Message from the Dean

Dawndra Sechrist, OTR, Ph.D.

Dean of the School of Health Professions

Welcome to the School of Health Professions (SHP)! We are an integral part of the Texas Tech University Health Sciences Center (TTUHSC) offering over twenty different degree programs ranging from a certificate to clinical and research doctoral programs. We are one of the largest schools of health professions in the nation delivering programs both online and face-to-face on our Lubbock, Amarillo, Midland, and Odessa campuses. We prepare health professionals who will meet the evolving healthcare needs of the 21st century. The SHP remains focused on developing and presenting educational programs of the highest quality in a diverse and student-centered learning environment.

We offer learning opportunities that exceed nationally recognized standards of technical competence, while simultaneously developing the professional insight and service-oriented compassion that will enable graduates to excel throughout their professional careers. The SHP faculty, students, and alumni of the School of Health Professions represent the very best in the complement of innovation, education, and clinical skills offered in service to the people of Texas and the nation.

As an SHP student, you will spend some of the most challenging and fulfilling years of your life immersed in a captivating academic environment. You will be working alongside remarkable clinicians and researchers to broaden your knowledge, advance discoveries, and make significant contributions to your health profession discipline.

I encourage you to put to use every resource the TTUHSC SHP has to offer. Take advantage of your time here, work hard, enjoy yourself, and welcome to the Red Raider Family!

Table of Contents

The information contained herein is not to be considered a contract and the Texas Tech University Health Sciences Center School of Health Professions (SHP) reserves the right to make changes to the information and policies contained herein at such times as it deems appropriate. This catalog supersedes all previous editions. The provisions of the catalog do not constitute a contract, express or implied, between any student, faculty member, Texas Tech University System (TTUS), Texas Tech University Health Sciences Center (TTUHSC), and/or the TTUHSC SHP.

The TTUHSC SHP shall notify the student of any changes to the TTUHSC SHP Catalog occurring during the academic year. At any given time, the most current edition of the catalog will be available on the TTUHSC SHP current student resource webpage: https://student.ttuhsc.edu/health-professions/.

Administration

Texas Tech System Board of Regents

https://www.texastech.edu/board-of-regents/

Texas Tech University Health Sciences Center Administration

https://www.ttuhsc.edu/administration/default.aspx

School of Health Professions Administration

https://www.ttuhsc.edu/health-professions/administration/default.aspx

School of Health Professions Department Chairs

https://www.ttuhsc.edu/health-professions/administration/department_chair.aspx

About Our School

TTUHSC Mission

As a comprehensive health sciences center, our mission is to enrich the lives of others by educating students to become collaborative healthcare professionals, providing excellent patient care, and advancing knowledge through innovative research. To view the institution's goals and vision statement please visit http://www.ttuhsc.edu/about/mission-vision.aspx.

SHP Mission

The mission of the TTUHSC School of Health Professions is to enhance the quality of life of those we serve by delivering exemplary holistic student-centered education and cultivating research opportunities while championing interprofessional and clinical care partnerships that are innovative and relevant to the communities we serve.

SHP Vision

The TTUHSC School of Health Professions will be a premier school that uses innovation and collaboration across education, scholarship, and clinical care for West Texas communities and beyond.

SHP Organizational Philosophy

As a multi-campus, regional element of the TTUHSC education system, we seek to encourage maximum learning and enhance the accessibility of our educational programs and services by applying a variety of innovative educational approaches and technologies.

We seek, through our research and clinical service activities, to contribute positively to improving the general health status and overall quality of life of the people of West Texas, while enhancing our professional and clinical competence.

Our faculty are, first and foremost, student-oriented and teaching-focused. We value activities that enhance teaching effectiveness and learning while seeking to create an environment conducive to research and effective clinical service.

Our staff are student-oriented professionals who provide high-quality, responsive service to students and faculty. We strive to maintain an empowering environment based on mutual trust, respect, and partnership among faculty, staff, and students.

We accomplish our mission within the context of the mission, vision, and policies of the Texas Tech University Health Sciences Center and the Board of Regents.

SHP Milestones

1981	• 67th Texas Legislature approved funding for the school • Robert Cornesky, Sc.D. was appointed as Founding Dean of the School of Allied Health (SOAH)
1983	• The school accepted nineteen students as part of its first class
1985	• Robert Peake, OTR, was appointed as the second dean of the School of Allied Health • Full accreditation was received for programs in Physical Therapy, Occupational Therapy, and Medical Technology

1987	• Shirley McManigal, Ph.D., MT, was appointed as the third dean of the School of Allied Health
1991	• The Emergency Medical Services program was added
1993	• The Department of Communication Disorders was transferred from TTU where it had existed since 1928
1994	• The Physical Therapy and Occupational Therapy programs were expanded to Amarillo and Odessa with extensive reliance on HealthNet. The Physical Therapy Program was expanded from a B.S. degree to M.P.T.
1998	• Paul P. Brooke, Jr., Ph.D., FACHE, was appointed as the fourth dean of the School of Allied Health • Texas Tech University System (TTUS) Chancellor and Board of Regents identified enrollment growth as a strategic imperative for TTU and TTUHSC • That Fall, the TTUHSC President challenged the schools to plan, develop, obtain institutional approval for, and implement strategies that will support overall TTUHSC enrollment growth. • SOAH established "The Executive Committee" (TEC) as a permanent planning group for the school. • Planning began to develop new program concept proposals for a Doctor of Audiology (Au.D.), Master of Occupational Therapy (M.O.T.), and B.S. in Emergency Medical Systems Management
1999	• The Board of Regents (BOR) approved the SOAH new program concept proposals for the Au.D., MOT, and B.S. in Emergency Medical Services Management • The B.S. in Physician Assistant Studies enrolled the first student cohort in temporary facilities on the Midland College campus • A $1.2 million renovation project started on the permanent facility for the SOAH in Odessa • New degree concept proposals were developed for a Master of Vocational Rehabilitation (later changed to Rehabilitation Counseling), Master of Athletic Training (MAT), and Doctor of Science (Sc.D.) in Physical Therapy
2000	• TTUHSC hosts a THECB-directed site visit with regard to the proposed Doctor of Audiology (Au.D.) degree • Construction began on a $3 million permanent 14,750 sq. ft. facility for the PA Program on the Midland College campus • A new program proposal requesting authority to implement a Master of Physician Assistant Studies and grant the MPAS degree was submitted to THECB • The Department of Speech, Language, and Hearing Sciences relocated to a $2.2 million renovated facility at the TTUHSC campus • SHP - Odessa is relocated into the completed permanent facility • The Master of Occupational Therapy program is implemented with enrollment of its first cohort of students • Four academic programs (Au.D., MVR, MAT, BS-EMSM) were implemented with the first student cohorts for the Fall 2000 semester. Of existing programs, the TTUHSC AuD program was the first of its kind west of the Mississippi • The Board of Regents approved new degree program concept proposals for a Master of Science in Molecular Pathology, Master of Science in Rehabilitation Science, and a BS in Clinical Support Services Management (BS, CSSM; later renamed BS in Clinical Service Management - CSM)
2001	• The Board of Regents approved the proposal to establish the Center for Brain Mapping and Cortical Studies within the SOAH. This center was designed to serve as a platform for multidisciplinary research and clinical service • The Center was an essential component of a long-term plan to amass faculty and research capabilities needed to support a planned Ph.D. program in Communication Science and Disorders • $150,000 equipment procurement was completed for the Center for Brain Mapping and Cortical Studies • Authorization was received from the President to implement a post-professional, clinical doctorate in Physical Therapy and grant the ScD, PT. • The Physician Assistant Program relocated into a permanent TTUHSC facility on the campus of Midland College • The Master of Physician Assistant Studies program was implemented with the enrollment of its first cohort of students

	• A new program proposal requesting authority to implement an M.S. in Molecular Pathology and award the M.S., M.P. degree was approved by THECB • A new program proposal requesting authority to implement a B.S. in Clinical Support Services Management and award the B.S., CSSM degree was submitted to THECB • A new program proposal requesting authority to implement an M.S. in Rehabilitation Science and award the M.S., RS degree was submitted to THECB
2002	• The Board of Regents approved the establishment of the Center for Clinical Rehabilitation Assessment within the SOAH, which provides a platform for coordinating the activities of the Gait Analysis, Balance Assessment, and Energy Consumption Laboratories and serve to support an expansion of faculty research and research activities that will support a planned Ph.D. in Rehabilitation Sciences • SOAH - Amarillo relocated to a multi-million-dollar permanent facility • THECB approved the proposal for an M.S. in Rehabilitation Science • A $350,000 project to construct and equip a Molecular Pathology Program laboratory was completed • The M.S. in Molecular Pathology program was implemented with the enrollment of its first student cohort for the Summer semester. This was the first program of its kind in the nation • The Sc.D., PT; M.S., RS; and B.S., CSSM programs were implemented with the enrollment of their first student cohorts in the Fall 2002 semester
2003	• A new program proposal requesting authority to implement a Ph.D. in Communication Sciences and Disorders and to grant the Ph.D. degree was submitted to THECB • TTUHSC hosted a THECB-directed site visit in regard to the proposed Ph.D. in Communication Science and Disorders
2004	• SHP Fall 2004 enrollment totals 774, a 72% increase over the 2000 enrollment of 452 • THECB approved the proposal for a Ph.D. in Communication Sciences and Disorders • Final renovations completed for a three-year phased project to construct and equip a $690,000 Rehabilitation Assessment Center with Gait Analysis, Balance Assessment, and Cardiopulmonary laboratories • Ph.D. in Communication Sciences and Disorders was implemented with the enrollment of the first cohort of four doctoral students that Fall
2005	• The Department of Clinic Administration and Rehabilitation Counseling was established. This department was formed by moving the faculty, clerical staff, and technical support personnel of the three online programs from the Department of Rehabilitation Sciences. The three academic programs consist of Clinical Practice Management (M.S.), Rehabilitation Counseling (M.S.), and Clinical Service Management (B.S.) • Approval of name change for the Center for Clinical Rehabilitation Assessment to the "Center for Rehabilitation Research"
2007	• THECB approval granted for the expansion of Physical Therapy from a masters (MPT) to a clinical entry-level doctorate (DPT) in Fall 2007 • CSM program expands to provide a specialty track in Long Term Care Administration with approval from the Texas Department of Aging and Disabilities • The Autism Clinic within the Department of Speech, Language, & Hearing Sciences was opened on the third floor of the TTUHSC
2008	• The Doctorate of Physical Therapy (DPT) was implemented with enrollment of its first cohort of students in Summer 2008
2009	• Approval and addition of the following programs: the Ph.D. in Rehabilitation Sciences, the Transitional Doctor of Physical Therapy Pathway (DPT), and the Clinical Laboratory Science Second Degree and Certificate Programs
2010	• Physician Assistant Program facility expansion was completed. Enrollment for the program was increased from 45 to 60 students per cohort • First National Institutes of Health (NIH) grant obtained by SHP faculty • Approval of name change for the Center for Brain Mapping and Cortical Studies to the "Center for Speech, Language, and Hearing Research"

