics

4 semester hours

This four-week outpatient rotation in general pediatrics includes both well- and sick-child care encountered in ambulatory care settings. The student is expected to acquire proficiency in normal child development and anticipatory guidance.

MPA 5428 Clinical Elective

4 semester hours

This four-week rotation may be completed in any field of medicine 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-V 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 trauma evaluation and management, and learn the medical and surgical aspects of emergency intervention. 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 rounds. This rotation also requires attendance at structured teaching conferences and tutorials.

MPA 5450 Directed Study

4 semester hours

This four-week period is intended to provide enrolled students adequate time for the final preparation and submission of the graduate project manuscript as required for program graduation. Projects include evidence-based medicine, quality improvement, systematic reviews or others with approval.

MPA 5451 Infectious Disease

4 semester hours

This four-week rotation offers the student the opportunity to experience the evaluation and treatment of patients with infectious diseases. The student is directly involved in the multidisciplinary approach and management of patients diagnosed with infectious diseases in both inpatient and outpatient settings.

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 hospitalized patients.

MPA 5831 Family Medicine

8 semester hours

This eight-week rotation is designed to provide a practical patient-care experience in an outpatient primary-care setting. Students are provided the opportunity to deliver acute and continuing care and to address health maintenance issues in keeping with the primary-care philosophy and under the supervision of a 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.

MPA 5832 Primary Care Preceptorship

8 semester hours

This eight-week outpatient rotation is completed in a primary care focused discipline (general/family medicine, general pediatrics, general internal medicine, women's health, or geriatrics) chosen by the student. The preceptorship integrates clinical experience with a focus on competencies in leadership, communication, quality improvement, patient safety, and management skills.

Prosthetics-Orthotics

Degree Offered

Master of Prosthetics-Orthotics

Program Director

Leslie Gray, M.Ed., C.P.O., L.P.O., FAAOP

FACULTY

Assistant Professors

Leslie Gray, M.Ed., UT Brownsville, 2007; B.S., C.P.O., UT Southwestern Medical Center, 2002; Fellow American Academy of Orthotists and Prosthetists, 2016

Miguel N. Mojica, B.S., C.P.O., UT Southwestern Medical Center, 1987

Kirsten Tulchin-Francis, Ph.D., Texas Woman's University, 2012; M.S., Marquette University, 2001; B.S., Trinity College, 1998

David Wilson, M.P.O., C.P.O., UT Southwestern Medical Center, 2011; B.S., The College of William and Mary, 2010; Fellow American Academy of Orthotists and Prosthetists, 2017

Instructor

Tiffany Graham, B.S., C.P.O, Georgia Institute of Technology, 2007; M.S., Trinity University, 2005

OBJECTIVES

The Prosthetics-Orthotics Program offers a solid foundational knowledge base in related sciences and teaches the clinical, professional, and technical skills sufficient to enter residency training. Graduates from this Program are trained 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 will function as leaders in prosthetic-orthotic practices and serve as active members of interdisciplinary health care teams, collaborating with other health care professionals in rehabilitating people with chronic disabling illnesses, injuries, or birth defects.

Successful graduates will have the necessary skills to assess physical and functional deficits using a variety of evaluation procedures and measurements to determine the nature and extent of the patient's needs and plan a treatment approach based on an analysis of individual patient needs, fabricate and fit prosthetic-orthotics devices, assess the effectiveness of the fit and function of devices, and make appropriate adjustments when indicated. Furthermore, Program graduates will have the preliminary skills needed to pursue research and development in the field of prosthetics-orthotics and will be able to contribute to clinical research, professional meeting scientific content, and publish articles in professional journals.

ACCREDITATION

To ensure that graduates are eligible for certification and licensure, the Master of Prosthetics-Orthotics Program has earned accreditation from the [Commission on Accreditation of Allied Health Education Programs](#) upon the recommendation of the [National Commission on Prosthetic & Orthotic Education](#).