2011	• Major renovation of clinical research space was completed. The SHP faculty was relocated to the 3C lab and office space • The Health Promotion Research Laboratory was opened on the Amarillo campus • Fall enrollment exceeded 1250
2012	• Robin Satterwhite, MBA, Ed.D., FACHE, was hired as the fifth dean of the School of Allied Health • Fall enrollment exceeded 1300
2014	• Approval and addition of the following concentration areas Respiratory Care, Medical Imaging, and Emergency Medical Services to the Bachelor of Science in Health Sciences program
2015	• The Board of Regents approved a school name change from the School of Allied Health Sciences to the School of Health Professions • Approval and addition of the Second-Degree Bachelor of Science in Speech, Language, and Hearing Sciences Program
2016	• Lori Rice-Spearman, Ph.D., was hired as the sixth dean of the School of Health Professions • Department name and structural changes from Department of Clinic Administration & Rehabilitation Counseling to the Department of Healthcare Management & Leadership • Program names changed from BS in Health Sciences and the BS in Clinical Services Management to Bachelor of Science in Healthcare Management and the MS in Clinical Practice Management changed to the Master of Science in Healthcare Administration • Approval and addition of the Department of Clinical Counseling & Mental Health
2017	• Texas Tech University Health Sciences Center (TTUHSC) broke ground for new buildings bringing additional opportunities for education & research initiatives plus creating a more seamless campus experience for students & visitors • The $85.9 million project consisted of three parts: a north expansion that created two new buildings north of the existing TTUHSC building, a west expansion that added facilities to the existing TTUHSC building, and creation of a boulevard entrance to campus for accessibility • Approval and addition of the Master of Science in Addiction Counseling program and the Master of Science in Clinical Mental Health Counseling program. Both programs are housed in the Department of Clinical Counseling & Mental Health
2018	• The Ph.D. in Communication Sciences and Disorders and the Rehabilitation Sciences were consolidated into the Ph.D. in Rehabilitation Science with concentrations in Movement Sciences & Disorders and Communication Sciences & Disorders • Approval and addition of the Graduate Certificate Programs within the Department of Healthcare Management & Leadership • 8-Week Terms were added for the Master of Science in Healthcare Administration Program
2020	• Dawndra Sechrist, OTR, Ph.D. was hired as the sixth dean of the School of Health Professions • A state-of-the-art Molecular Pathology Laboratory was completed in Pod D • The Department of Laboratory Sciences & Primary Care partnered with John T. Montford Regional Medical Facility to oversee the Clinical Laboratory. LSCP ream members were relocated to 4D office space • New state of the art analyzers and equipment were acquired for the molecular courses, expanding research capabilities

Accreditation

Texas Tech University Health Sciences Center is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award baccalaureate, masters, doctoral, and professional degrees. Degree-granting institutions also may offer credentials such as certificates and diplomas at approved degree levels. Questions about the accreditation of Texas Tech University Health Sciences Center may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC's website

(www.sacscoc.org).

A member of the Texas Tech University System, TTUHSC has been accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) as a separate institution from Texas Tech University since 2004. TTUHSC received its reaffirmation of accreditation from SACSCOC in 2019. TTUHSC will submit a Fifth-Year Interim Report in the spring of 2025.

Frequently Asked Questions

Q: What degrees does the School of Health Professions offer?

A: The School of Health Professions offers the following degrees:

- Certificate

- Health Informatics and Data Analytics
- Health Systems Policy and Management
- Healthcare Finance and Economics
- Health Systems Engineering and Management
- Long-Term Care Administration
- Medical Laboratory Science

Bachelor of Science (B.S.)

- Healthcare Management
- Medical Laboratory Science
- Speech, Language and Hearing Sciences

Second Degree Bachelor of Science

- Medical Laboratory Science
- Speech, Language and Hearing Sciences

Master of Athletic Training (MAT)

Master of Physician Assistant Studies (MPAS)

Master of Science (MS)

- Healthcare Administration
- Molecular Pathology
- Speech-Language Pathology
- Clinical Mental Health Counseling
- Clinical Rehabilitation Counseling
- Addiction Counseling

Doctor of Audiology (Au.D.)

Doctor of Occupational Therapy (OTD)

Doctor of Philosophy in Rehabilitation Science (Ph.D.)

- Concentration in Communication Sciences and Disorders
- Concentration in Movement Sciences and Disorders

Doctor of Physical Therapy (DPT)

Post-Professional Doctor of Occupational Therapy (OTDP)

Doctor of Science in Rehabilitation Science (Sc.D.)

Q: How can I apply for admission to the School of Health Professions?

A: Online application information may be accessed via the TTUHSC School of Health Professions website: www.ttuhsc.edu/health-professions/admissions/application.aspx

Q: How can I contact the School of Health Professions?

A: You may contact us by using the following information:

Texas Tech University Health Sciences Center
School of Health Professions Office of Admissions and Student Affairs
3601 4th Street, Mail Stop 6294
Lubbock, TX 79430
Phone: 806-743-3220
Fax: 806-743-2994
http://www.ttuhsc.edu/health-professions/
health.professions@ttuhsc.edu

Q:: How is the School of Health Professions organized?

A:: Our programs are organized into five Departments:

- Department of Laboratory Sciences and Primary Care
  - Programs in Medical Laboratory Science (B.S. and Certificate)
  - Program in Molecular Pathology (M.S.)
  - Program in Physician Assistant Studies (MPAS)
- Department of Speech, Language, and Hearing Sciences
  - Programs in Speech, Language and Hearing Sciences (B.S. and Second Degree)
  - Program in Speech-Language Pathology (M.S.)
  - Program in Audiology (Au.D.)
  - CSD Concentration, Rehabilitation Science (Ph.D.)
- Department of Rehabilitation Sciences
  - Program in Athletic Training (MAT)
  - Programs in Occupational Therapy (OTD, OTDP)
  - Program in Physical Therapy (DPT)
  - Program in Rehabilitation Science (Ph.D.)
    - Concentration in Communication Sciences and Disorders
    - Concentration in Movement Sciences and Disorders
  - Program in Rehabilitation Science (Sc.D.)
- Department of Healthcare Management and Leadership
  - Program in Healthcare Management (B.S.)
  - Program in Healthcare Administration (M.S.)
  - Certificate in Health Informatics and Data Analytics
  - Certificate Health Systems Policy and Management
  - Certificate in Healthcare Finance and Economics
  - Certificate in Health Systems Engineering and Management
  - Certificate in Long-Term Care Administration
- Department of Clinical Counseling and Mental Health

- Program in Clinical Rehabilitation Counseling (M.S.)
- Program in Clinical Mental Health Counseling (M.S.)
- Program in Addiction Counseling (M.S.)

2022-2023 Academic Calendar

TTUHSC School of Health Professions

https://www.ttuhsc.edu/health-professions/academic-calendar/default.aspx

General Policies & Procedures

Core Curriculum Requirement

Students who will be earning their first baccalaureate degree from the Texas Tech University Health Sciences Center must satisfy the coursework requirements of the TTUHSC Core Curriculum.

This base of general knowledge provides students with a foundation in the natural and applied sciences, social sciences, mathematics, humanities, visual and performing arts, and the tools of language and thought. The TTUHSC Core Curriculum complies with 1997 Texas legislation that requires each state-supported institution to establish a core curriculum that encompasses, “basic intellectual competencies in . . . reading, writing, speaking, listening, critical thinking, and computer literacy.”

These courses or their equivalents may be taken at any regionally accredited college or university. Students should choose only Core Curriculum courses that satisfy the requirements of their particular TTUHSC degree program, as different core courses may be required by different programs.

TTUHSC Core Curriculum

Communication - 6 Credit Hours

*English 1301 Composition I	3 hours
*English 1302 Composition II	3 hours

Mathematics - 3 Credit Hours

**Courses with prefix MATH that meet minimum core curriculum requirements	3 hours

Natural Sciences - 6 Credit Hours

**Courses with prefixes BIOL, CHEM, GEOL, PHYS, or other natural sciences	6 hours

Creative Arts - 3 Credit Hours

**Any art, music, drama, or theatre arts course	3 hours

Language, Philosophy, and Culture - 3 Credit Hours

**Any literature, philosophy, modern or classical language/literature, or cultural studies course	3 hours

Social and Behavioral Sciences - 3 Credit Hours

**Any psychology, sociology, or anthropology course	3 hours

American History - 6 Credit Hours

*HIST 1301 United States History I	3 hours
*HIST 1302 United States History II	3 hours

(Students may substitute 3 credit hours of Texas History for 3 credits of United States History)

Government/Political Science - 6 Credit Hours

*GOVT 2305 American Government	3 hours
*GOVT 2306 Texas Government	3 hours

Core Curriculum Electives

Chosen from the fields of student listed above	6 hours

**Course numbers listed are based on the Texas Common Course Numbering System (TCCNS). Check with your academic institution to verify the course number that corresponds with the TCCNS number.*

***The above-listed courses must meet Texas Common Core requirements at the institution at which you take them.*

Instructional Method Definitions

FACE: A traditional face-to-face course in which the student and instructor(s) are in the same physical location (used for clinical courses).

HYBRID:A course in which the majority (greater than 50% but less than 85%) of planned instruction occurs when the student and instructor(s) are not in the same place.

ONLINE: A course in which 85% or more of planned instruction occurs when the student and instructor(s) are not in the same place.

IVC (Interactive Video Conferencing):A course in which synchronous instruction is delivered via two-way transmission between an instructor and student who are not in the same physical location.

Academic Credit Details

Definition of a Semester Credit Hour

The SHP defines semester credit hours for traditional face-to-face lecture courses using the Carnegie and Federal guidelines, namely that 3 Semester Credit Hours (SCH) should contain 15 weeks of instruction (45 contact hours) plus a week for final examinations so that such a course contains 45-48 contact hours depending on whether or not there is a final examination.

Clinical practicum and lab courses are assigned credit hours based on learning objectives rather than the standard contact hour requirements. In such cases, courses are reviewed and approved through a formal school-level faculty review process (Academic Affairs Committee) that evaluates the course and its learning outcomes and judges that the course does have learning outcomes comparable to a traditional lecture-based course.

Semester credit hours for online and/or hybrid courses are calculated so as to be equivalent to that of a traditional face-to-face course (i.e., 3 hours of student engagement per week for 3 semester credit hour course).

Course Drop Limits

Under section 51.907 of the Texas Education Code, “an institution of higher education may not permit a student to drop more than six courses, including any course a transfer student has dropped at another institution of higher education”. This statute was enacted by the State of Texas in spring 2007 and applies to students who enroll in a public institution of higher education (in the State of Texas) as first-time freshmen in fall 2007 or later.

Any course that a student drops is counted toward the six-course limit if (1) the student was able to drop the course without receiving a grade or incurring an academic penalty; (2) the student’s transcript indicates or will indicate that the student was enrolled in the course; (3) the student is not dropping the course in order to withdraw from the institution. Exemptions for good cause could allow a student to drop a course without having it counted toward this limit, but it is the responsibility of the student to establish that good cause.

Contact the SHP Office of Admissions and Student Affairs personnel for more information before you drop a course.

Any student affected by this statute that has attended or plans to attend another institution of higher education (in the State of Texas) should become familiar with that institution's policies on dropping courses.

Enrollment Status for Students

Texas Tech University Health Sciences Center Office of Student Services, Registrar & Financial Aid defines an undergraduate student as considered enrolled full-time with 12 credit hours per semester and part-time enrolled in 6 credit hours per semester. A graduate student is considered enrolled full-time with 9 credit hours (Fall and Spring) and 6 hours (Summer) and part-time enrolled in 5 credit hours (Fall and Spring) and 3 credit hours (Summer). The School of Health Professions defines a graduate student enrolled in 8-week terms as considered full-time with 6 credit hours per semester and part-time enrolled in 3 credit hours per semester.

Transfer of Credits

The School of Health Professions will accept transfer hours from fully accredited U.S. two-year colleges and universities. The School traditionally accepts 63-70 transfer hours for undergraduate programs; however, additional hours may be accepted upon program approval.

Second Bachelor's Degree

No second bachelor's degree is conferred until the candidate has completed at least 24 semester hours—exclusive of credit by examination—in addition to the courses counted toward the first bachelor's degree. A second bachelor's degree sought by a student who did not graduate from a public Texas university must include the required Core Curriculum.

Credit for Core Requirements Taken at Another State Institution

In accordance with the rules mandated by the Texas Legislature concerning the transfer of core curriculum: "If a student successfully completes the 42 semester credit hour core curriculum at an institution of higher education, that block of courses may be transferred to any other institution of higher education and must be substituted for the receiving institution's core curriculum. A student shall receive academic credit for each of the courses transferred and may not be required to take additional core curriculum courses at the receiving institution unless the board has approved a larger core curriculum at that institution." (Section 5.402, d)

Credit by Examination for Prerequisite Courses

The School of Health Professions encourages students to use previous learning experiences. Students may demonstrate proficiency in certain subject areas through various programs.

A student may earn prerequisite course credit by examination in four separate programs. These include:

1. Specified College Board (CB) Achievement Tests (SAT Subject Tests)
2. Specified subject examinations of the CB College Level Examination Program (CLEP)
3. Credit for Advanced Placement Examinations, which are part of the Advanced Placement programs (AP) available in a limited number of secondary schools
4. The International Baccalaureate (IB) diploma and/or examinations, dependent upon departmental evaluation.

Credits earned for prerequisite courses by the above-listed sources must be specifically listed on an official college transcript from a previously attended institution. For example, to be given credit for English Composition I, the transcript must read CR 1301 Composition I.

Credit for College Board Achievement Tests (SAT Subject Exams)

Achievement Tests are part of the College Board Admissions Testing Program. Each year there are several national administrations of the SAT Subject Tests. Students should plan to take the specified tests at national testing centers during their senior year of high school at an early testing date in order that scores may be reported to the university by June. For more information, view www.collegeboard.com; visit a high school counselor; or contact Academic Testing Services, Texas Tech University, Box 45002, Lubbock, Texas 79409-5002, 806.742.3671

Credit for Advanced Placement Program Examinations (AP)

The Advanced Placement Examination is the standardized examination for a course offered in participating secondary schools. The objective of the AP is to allow students to begin work toward college credit while still in high school. Students should check with their high school counselor or principal as to the availability of the AP examinations in their school. The AP is offered once a year during May at participating high schools. AP scores are reported to the university in July.

Credit for College Level Examination Program (CLEP)

Under the College Level Examination Program, the School of Health Professions will award credit only for specific examinations. As with the other CB testing programs, a student may attempt a CLEP examination at a national CLEP testing center before enrolling and have the official scores reported to the School of Health Professions. These examinations are offered on the Texas Tech University campus during Red Raider Orientation conferences held each summer, as well as several times each month throughout the year to students currently enrolled, and monthly at national CLEP test centers. Further information concerning the CLEP tests may be obtained by contacting College Level Examination Program at www.collegeboard.comor the TTUHSC Office of the Registrar. Pass or fail grades earned on examinations for these courses will not be considered in determining grade-point averages. TTUHSC Schools may elect not to accept credit by examination, where it is determined that such academic achievement may hinder the success of national licensure exams/certifications.

Credit for International Baccalaureate (IB) Examinations and/or Diploma

The International Baccalaureate is an international program of courses and examinations offered at the high school level. Texas Tech Health Sciences Center welcomes students in the IB program. For those individuals who participate in IB courses, but do not have an IB Diploma, individual course credit may be earned based on the subject and score obtained on specified IB exams. Students must send an official IB examination transcript to Texas Tech University (or other home institution previously attended) to receive credit.

Credit for Educational Courses Completed in the Armed Forces

Credit may be gained for formal service school courses completed in the armed services after evaluation of official documents by the TTUHSC Program Director. The Program Director, in conjunction with the TTUHSC SHP Office of Admissions and Student Affairs, will decide if credit awarded for such courses will be applied toward degree requirements.

Grading Criteria

It is the policy of the Texas Tech University Health Sciences Center School of Health Professions to use the following grading criteria:

GPA of:

4.0 = A >= 90%

3.0 = B >= 80.0 and < 90%

2.0 = C >= 70.0 and < 80%

1.0 = D >= 60.0 and < 70%

0.0 = F < 60%

PR: The grade of PR is given only when the work in a course (to include: preceptorship, clinical internship, fieldwork, or research) is

planned to extend beyond the semester or term. The PR grade must be changed no later than the end of the following semester.

CR: The grade of CR is given only when a student fulfills the requirements for the semester but will register for the same course multiple semesters to complete curriculum requirements (master's project, thesis, or dissertation).

*The School of Health Professions does not grade replace.

Expectations of the Student

Students studying in the School of Health Professions must complete the professional curriculum within the prescribed school and departmental academic and calendar guidelines. Health Professions students are required to observe departmental, school, and institutional regulations and requirements. Health Professions students are expected to maintain a professional attitude toward the patients to whom they will provide healthcare, and toward the colleagues with whom they learn and work. Only the specific course instructor can excuse absences. Other policies concerning departmental expectations of Health Professions students are contained in the student handbooks of the respective departments. Students will be held responsible for both the information contained in this catalog and in the departmental handbooks. In addition, students are expected to abide by all stated school or departmental policies and regulations.

SHP Ethical School Standard

As a student of the School of Health Professions at Texas Tech University Health Sciences Center, I will use my knowledge and skills responsibly to improve the quality of life for those we serve. I will seek in all academic, professional, and personal endeavors to demonstrate ethical behavior, honesty, integrity, and respect for others.

Student Conduct

Responsible citizenship among college students includes honesty and integrity in-class work; regard for the rights of others; and respect for local, state, and federal laws as well as campus standards. It is the policy of the Texas Tech University Health Sciences Center to affirm the right of its students to a prompt and fair resolution of a complaint or grievance involving allegations of inappropriate behavior by other TTUHSC students or by TTUHSC personnel toward students.

Specific standards concerning the rights and responsibilities of students and registered student organizations at TTUHSC are contained in the TTUHSC Institutional Student Handbook Code of Professional Conduct and each departmental Student Handbook. Students are expected to become thoroughly familiar with and abide by these standards.

Policy and procedure information regarding student complaints can be accessed online at https://www.ttuhsc.edu/student-affairs/grievances.aspx

The TTUHSC Student Handbook can be accessed online at https://www.ttuhsc.edu/health-professions/handbooks/default.aspx

TTUHSC Title IX Training for Students

One of your first learning experiences at the Texas Tech University Health Sciences Center (TTUHSC) is to complete a mandatory Title IX & Sexual Misconduct Training for Students. This training emphasizes the TTUHSC's commitment to providing and strengthening an educational and working environment where students, faculty, staff, and visitors are free from sex discrimination of any kind, and includes information on how to report prohibited conduct. For more information on Title IX and reporting sexual misconduct, visit http://www.ttuhsc.edu/title-ix/

Student Liability

An essential part of the School of Health Professions education is the clinical experience. Students in all departments of the School of Health Professions are placed in clinical settings outside the institution. Because health professions students will practice patient care under the supervision of graduate professionals, the School of Health Professions will purchase professional liability insurance coverage

for the students. A nominal yearly charge to cover the insurance cost is included in student fees paid at registration.

Interprofessional Practice and Education (IPE) Core Curriculum

All TTUHSC students, regardless of school affiliation, will be required to complete the IPE core curriculum prior to graduation. The IPE core curriculum is composed of two components, including successful completion of a non-credit online course (>70 % accuracy on the knowledge post-tests) and successful participation in at least one registered IPE learning activity. Failure to complete the IPE core curriculum will result in delayed graduation. Students should consult their academic/program advisor and/or school catalog for additional information.