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 by the end of May of the year you apply. (A prosthetics and orthotics-related major, such as biomechanical engineering, biomechanics, biology, or applied physiology is recommended);
2. Earn the minimum recommended cumulative and science GPA of 3.0 on a 4.0 scale in science and overall;
3. Complete and submit an online application with OPCAS available mid-July;
4. Submit three letters of recommendation (instructor, employer, undergraduate adviser, volunteer experience, or leadership position supervisor, other academic/research mentor);
5. Have visited, shadowed, volunteered, or worked in a prosthetic-orthotic clinic; and
6. Submit a Graduate Record of Examination score (Scores are acceptable within five years of taking the exam);
7. Complete the 37 semester hours of specific prerequisite courses (listed below).

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
Total Credit Hours	37

*All required science classes must be for science majors and include a laboratory component.

** Courses must have been taken within the past eight years.

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. The length of the Program is five semesters.

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 other musculoskeletal 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, Prosthetics and Pedorthics.

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
Total		13

FALL

MPO 5102	Clinical Evaluation Tools	1
HCS 5306	Introduction to Pathology	3
MPO 5203	Biomechanics of Human Movement 1	2
MPO 5504	Orthotic Management of the Lower Limb 1	5
MPO 5505	Prosthetic Management of the Lower Limb 1	5
HCS 5106	Professional Development	**
Total		16

SPRING

MPO 5106	Biomechanics of Human Movement 2	1
MPO 5407	Orthotic Management of the Lower Limb 2	4
MPO 5308	Orthotic Management of the Spine	3
MPO 5409	Prosthetic Management of the Lower Limb 2	4
HCS 5230	Health Care Research	2
HCS 5106	Professional Development	1
MPO 5103	Laboratory Skills and Materials in Prosthetics-Orthotics II *	1
Total		16

* Elective, students may enroll once in either their third, fourth or fifth semester, space permitting

** Year-long course, completed in Spring

Second Year

		HOURS
SUMMER		
MPO 5310	Prosthetic Management of the Upper Limb	3
MPO 5411	Clinical Experience	4
MPO 5112	Clinical Research 1	1
Total		8

FALL

MPO 5313	Orthotic Management of the Upper Limb	3
MPO 5115	Clinical Research 2	1
MPO 5416	Contemporary Practice and Synthesis	4

Total	8
Total Hours	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 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 2.7 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 Enrollment Services.
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

Instruction 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 5103 Laboratory Skills and Materials In Prosthetics Orthotics II

1 semester hour

This course is designed to enhance skills learned in MPO 5101 by providing clinically relevant hands-on experience in fabrication techniques and material technology. The student will learn side by side with faculty and technical staff in the program's patient care fabrication laboratory.

MPO 5106 Biomechanics of Human Movement 2

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 1

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 2

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 1

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 5308 Orthotic Management of the Spine

3 semester hours

Instruction 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 5416 Contemporary Practice and Synthesis

4 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. Instruction 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 lifelong personal and professional development. Resumé development and interviewing skills for securing a residency position are included. Instruction 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, microprocessor-

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 2

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 2

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 multiweek 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 Department of Veterans Affairs facility.

MPO 5504 Orthotic Management of the Lower Limb 1

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 1

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

Post-Baccalaureate Certificate

Director

Kameka Rideaux, M.B.A., RT (R)(T)

FACULTY

Hak Choy

Medical Advisor of the Radiation Therapy Program

Professor and Chair of the Department of Radiation Oncology

M.D., UT Medical Branch at Galveston, 1987

Kameka Rideaux

Assistant Professor

UT M.D. Anderson Cancer Center, 2001, M.B.A., University of Phoenix, 2008; McNeese State University, 2000

Steven Russell

Adjunct Instructor

J.D., University of Memphis School of Law, 1985; M.P.H., UT School of Public Health, 2010

Strahinja Stojadinovic

Assistant Professor

Ph.D., Kent State University, 2004

OBJECTIVES

The Radiation Therapy Program offers a didactic and clinical education to prepare graduates 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 must already hold a bachelor's degree to pursue a post-baccalaureate certificate.