Change of Address

Students are required to maintain current contact information by making changes on their portal at http://portal.texastech.edu. All correspondence, including financial aid refund checks, will be mailed to the address provided by the student.

Services for Students

Student Organizations

TTUHSC and the School of Health Professions offer a variety of student organizations. The School sponsors a chapter of Alpha Eta, the national honorary society in Health Professions, for students of the School who have distinguished themselves academically. Departments within the School of Health Professions may have a student group organized for student support and participation in professional activities specific to the department. For more information concerning organizations open to students at TTUHSC, or to register a new organization, please contact the TTUHSC Office of Student Life (https://www.ttuhsc.edu/student-life/default.aspx).

Student Health Services

Students who pay the Medical Services Fee and are enrolled in the School of Health Professions are eligible to receive healthcare through the Department of Family Medicine at TTUHSC. However, services may vary from campus to campus. Services can be found on the TTUHSC Student Affairs website (https://www.ttuhsc.edu/student-affairs/health.aspx)

Student Health Insurance

All students must obtain and maintain health insurance coverage that is Affordable Care Act (ACA) compliant while enrolled at the Texas Tech University Health Sciences Center (TTUHSC), except those enrolled in a 100% distance program. Per OP 77.19

If you are in one of the following programs, Health Insurance is not required.

1. Bachelor of Science in Healthcare Management
2. Master of Science in Healthcare Administration
3. Post-professional Doctor of Occupational Therapy

To understand the full expectations of this requirement, please review the website linked below.

https://www.ttuhsc.edu/student-life/health-insurance.aspx

Students with Disabilities

It is the policy of the School of Health Professions to conduct educational programs in a place and manner accessible to individuals with disabilities and to make reasonable modifications and accommodations necessary to achieve this purpose. If accommodations are needed, students must contact TTUHSC Student Disability Services, at 806-743-1926, after accepting an admission offer. However, qualified students are eligible for accommodations at any point in their academic career. It is best to reach out to the SDS staff from the beginning, but if a disability is acquired during the student's academic program, the student is eligible to request accommodations at that point. The student will be asked to complete an application requesting accommodation(s) and supply documentation necessary to support

the application. For additional information on obtaining disability services, visit https://www.ttuhsc.edu/disability/default.aspx

Veterans Resource Center

The TTUHSC Veterans Resource Center (VRC) is here to assist veterans, service members, and their families with their Federal benefits and Hazlewood Exemption. The VRC also has opportunities such as Green Zone Training, SALUTE Veterans Honor Society, Veteran-to-Veteran Mentorship Program, VetConnect, and more.

If you have any questions regarding benefits or available services, please contact the TTUHSC Veterans Resource Center at 806-743-7549 or email vrc@ttuhsc.edu.

https://www.ttuhsc.edu/veterans-resource-center/

TTUHSC SHP International Student Travel

International Health Elective

IHHP 1001/1002/1003/1004 International Health Elective: The purpose of this elective is to foster the development of humanism and life-long commitment to service while recognizing the responsibility of an interprofessional team to address global health disparities. Registration in this course is required for students to be eligible to apply for international experiences sponsored through the TTUHSC Office of Global Health. This elective must be approved by the program director and the student is required to complete the standardized application available through the Office of Global Health. Students will receive a transcript notation of the International Health Elective (zero credits).

Eligibility: To be eligible to participate in an International Program for Students, a person must be a student at the University. For the purposes of an International Program for Students, a student is defined as all persons taking courses at the University, either full-time or part-time, pursuing undergraduate, graduate, or professional studies, specifically excluding School of Medicine House Staff. Persons who are not officially enrolled for a particular term but who have a continuing relationship with the University or who have been notified of their acceptance may be considered students.

For the purposes of an International Program for Students, a person is considered to have a continuous relationship with the University if the person was enrolled at the University for the preceding semester and:

- Is registered or preregistered for the following semester; or
- If the person has not completed the person's degree program, is eligible to continue the degree program in the following semester; or
- If the person completed a degree program in the preceding semester and is admitted to another degree program at the University for the following semester.

In addition, persons must be in good academic and disciplinary standing as determined by the person's school at the time the person applies for an International Program and at the time of the dates of travel. Good disciplinary standing is defined as relating to a student not currently on disciplinary probation; or, a student, whose disciplinary suspension, expulsion or conditions and/or restrictions imposed, if any, have been totally fulfilled in a timely manner.

Per OP 10.29, International Programs for Students, International Programs are part of a degree program. As such, schools will determine course credit being awarded for an International Program in accordance with OP 60.05.

Withdrawal/Refunds: TTUHSC is not liable for funds paid for travel to airlines or the host institution/organization or other fees of any kind or character related to the trip if a person is no longer eligible or can no longer participate in the international program. As such, the

person is responsible for any and all financial losses that may be incurred.

Diversity Statement

TTUHSC is committed to creating learning and working environments that are comprised of individuals of all social and intrinsic backgrounds. TTUHSC strives to foster diversity, equity, and inclusion through the removal of barriers for historically marginalized individuals to continue creating greater access. In an effort to continue transforming healthcare through innovation and collaboration, TTUHSC will cultivate a climate that is intentional, welcoming, and affirming of each individual. TTUHSC will serve as a community for culturally competent healthcare that considers individuals from all walks of life.

Tobacco-Free Environment

TTUHSC **prohibits** tobacco use or vaping in a TTUHSC facility or anywhere on the grounds of any TTUHSC facility including a leased facility/space. In addition, TTUHSC prohibits sales, sponsorship, advertising, or promotional activities of tobacco in all campus facilities or at TTUHSC-sponsored events. Violations of this policy are subject to disciplinary action as stipulated in HSC Operating Policy and Procedure 10.19, as appropriate. For more information regarding the Tobacco-Free Environment or the Tobacco Intervention Program please visit the TTUHSC website at https://webb.ttuhsc.edu/wellness/smoking-cessation.aspx.

Registration of Convicted Sex Offenders

Chapter 62, Code of Criminal Procedure now requires that all sex offenders register with local law enforcement authorities. Those who intend to be students or attend classes on or at any campus of the Texas Tech University System are required to register with the campus police department in accordance with article 62.153 of the Texas Code of Criminal Procedure within seven (7) days of beginning school. In addition, all such sex offenders who intend to volunteer, work, or carry on a vocation (including full-time or part-time employees and employees of outside contractors) on any campus of the Texas Tech University System for a consecutive period exceeding fourteen (14) days or an aggregative period exceeding thirty (30) days in a calendar year are required to register with the campus police department within seven (7) days of beginning work on any campus of the Texas Tech University System. In addition, all such sex offenders are required to notify campus police within seven (7) days of terminating attendance or work on any campus of the Tech University System. All such sex offenders who are currently students, employees, volunteers, or contractor employees must register with campus police. Failure to register, as required, may subject such individuals to criminal penalties. Questions about this new requirement should be addressed to the TTU Police Department, 413 Flint Avenue, Lubbock, TX 79415, (806) 742-3931.

The Texas Tech Police Department is located at 413 Flint Avenue and is operated 24 hours a day, seven days a week. The department provides police services and security for the entire Texas Tech community, an area much larger and more populated than many towns in Texas. The department phone number is 806.742.3931 or, in an emergency call 911.

The Texas Tech Police Department employs over 140 dedicated individuals interested in making a positive impact by providing a safe and secure educational environment. The officers are licensed by the Texas Commission on Law Enforcement and are fully commissioned.

The Texas Tech Police Department employs Crime Prevention Specialists available to offer presentations on a number of topics, including personal safety, burglary/theft prevention, sexual assault awareness, and drug and alcohol awareness programs. In addition, these officers will discuss crime prevention with any student, faculty, or staff member.

The department posts information and crime statistics online at www.depts.ttu.edu/ttpd/.

Student Debts

The School of Health Professions and TTUHSC will not be responsible for debts incurred by the student or student organizations. Students must meet all financial responsibilities due to the University. The writing of checks on accounts with insufficient funds, the non-payment or

delinquent payment of outstanding loans, and failure to meet any other financial obligations to the University, are considered a lack of financial responsibility. Financial irresponsibility can subject the student to action by TTUHSC, including, but not limited to, denial of registration, withholding of grades and transcripts, and possible adjudication under the Code of Professional and Academic Conduct. In addition, failure to meet financial obligations to the University may result in: a.) Cancellations of the student's registration if tuition and registration fees are not paid by the 12th class day and 20th class day (4th class day and 15th class day in summer), or if a returned check given in payment of tuition and fees is not redeemed by that time; b.) Loss of University check writing privileges and possible criminal prosecution for writing insufficient fund checks and for failure to pick up a returned check; c.) A flag placed on a student's academic records preventing future registration (before registering or requesting a transcript, students may check on the presence of flags on their records by contacting the Office of the Registrar); and/or, d.) Reporting of financial problems to a credit agency or a collection agent.

Policies & Requirements

Admission Policy

Applicants for all programs in the School will be reviewed on an individualized and holistic basis that takes into account each applicant's demonstrated academic ability; commitment to service; potential for success in and contribution to the profession; and potential for contribution to the overall student-body diversity of the class and the School. Admissions criteria generally will include a consideration of prerequisite course grade-point-average (GPA); overall GPA; Graduate Record Examination (GRE) scores (where applicable); personal statement or essay (where applicable); letters of recommendation (where applicable); honors and awards received; extracurricular and community service activities; and the results of the personal interview (where applicable). Admissions requirements and weights assigned to program-specific criteria will be developed for each program.

Applying for Admission

Students admitted to Texas Tech University should not consider themselves also admitted to the School of Health Professions. For admission to any School of Health Professions program, the online application must be completed and submitted by the program deadline. Each program has its own applicant pool, from which the most qualified students are chosen for an admission review. Those students who best meet the stated qualifications and prerequisites of the individual programs will be accepted as students of TTUHSC and the School of Health Professions. Students who successfully complete the program will receive a degree from the Texas Tech University Health Sciences Center, School of Health Professions. After graduation, a certification or licensure examination may be required.

Deadlines for Application to the Individual Programs

https://www.ttuhsc.edu/health-professions/admissions/application.aspx

Qualifying for Admission

A student who wishes to enroll in the School of Health Professions must fulfill the general admissions criteria contained in this catalog, as well as the specific criteria of each program. Information for applications to any Health Professions program may be accessed via the Texas Tech University Health Sciences Center, School of Health Professions website at http://www.ttuhsc.edu/health-professions/.

Applicants to the Professional Programs

Applicants to the professional programs must have completed all prerequisite courses and met all other conditions of admission before entering the first professional program course. Acceptable minimum grade point averages vary with the program and are stated in the appropriate section of this catalog. A personal interview may be required of each applicant.

Prerequisite Course Credits

All questions of course acceptability must be referred to the academic advisors in the School of Health Professions Office of Admissions and Student Affairs. All college-level, non-vocational courses completed at regionally accredited colleges and universities (not including trade or technical schools) will be evaluated for acceptance of prerequisite course credit by the School of Health Professions Office of Admissions and Student Affairs. In general, credit hours with a grade of C or higher will be accepted. However, evaluation of specific courses is required and decisions made by the program are final. Each student will be notified of acceptance of prerequisite courses. If the required science courses were completed seven or more years prior to admission into the School of Health

Professions, the student may be required to retake courses.

State Authorization for Distance Education and Clinical Education

Texas Tech University Health Sciences Center (TTUHSC) has been approved by the Texas Higher Education Coordinating Board to participate in the National Council for State Authorization Reciprocity Agreements (NC-SARA). NC-SARA is a voluntary, approach to state oversight of postsecondary distance education. California is currently the only state that is not an NC-SARA member. As a public institution, TTUHSC is exempt from state oversight in California and not required to register with the Bureau for Private Postsecondary Education (BPPE).

Please see the SARA Policies and Standards document for details of specific authorized activities. Please note that TTUHSC is not authorized to conduct internships leading to professional licensure without direct coordination with the licensure board in that state. TTUHSC has an implicit or explicit agreement to conduct 100% online learning activities for students in the indicated states. These agreements do not explicitly allow additional activities with a few exceptions such as a limited number of legislative internships in Washington, D.C. NC-SARA also does not affect the applicability of general-purpose State laws and has no effect on State professional licensing requirements.

Student Complaints: https://www.ttuhsc.edu/student-affairs/grievances.aspx

Applicant Pool

Applicants will be considered for admission only when completed application forms and appropriate supporting documents have been received. All applicants are carefully evaluated by the respective program admissions committees concerning qualifications and potential for successful completion of a professional curriculum.

Admissions Checklist

- Be certain you will be able to meet all admission requirements by the class starting date.
- Application materials may be accessed via the Texas Tech University Health Sciences Center, School of Health Professions' web site at www.ttuhsc.edu/health-professions/.
- Complete all admission materials and mail official transcripts to Texas Tech University Health Sciences Center, Office of Admissions and Student Affairs, School of Health Professions at 3601 4th Street, Mail Stop 6294, Lubbock, Texas, 79430.
- Have current, official transcripts of all college coursework sent to the above address. Make certain that the transcripts are mailed to the above address only. Do not send transcripts to Texas Tech University; this will delay the processing of your application. It is the applicant's responsibility, before the admissions deadline for each program, to see that updated transcripts containing the applicant's most recently completed coursework have been received.
- It is the applicant's responsibility to confirm that all necessary application materials have been received before the closing date for receiving application materials.

NOTE: All applicants with completed applications will be notified in writing as to the final status of their application after review by program admissions committees. Interviews and additional tests may be required before final admission decisions are reached.

Criminal Background Check

The TTUHSC School of Health Professions requires a Criminal Background Check (CBC) after admission but prior to matriculation. CBCs allow the university to evaluate whether TTUHSC students are qualified, eligible and possess the character and fitness to participate in clinical care and/or clinical rotation sites at TTUHSC or participating institutions.

Immunizations

Students in the School of Health Professions must have had the following immunizations:

- Varicella (Chicken Pox) Positive Varicella Titer (blood test). TTUHSC does not accept a vaccine for this requirement.
- Measles, Mumps, and Rubella (MMR) Positive MMR titer (blood test). TTUHSC does not accept a vaccine for this requirement.
- Tuberculosis: 2 –STEP TB skin test (within the past 3 months).
- Hepatitis B : Positive Hepatitis B titer. TTUHSC does not accept a vaccine for this requirement.
- Tetanus/diphtheria (Td): Tetanus Diphtheria booster (required within past 10 years)
- Tdap (Tetanus, Diphtheria, and Acellular Pertussis): One-time Adult Dose (these are only good for 10 years, must be good for your entire length of stay)
- Meningococcal Vaccine (MCV): Adults 22 and younger (vaccine within the last 5 years)
- Influenza Vaccine.
- Due to the CMS mandate, students enrolled in a program that includes a clinical education component may/will be required to have a COVID-19 vaccination or exemptions to complete the clinical education components of the curriculum.

Programs	Required Immunizations/Titers
DPT, MP, MLS, PA	*Varicella Titers, MMR Titers, *Hepatitis B Titer, 2-step Tb skin test (9-day process), Tdap vaccine, Meningococcal Vaccine, Influenza Vaccine (required during Flu season October-March)
OTD MAT, SLHS (SLHS, SLP, AUD)	*Varicella Vaccines, MMR Vaccines, Hepatitis B Vaccines, 2-step Tb skin test (9-day process), Tdap vaccine, Meningococcal Vaccine, Influenza Vaccine (required during Flu season October-March)
Certificate/Second Degree MLS	*Varicella Titers, *MMR Titers, *Hepatitis B Titers, Tdap vaccine, Meningococcal Vaccine. 2-step Tb test (9-day process) and Influenza Vaccine must be done after October 1st.

*Titers (Blood Work)

It is the student's responsibility to obtain and maintain proof of all required immunizations. The cost of immunizations is also the student's responsibility. These requirements can be found on the Institutional Health website under School of Health Professions: http://www.ttuhsc.edu/institutional-health/

International Prospective Students

For students who are not citizens/permanent residents of the U.S.

Application Procedures

The following requirements should be followed carefully in order for an applicant to be considered for a program at Texas Tech University Health Sciences Center, School of Health Professions. Please use your name as it appears on your passport on your application and all other communication with TTUHSC.

Completed Application

Application: Applications must be complete and submitted online. The applicant's name must be the same as it appears on the passport. All institutions attended must be included in the application. Falsification of application information will void admission to Texas Tech University Health Sciences Center.

Non-Refundable Application Fee: A nonrefundable application fee ($75) is required for the application to be complete. Application fees cannot be waived (with the exception of Faculty/Staff waivers). Acceptable methods of payment are checks drawn on a U.S. bank,

cashier's checks, U.S. or international postable money orders, international money orders, or credit cards. The application fee may be paid through the application, online *http://www.ttuhsc.edu/health-professions/admissions/application.aspx* or by sending payment to:

Texas Tech University Health Sciences Center School of Health Professions

Office of Admissions and Student Affairs 3601 4th Street, Mail Stop 6294

Lubbock, TX 79430

Official Proof of English Proficiency: All international applicants must provide proof of English proficiency from one of the following before their applications can be considered for admission:

- TOEFL (Test of English as a Foreign Language; *www.toefl.org*) - The minimum TOEFL score required is 550 (paper-based version) or 79 (internet-based version). The TOEFL score must be received directly from the Educational Testing Service (ETS); Texas Tech University Health Sciences Center's institutional code is 6851. TOEFL scores are valid for only two years.
- IELTS (International English Language Testing Service; *www.ielts.org*) - The minimum IELTS required score is an overall band score of 6.5 on the Academic version; IELTS General Training results are not acceptable. There is no IELTS institution code for Texas Tech University Health Sciences Center. IELTS scores are valid for only two years.

Countries exempt from the English language proficiency requirement:

Australia

Canada (except the Province of Quebec)

Commonwealth Caribbean Countries:

Anguilla	Barbados	Bermuda
Antigua	Belize	Cayman Islands
The Bahamas	British Virgin Islands	Dominica
Grenada	Montserrat	St. Vincent
Guyana	St. Kitts & Nevis	Trinidad & Tobago
Jamaica	St. Lucia	Turks & Caicos Island
Republic of Ireland	Liberia	New Zealand
United Kingdom (England, Scotland, Northern Ireland, & Wales)		United States

Official TOEFL score reports or official IELTS results are required from all other countries unless the applicant has received a degree from an accredited college/university in one of the above-listed countries.

TOEFL can also be waived based on SAT and ACT scores, at the school's discretion.

TOEFL can also be waived if the student took 4 consecutive long semesters of credit-bearing/non-development/non-ESL courses at an accredited post-secondary school in the US.

Foreign Transcripts: International applicants that have taken any courses outside the U.S., must have a foreign transcript evaluation from a foreign transcript evaluation agency. We do not mandate evaluations come from a certain company; however, they must be a detailed course-by-course evaluation.

Foreign transcript evaluations must be official, coming to us directly from the evaluation agency.

If multiple institutions outside the U.S. have been attended, the evaluation must include all institutions attended.

Proof of Financial Support: International applicants must provide proof of financial support as part of their application materials. Proof of funding can be by any of the means below:

1. Student can support themselves. Required documents:

- Student must submit a copy of their bank statement
- No financial statement is needed

2. Student can have a sponsor. Required documents:

- Student must submit a copy of the sponsor's bank statement
- A financial affidavit stating their intent to sponsor

Passport: International applicants must submit a copy of their passport.

Leave of Absence

In extreme circumstances, it may be necessary for a student to be absent from class for an extended time. The School of Health Professions may grant leave with the approval of the department chair and the consent of the Dean. For information concerning a leave of absence, contact the School of Health Professions Office of Admissions and Student Affairs at shp.enrollmentmanagement@ttuhsc.edu.

Withdrawal from the SHP

A student who wishes to withdraw from the School of Health Professions must first meet with their program director then contact the Office of Admissions and Student Affairs to receive an Official Withdrawal Form. This form must be initialed by faculty or staff from specific areas within the Health Sciences Center. After the withdrawal form is completed, it must be returned to the Office of Admissions and Student Affairs for processing. Students who fail to complete this self-initiated withdrawal process within 5 class days will be subject to administrative withdrawal and/or dismissal from the School of Health Professions.