The curriculum is designed to support a competency-based clinical education that prepares graduates to perform as an entry-level radiation therapist. The first-year courses introduce students to the health care industry, specifically radiation oncology. The second-year courses integrate these ideas into more advanced concepts.

The clinical aspect of the Program combines the didactic material with simulated and actual patient care and treatments. Clinical experience rotations are provided at the Moncrief Radiation Oncology Center, located on the North Campus of UT Southwestern, and Simmons Radiation Oncology on the East Campus. At these locations, students can experience state-of-the-art cancer treatment under the supervision of faculty and staff. Students also rotate through the Annette Simmons Stereotactic Treatment Center at Zale Lipshy University Hospital. The clinical setting allows students to hone their clinical skills and achieve competence in the treatment of cancer patients with ionizing radiation. Graduates of the Program must 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 N. Wacker Dr., Suite 2850; Chicago, IL 60606-3182; 312-704-5300).

REQUIREMENTS FOR ADMISSION

Post-baccalaureate certificate

The Admissions Committee for the Radiation Therapy Program determines the admissibility of an applicant based on prerequisite coursework, degree completed, essay, recommendation letters, and interview scores.

The application process consists of submitting all application materials, completing 16 hours of clinical observation, 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.

1. Bachelor's degree from a regionally accredited college or university (recommended in Sciences or Health Sciences);
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
4. A grade of C or better on all prerequisite coursework;
5. Radiation therapy prerequisite courses listed below:

RADIATION THERAPY POST-BACCALAUREATE PREREQUISITE COURSES

COMPONENT AREAS HOURS	TEXAS COMMON COURSE NUMBERS	CREDIT
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

* Higher level courses may be substituted. For example, calculus can be substituted for pre-calculus.

* We highly recommend that applicants complete a course in interpersonal communication.

* We highly recommend to applicants that have completed prerequisite course work more than five years, to enroll in additional science and math courses. Please contact the Program office for more information.

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

HOURS

RT 3301	Oncology Nursing and Patient Care	3
RT 3302	Introduction to Radiation Therapy	3
HCS 5306	Pathology	3
HCS 5106	Professional Development	0 *
RT 3212	Sectional Anatomy	2
RT 3412	Radiation Biology	4
RT 3304	Clinical Education I	3
RT 3311	Legal and Ethical Issues in Radiation Therapy	3
RT 3421	Principles and Practices of Radiation Therapy I	4

* 1 hour awarded in spring semester

Summer of First Year

RT 3314	Medical Dosimetry I	3
RT 3405	Clinical Education II	4
RT 3303	Medical Imaging and Processing	3

SECOND YEAR

HOURS

RT 3413	Radiation and Therapy Physics	4
RT 4422	Principles and Practices of Radiation Therapy II	4
RT 4315	Medical Dosimetry II	3
RT 4301	Introduction to Research Methodology	3
RT 4406	Clinical Education III	4
RT 4216	Quality Assurance and Operational Issues	2
RT 4302	Directed Research	3
RT 4323	Registry Review	3

COURSE DESCRIPTIONS

See other Departmental listings in this catalog for courses that do not begin with the prefix RT.

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 as well as 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 3311 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 and 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 4216 Quality Assurance and Operational Issues

2 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 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.

RT 4302 Directed Research

3 semester hours

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

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 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.

Student Organizations

A number of organizations offer students opportunities for association with individuals of shared interests or backgrounds. Information on registered or sponsored student organization can be found in the "General Information" section of the catalog.

A list of organizations is available from the Bryan Williams, M.D. Student Center or on the UT Southwestern website at:

<http://www.utsouthwestern.edu/life-at/campus-academic-life/student-center/student-orgs/index.html#>

Commencement

The varying requirements of the Programs of the School of Health Professions 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 and post-baccalaureate certificate 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 and post-baccalaureate certificate requirements since the previous commencement will be listed in the commencement program.

Degrees and post-baccalaureate certificates earned are posted to the students' permanent academic records at the end of the semester in which all degree or certificate 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 (including continuing education and lifelong learning) of health professionals. All graduates of the School become members of the Alumni Association upon completion of all academic requirements for graduation.