SHP Readmission Application

Students who fail to register or who leave school during the spring or fall semester must submit the application and oath of residency plus a $75 non-refundable application fee. A former student who seeks to be readmitted to a program in the School of Health Professions must have withdrawn in good academic standing and meet all current admissions and degree requirements for the semester of readmission. Automatic readmission is not guaranteed; programs will consider students on a case-by-case basis. For questions concerning the readmission process, email shp.enrollmentmanagement@ttuhsc.edu .

Graduation

A student must be enrolled at Texas Tech University Health Sciences Center in the term in which they plan to graduate and possess the minimum GPA requirement as determined by the program. A student planning to graduate must complete the required application for graduation.

Financial Information

Tuition and Fees

Texas Tech University Health Sciences Center reserves the right, without notice in this catalog, to amend, add to, or otherwise alter any or all fees, rates, or other charges set forth herein by the action of the Board of Regents of Texas Tech University or the Texas State Legislature, as the case may be.

Texas residents will be charged tuition at a rate of $215 per semester credit hour. Non-resident and foreign students will be charged tuition at a rate of $635 per semester credit hour. Both resident and non-resident students enrolled in graduate programs will be charged an additional $50 per semester credit hour.

To be granted status as a resident of Texas for educational purposes, proper documentation must be on file in the TTUHSC Office of the Registrar. Each student will be required to complete a written residency oath upon applying. For detailed information regarding residency status, contact the TTUHSC, Office of the Registrar. Foreign students seeking entry into the School of Health Professions must be processed through the International Admissions Counselor at Texas Tech University.

Link to SHP Tuition Information: https://webb.ttuhsc.edu/health-professions/tuition.aspx

Traditional Tuition & Fees Table*

Fall or Spring Semester

Full-time student enrolled in 15 hours

Tuition	
Resident Undergraduate	$3,225.00
Resident Graduate	$3,975.00
Non-Resident Undergraduate	$9,525.00
Non-Resident Graduate	$10,275.00
Student Services Fee	$132.00
Placement Guarantee Fee (All 1st-year students, non-refundable)	$125.00
Student Malpractice Insurance Fee ($61 for PA students)	$14.50
Data Management Fee (PA)	$142.00
Data Management Fee (AT)	$110.00
Data Management Fee (PT)	$56.00
Microscope Usage Fee (CLS Juniors & Seniors annually)	$50.00
CLS (Traditional Program) **Preceptorship Fee**	$100.00
CLS (Online) **Preceptorship Fee**	$160.00
CLS (Traditional/Online) **Clinical Simulation Fee**	$1000.00
MP Simulation Fee	$750.00

MP Preceptorship Fee	$200.00
PA SimLife Fee	$350.00
SLHS Practicum Fee (Dept. of SLHS only)	$300.00
Resource and Calibration Fee for Undergraduate Students (Dept. of SLHS only)	$50.00
Calibration Fee for Graduate Students (Dept. of SLHS only)	$25.00
Medical Services Fee	$70.00
Screening & Immunization Fee (Fall & Spring)	$42.50
Recreation Center Fee	$75.00
Identification Card Fee	$5.00
Informational Technology Fee	$330.00
Student Athletic Fee	$61.20
Record Processing Fee	$15.00
Synergistic Center Fee (Student Union Fee)	$5.00
International Education Fee	$4.00
Academic Department Instructional Assessment Fee	$400.00
Graduation Fee	$100.00
Educational Technology Fee	$165.00
Learning Resources Fee	$255.00
Total Tuition & Fees for Semester (estimate)	
Resident Undergraduate	$4,799.20
Resident Graduate	$5,549.20
Non-Resident Undergraduate	$11,099.20
Non-Resident Graduate	$11,849.20

Summer Session

Duration of 10 weeks or longer

Full-time student enrolled in 7 hours

Tuition

Resident Undergraduate	$1,505.00
Resident Graduate	$1,855.00
Non-Resident Undergraduate	$4,445.00
Non-Resident Graduate	$4,795.00

SHP Anatomy Fee (AT, OT, PA & PT only)	$1,200.00
PA Emergency Management Fee	$500.00
SLHS Practicum Fee (Dept. of SLHS only)	$300.00
Resource and Calibration Fee for Undergraduate Students (Dept. of SLHS only)	$50.00
Calibration Fee for Graduate Students (Dept. of SLHS only)	$25.00
Student Services Fee	$132.00
Medical Services Fee	$70.00
Recreation Center Fee	$75.00
Identification Card Fee	$5.00
Informational Technology Fee	$154.00
Record Processing Fee	$15.00
Synergistic Center Fee (Student Union Fee)	$5.00
International Education Fee	$4.00
Academic Department Instructional Assessment Fee	$400.00
Educational Technology Fee	$165.00
Learning Resources Fee	$119.00
Total Tuition & Fees for Summer Semester (estimate)	
Resident Undergraduate	$2,649.00
Resident Graduate	$2,999.00
Non-Resident Undergraduate	$5,589.00
Non-Resident Graduate	$5,939.00

These fees may not represent all costs incurred to students. Many courses within each program have special instruction fees that will be applied to tuition as necessary. Students on regional campuses have appropriate fees waived.

Distance Learning Tuition & Fees

**Non-resident students, residing in the state of Texas, will be assessed tuition and fees at the rates provided in the section above. The Distance Learning rates provided below only apply to non-resident students physically residing outside of the State of Texas.*

Clinical Laboratory Science (Second Degree & Certificate)

Out-of-state students enrolled in a distance learning program pay a fee of $489 per credit hour, which is $1,467 per three-hour course. A record processing flat fee of $15, learning resource fee of $17 per credit hour, Institutional information technology fee of $22 per credit hour, Student Services Fee of $26.40, and School of Health Professions educational technology flat fee of $165 will also be assessed each semester. A malpractice insurance flat fee of $14.50 will be assessed annually and a screening and immunization flat fee of $42.50 will be assessed semiannually.

Students enrolled in the Clinical Laboratory Science (Second Degree and Post-Baccalaureate Certificate) programs will be responsible

for proctoring expenses associated with midterm and final examinations.

Healthcare Administration

Out-of-state students enrolled in a distance learning program pay a fee of $579 per credit hour, which is $1,737 per three-hour course. A record processing flat fee of $15, learning resource fee of $17 per credit hour, Institutional information technology fee of $22 per credit hour, Student Services Fee of $26.40, and School of Health Professions educational technology flat fee of $165 will also be assessed each semester.

Healthcare Management

Out-of-state students enrolled in a distance learning program pay a fee of $323.50 per credit hour, which is $970.50 per three hour course. A record processing flat fee of $15, learning resource fee of $17 per credit hour, Institutional information technology fee of $22 per credit hour, Student Services Fee of $26.40, and School of Health Professions educational technology flat fee of $165 will also be assessed each semester.

Addiction Counseling
Clinical Rehabilitation Counseling
Clinical Mental Health Counseling

Out-of-state students enrolled in a distance learning program pay a fee of $579 per credit hour, which is $1,737 per three-hour course. A record processing flat fee of $15, learning resource fee of $17 per credit hour, Institutional information technology fee of $22 per credit hour, Student Services Fee of $26.40, and School of Health Professions educational technology flat fee of $165 will also be assessed each semester. A malpractice insurance flat fee of $14.50 will be assessed annually and a screening and immunization flat fee of $42.50 will be assessed annually.

Doctor of Science in Rehabilitation Sciences

Out-of-state students enrolled in a distance learning program pay a fee of $724 per credit hour, which is $2,172 per three-hour course. A record processing flat fee of $15, learning resource fee of $17 per credit hour, Institutional information technology fee of $22 per credit hour, Student Services Fee of $26.40, and School of Health Professions educational technology flat fee of $165 will also be assessed each semester. A malpractice insurance flat fee of $14.50 will be assessed annually and a screening and immunization flat fee of $42.50 will be assessed annually to students enrolled in the Doctor of Science in Physical Therapy program only.

Post-Professional Doctor of Occupational Therapy

Out-of-state students enrolled in a distance learning program pay a fee of $724 per credit hour, which is $2,172 per three-hour course. A record processing flat fee of $15, learning resource fee of $17 per credit hour, Institutional information technology fee of $22 per credit hour, Student Services Fee of $26.40, and School of Health Professions educational technology flat fee of $165 will also be assessed each semester. A malpractice insurance flat fee of $14.50 will be assessed annually and a screening and immunization flat fee of $42.50 will be assessed annually.

Refund of Tuition & Fees

Refund Policies (Institution and Title IV Withdrawal/ Refund Policies)

Detailed information about the impact of decreasing course load on:

- Institutional Refund Policy – All students who withdraw from TTUHSC or drop all courses during a term
- Additional considerations for students who received financial aid and withdraw from TTUHSC or drop all courses during a term

Institutional Refund Policy

Refund Policies for Tuition and Fees. Texas Education Code, Section 54.006, provides the amount of tuition and fees to be refunded to students who drop courses or withdraw from the institution. Class day count is based on the official institution calendar for the school, not the specific course dates.

Students who drop a course, but remain enrolled at the institution will be refunded at the following rate:

Term	Class Day	% of Refund of Charges
More than 5 weeks but less than 10 weeks in duration	1st class day through 4th class day *After the 4th day of class*	100% *None*
Duration of 10 weeks or longer	1st class day through 12th class day *After the 12th day of class*	100% *None*

Students who withdraw from the institution (zero semester credit hours) are required to pay tuition and fees according to the following schedule based on their official withdrawal date:

Term	Class Day	% of Refund of Charges
More than 5 weeks but less than 10 weeks in duration	Before the 1st class day *1st, 2nd, or 3rd class day* 4th, 5th, or 6th class day *7th class day or later*	100% *80%* 50% *None*
Duration of 10 weeks or longer	Before the 1st class day *First 5 class days* Second 5 class days *Third 5 class days* Fourth 5 class days *21st class day or later*	100% *80%* 70% *50%* 25% *None*

NOTE: Any refund due to a student will be after calculation of the amount of tuition and fees due at the time of withdrawal. If the student has paid less than the amount due at the time of withdrawal, the student will be required to pay the percentage due.

Students who withdraw from TTUHSC or drop all courses during a term that receive(d) financial aid

It's important for students who receive financial aid and withdraw or drop all courses during the term to be aware of the refund policies and to understand the impact they will have on the aid released and the continued financial aid eligibility. Current refund policies for students who withdraw or drop all courses during a term are determined by the Higher Education Title IV refund regulations.

Federal Refund and Repayment calculations must be performed for students who receive Title IV (Pell, FSEOG, Perkins and/or Stafford Loans) funds and officially withdraw from all courses, drop out of all courses, are expelled, take an unapproved leave of absence, or fail to return from an approved leave of absence prior to the 60% date of the term. All "unearned aid" must be returned to the federal aid programs as determined by the Federal Refund and Repayment calculations.

- The requirements for Title IV program funds are separate from the university refund policy. As such, you are responsible for unpaid institutional charges remaining after the refund calculation. You are also responsible for charges/balances created by the returning of Title IV program funds that the school was required to return.
- If you have questions about your Title IV program funds, you can call the Federal Student Aid Information Center at 1-800-4-FEDAID (1-800-433-3243). TTU users may call 1-800-730- 8913. Information is also available on Student Aid on the web at www.studentaid.ed.gov.

In order to keep all the financial aid issued in each term, students must be enrolled for at least 60% of the term. After this point in the

term, students have earned 100% of the Title IV funds released for the term. Therefore, it is in your best interest to maintain attendance and complete at least one class each term that you receive federal aid to avoid repayment of funds.

How the calculation works:

1. Number of days attended ÷ Days in semester = % of semester completed
2. Total $ disbursed X % completed = Earned $
3. Total $ disbursed - Earned $ = $ to be returned

Once it is determined that you owe money back to any of the federal aid programs, you will be ineligible to receive further federal aid at TTUHSC or any other institution until this debt is cleared.

Textbooks & Supplies

The cost of books and supplies will vary with the different curricula. School of Health Professions students can expect to pay approximately $500-$750 per semester for books and supplies. Some professional students will also be required to purchase lab coats and accessories for coursework at TTUHSC.

Office of Student Financial Aid (806) 743-3025 | financial.aid@ttuhsc.edu

It is the objective of the TTUHSC Office of Student Financial aid to provide financial assistance to students who, without such assistance, would not be able to pursue advanced education. Financial aid at TTUHSC comes from many sources: grants, scholarships, and student loans. Federal, state, and local programs are available to students who appropriately demonstrate financial need.

General financial aid information, including steps for applying for financial aid, types of financial aid, student eligibility requirements, and disbursement dates, can be found on our website: https://www.ttuhsc.edu/financial-aid/.

Student financial aid awards may be viewed and accepted through the student's WebRaider Portal under "Manage My Finances – Student Financial Aid."

Scholarships

The School of Health Professions has many scholarships available. These are administered through the Office of Admissions and Student Affairs. Scholarships are designed to reward, encourage and assist students in pursuing academic excellence and leadership. Scholarships are awarded on the basis of academic achievement (e.g., grade point average and GRE scores), extracurricular activities (e.g., involvement, volunteer history, and employment), personal interview, written essay, and in some cases, financial need. Some scholarships may have additional, very specific qualifications (county of residence, etc.).

A non-resident student may be eligible to pay in-state tuition rates if the student receives an institutional competitive scholarship totaling at least $1,000 for the academic year and/or summer for which the student is enrolled. Most scholarships are considered "competitive" in nature. However, not all meet the requirements necessary to waive out-of-state tuition for non-resident recipients.

Master of Science in Addiction Counseling (MSAC)

Our program is accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP).

500 Montgomery Street, Suite 350
Alexandria, VA, 22314
703.535.5990
http://www.cacrep.org

The Addiction Counseling Profession

Addiction counselors provide treatment and coordinate services for people with a range of substance use disorders, addictions, co-occurring disorders, and other behavioral health problems. These professionals conduct a range of activities, including appraisal, diagnosis, treatment planning, counseling, referral, and coordination with other health care providers. Addiction counselors provide individual, group, and family counseling and also deliver prevention programming. They help clients find ways to address their addiction with family and friends and improve their social relationships. Furthermore, they help clients rebuild professional relationships and, if necessary, reestablish their career.

Program Description

This Addiction Counselor education curriculum is designed to involve the learner as an active participant in the essential knowledge, skills, and attitudes necessary for competent practice in the field. The program conforms to the stated requirements for the graduate education of addiction counseling professionals as set forth by accrediting and certification bodies. It is the intent of the program to graduate students who are:

- Ready to acknowledge the importance of ensuring dignity, independence, and wellness for persons with substance use and/or behavioral health disorders;
- Dedicated to adhering to the key values, standards, and codes of ethics as set forth by state and national licensing and certifying bodies;
- Engaged in reflective, creative problem-solving;
- Sensitive to the collaborative therapeutic relationship;
- Involved in leadership roles to develop and enhance service delivery systems;
- Able to act as a responsible advocate for affected clients and their families.

Graduates of the program can seek employment in addiction, behavioral or mental health centers, state agencies, hospitals, healthcare facilities, non-profit organizations, insurance companies, health management organizations, educational institutions, prisons, probation and corrections agencies, and research organizations. The program actively recruits students from diverse populations and has a minority rate of approximately 55%. Since the inception of the Addiction Counseling program 89% of students who enter the program finish with their degree or certification requirements.

The Master of Science in Addiction Counseling (MSAC) degree program is a distance education, 60 credit hour graduate program, designed to provide a comprehensive exposure to the field of Addiction Counseling.

The MSAC program was designed specifically for people who cannot attend traditional types of graduate programs. The program is

ideal for: people who are currently employed; who live in rural or isolated areas; have family or personal responsibilities that prevent them from taking on-campus study; or who simply cannot take extended time off to attend school. TTUHSC uses a variety of methods and technologies to maximize the students' educational experience, including web and internet-based technologies, teleconferencing, web conferencing, hard copy, and on-site practicum and internship experiences. These and other strategies are employed to ensure that all students, regardless of geographic location, are able to participate to the maximum degree possible in all aspects of their program. Students are not required to come to the TTUHSC campus.

Clinical Education

Clinical education is an integral aspect of the program. The MSAC program complies with requirements for practicum and clinical internships as set forth by relevant accrediting and certifying organizations. In order to meet these requirements, Addiction Counseling students are required to undertake two forms of clinical education during their program. First, all students will participate in a 100 hour supervised addiction counseling practicum, which fosters personal growth, provides active learning experiences, enhances student insights into individual, group, and organizational behavior, and introduces students to counseling approaches and the issues that affect service delivery. Delivered on a distance basis, these experiences will combine applied instruction by faculty with supervised practicum experiences in off-campus settings, either at the student's place of employment (when appropriate) or in designated clinical settings.

Second, all students are required to undertake a 600-hour supervised internship in an addiction-focused clinical setting. Students undertaking supervised employment in addiction counseling settings may, with program approval, utilize these locales for their internship experiences. Students who are not employed shall be assisted in locating placements in appropriate, supervised clinical settings.

Professional Liability Insurance

All MSAC students are required to obtain and provide proof of individual counseling liability insurance before being allowed to participate in their clinical experiences.

Mission Statement

The mission of the Master of Science in Addiction Counseling (MSAC) program at Texas Tech University Health Sciences Center, School of Health Professions, is to educate students in evidence-based addiction counseling practices in order to produce competent and compassionate counseling and behavioral healthcare professionals.

Program Goals

The goal of the program is to prepare counselors with the counseling knowledge, attitudes, and skills to assist clients with substance use disorders, behavioral health issues, and/or addictions to use their own resources and opportunities to meet their developmental, educational, and interpersonal needs. To accomplish this goal, the program provides educational and practical experiences that allow students to meet the following knowledge and outcome expectations:

The objectives of our program are linked to our mission statement. They are to provide:

- Knowledge of Addiction Counseling: Educational experiences that facilitate the development of the knowledge, attitudes, and skills necessary to practice as qualified addiction counselors with a diverse population in a wide variety of contexts.

- Ethical and Cross Cultural Practice: Learning opportunities to support the ability to implement culturally responsive and ethically sound counseling practices throughout their careers, and to advocate for individuals with addiction concerns and the profession.

- Professional Ethics: Clinical training experiences focused on translating acquired knowledge, attitudes, and skills to evidence-based practice in a wide range of real-world opportunities.

The MSAC program strives to accomplish our mission, goals, and objectives by:

- Recruiting, educating, and graduating a diverse population of students who are prepared to provide addiction counseling services in a variety of employment settings.

- Providing a rigorous academic environment that provides a solid foundation for entry-level addiction counselors who meet national certification standards.
- Working closely with the public and private counseling communities to ensure well-trained graduates are considered valued employees.
- Developing a faculty that is valued by our students and the counseling community for our teaching, research, and service.
- Achieving the highest quality program possible within the constraints of available financial, human, technological, and time resources.

Developing commitment within students to empower individuals with substance use and/or behavioral disorders to identify and maximize their resources to meet their health-related, developmental, vocational, and educational goals.

Certification & Licensure

Upon completion of the MSAC program, students will possess the competencies and experiences necessary to take the National Counselor Examination for Licensure and Certification (NCE). Successful graduates can be credentialed as a National Certified Counselor (NCC) and apply for licensure as a professional counselor (LPC) in most states.

Admission to the Program

The MSAC program has a rolling admission policy, however, students applying for the Fall semester must submit an application by June 1 and those applying for the Spring semester must submit an application by November 1.

Individuals applying to the program should already hold a bachelor's degree from a regionally accredited college or university, preferably in a related area such as psychology, social work, counseling, special education, sociology, nursing, and related disciplines, however, all disciplines are considered. To be considered for admission, it is recommended that applicants meet one of the following GPA requirements:

- A minimum overall GPA of 2.7 from all previous institutions, OR
- A cumulative GPA of 2.7 in the last 60 semester hours of courses
- Applicants with lower GPA's may be considered based upon their work experience in an addiction-focused/human services or related field for (3) or more years

Prior work or volunteer experience in human service settings is considered a valuable attribute for applicants but is not mandatory. Graduate Record Examination (GRE) or Millers Analogies Test (MAT) scores are not required for entry into the MSAC program. Students may transfer up to 9 credit hours, if applicable, with program approval. Persons with disabilities are strongly encouraged to apply.

Application Process

Students will submit a completed application form, transcripts, 2 letters of reference, and a resume. Qualified candidates will be contacted for an interview.

It is the applicant's responsibility to assure that all supporting documentation is received by the Admissions Department. Application materials and detailed information on application procedures and Admission criteria can be accessed via the Texas Tech University Health Sciences Center, School of Health Professions web site at http://www.ttuhsc.edu/health-professions/admissions/application.aspx

Applications for non-degree-seeking students wishing to participate in selected MSAC courses are only accepted with prior departmental approval. Please contact the program director for more information.

MSAC Curriculum

CORE COURSEWORK

Courses		Credit Hours
HPAC 1002	Foundations for Interprofessional Collaborative Practice	0
HPAC 5301	Introduction to Counseling and Ethical Development	3
HPAC 5302	Counseling Theories	3
HPAC 5303	Human Growth and Development	3
HPAC 5304	Career Counseling	3
HPAC 5305	Psychopathology and Diagnosis	3
HPAC 5307	Multicultural Counseling	3
HPAC 5308	Research and Statistics	3
HPAC 5311	Addictions Counseling	3
HPAC 5312	Assessment	3
HPAC 5318	Abnormal Behavior: Treatment Planning and Case Management	3

Total Hours = 30

SPECIALTY COURSEWORK

Courses		Credit Hours
HPAC 5330	Foundations of Addiction Counseling and Ethical Development	3
HPAC 5331	Advanced Addiction Counseling	3
HPAC 5332	Neurobiology of Addiction	3
HPAC 6050	Comprehensive Exam	0

Total Hours = 9

EXPERIENTIAL COURSEWORK

Courses		Credit Hours
HPAC 5340	Micro Counseling Techniques	3
HPAC 5342	Group Counseling Techniques	3
HPAC 5344	Couples, Marriage, and Family Counseling Methods	3

Total Hours = 9

CLINICAL EXPERIENCES

**Requires individual professional counseling liability insurance policy*

Courses		Credit Hours
HPAC 5360	Practicum	3
HPAC 6001	Internship	9
		Total Hours = 12

Master of Science in Addiction Counseling (MSAC) Course Descriptions

HPAC 1002 Foundations for Interprofessional Collaborative Practice (0:0:0,O) An introduction to broad concepts related to interprofessional core competencies for healthcare providers.

HPAC 5301 Introduction to Counseling and Ethical Development (3:3:0,O) This course introduces students to the profession of counseling, including: the history of the counseling profession, accreditation, certification and licensure requirements, laws and regulations governing counseling, and the professional associations and code of ethics. The course is designed to explore and shape the role identity of persons providing direct counseling treatment intervention. Additional topics include telehealth, consultation, supervision, and self-care strategies.

HPAC 5302 Counseling Theories (3:3:0,O) This course provides an introduction to theories and models of counseling. Students will explore individual, group, and family counseling theories and practices. This course encourages students not only to explore theories of counseling and psychotherapy, but also their personal beliefs and values in an effort to develop a personal model of counseling.

HPAC 5303 Human Growth and Development (3:3:0,O) The purpose of this class is to develop an understanding of human growth and development honoring both normative and non-normative experiences. Students will use this knowledge to develop the skills and attitudes necessary to provide ethical counseling services to diverse individuals across the lifespan.

HPAC 5304 Career Counseling (3:3:0,O) This course is designed to inform students of the theories, roles and techniques in the practice of career counseling. Topics include career counseling theories, working with special populations, job development and placement, work-site modifications, assistive technology, and work place supports.

HPAC 5305 Psychopathology and Diagnosis (3:3:0,O) The purpose of this class is the exploration of the range of personality and behavioral disorders as described in the DSM-5. Focusing on process, students will explore descriptive criteria, etiology, assessment, and diagnosis. Additional topics include theories of psychopathology, common psychopharmacological treatments and medications, and equity and diversity issues.

HPAC 5307 Multicultural Counseling (3:3:0,O) This course focuses on the theories underlying multicultural counseling, identity development and social justice, and their application to practice. Topics addressed include race, ethnicity, gender, disability, and socioeconomic issues; racial and cultural identity formation; and oppression, privilege, social justice, and advocacy. Course materials and learning activities provide opportunities for students to apply their knowledge of multicultural and diversity theories and issues to examine their own development as counselors to specific client populations and to their communities.

HPAC 5308 Research and Statistics (3:3:0,O) This course provides the student with an exploration of current trends in research in counseling and related fields; basic research design, methodologies, analysis, and interpretation; a discussion of the applications of research methodologies, findings, and interpretations in guiding and evaluating counseling practice (e.g.-choosing interventions, planning assessments, evaluating results, etc.); and an introduction to research statistics.

HPAC 5311 Addictions Counseling (3:3:0,O) A thorough review of addictions including models of addiction, assessment, treatment, and interactions within interprofessional treatment settings. Common topics include specific issues related to alcohol, drugs, gambling, sex and food/eating.

HPAC 5312 Assessment (3:3:0,O) This course focuses on measurement and appraisal tasks for professional counseling. Special topics related to clinical rehabilitation, addiction, and clinical mental health counseling assessment are presented. Common topics include a comprehensive study of commonly used assessment tools as well as techniques.

HPAC 5318 Abnormal Behavior: Treatment Planning and Case Management (3:3:0,O) This course focuses on treatment planning and case management practices for abnormal human behavior. Topics include the principles of understanding dysfunction in human behavior, the case management process, service coordination, client advocacy, and treatment planning strategies.

HPAC 5330 Foundations of Addiction Counseling and Ethical Development (3:3:0,O) Introduction to the history and philosophy of addiction counseling, and the legislative and policy background underpinning the modern delivery of counseling services. This course will provide an exploration of the organizational structure of current addiction counseling services, and the legal and ethical standards that guide them. Discussion of societal issues, trends, and developments in addiction counseling, and their impact on treatment strategies and relevant issues pertaining to social justice and diversity will occur.

HPAC 5331 Advanced Addiction Counseling (3:3:0,O) This course provides an in-depth examination of the theories and models of addiction; sociocultural and multicultural factors that may increase an individual's risk of addiction or relapse; the impact of addiction on the individual and the family, and factors related to recovery, including wellness, resilience, and spirituality, an their impact on assessment, diagnosis, treatment, and outcomes. Provides an overview of prevention research and practice, and examines the counselor's role in designing and implementing prevention strategies in an interdisciplinary setting.

HPAC 5332 Neurobiology of Addiction (3:3:0,O) This course provides insight into the history of pharmacology as well as a detailed study of drug categories, etiology, understanding side effects, and an exploration of clinical applications. Topics will include contemporary healthcare issues related to research on the neurobiology of addiction, co-occurring disorders, neuroscience, and their impact on practice.

HPAC 5340 Micro Counseling Techniques (3:3:0,O) This course provides an in-depth focus on the exploration, development, and practice of micro-skills, the essential building blocks of counseling. Training allows for observed development and peer practice in a synchronous online setting. Advanced study of counseling-related telehealth is included. Students must have passed HPCR/HPMC/HPAC 5302 and 5307 or equivalents before enrolling.

HPAC 5342 Group Counseling Techniques (3:3:0,O) This course is designed to prepare counselors to become knowledgeable and skillful in using the theoretical constructs and technical skills of group counseling. Attention is given to theories of counseling, elements of leadership in group counseling, healthy and dysfunctional behaviors, culturally diverse perspectives, and legal and ethical issues. Training allows for observed development and peer practice in a synchronous online setting. Students must have passed HPCR/HPMC/HPAC 5340 before enrolling.

HPAC 5344 Couples, Marriage, and Family Counseling Methods (3:3:0,O) This course is designed to prepare counselors to use the theoretical constructs and technical skills used in couples, marriage and family counseling settings. Training allows for observed development and peer practice in a synchronous online setting. Students must have passed HPAC 5340 and 5342 before enrolling.

HPAC 5360 Practicum (3:3:7,H) This course provides for the application of theory and the development of counseling skills under supervision. Includes both synchronous online class and on-site experiences in settings that facilitate the development of basic counseling and practice skills. This course may be repeated for credit. Completion of this course is a prerequisite for the internship phase of the program. Students must have passed HPCR/HPMC/HPAC 5312 and 5342 before enrolling.

HPAC 6001 Internship (3-9:0:1-40,F) An immersion experience of supervised practice within a counseling services setting. Students will serve as a counseling professional under the supervision of a fully qualified practitioner. Mandatory group supervision by faculty in an online setting. Requires a total of 600 clock-hours of supervised clinical practice throughout the 9 required credit hours. Student will work with their advisor to determine the appropriate number of credit hours for which to register each semester. Students must have passed the Practicum course for their specialty before enrolling. Students may enroll in course multiple times.

HPAC 6050 Comprehensive Examination (0:0:0,O) The comprehensive examination is designed to assess counseling students' knowledge across the common domains, and relevant specialty area, of counselor preparation. The comprehensive exam is graded on a Pass/Fail basis.

Master of Science in Clinical Rehabilitation Counseling (MSCR)

We are a CACREP Accredited program as a Master of Science in Clinical Rehabilitation Counseling program through March 2029.

500 Montgomery Street, Suite 350
Alexandria, VA 22314
www.cacrep.org

Our Profession

Clinical Rehabilitation Counselors empower people with disabilities to make informed choices, build viable careers, and live more independently within the community. Through a counseling process, Clinical Rehabilitation Counselors provide and coordinate services for people with a wide range of physical and psychiatric disabilities, chronic conditions or diseases, and people who are in recovery from substance abuse disorders. Services include counseling to support clients in achieving their education and career goals through preparation activities and training for a specific occupation. Clinical Rehabilitation Counselors work with clients in a variety of settings, including schools and universities, state workforce systems, veteran's services, advocacy and non-profit agencies, employee assistance programs, private forensic practice, and hospital settings.

Program Description

This Clinical Rehabilitation Counseling curriculum is designed to involve the learner as an active participant in the essential knowledge, skills, and attitudes necessary for competent practice in the field; and conforms to the stated requirements for the graduate education of Clinical Rehabilitation Counselors as set forth by accrediting and certification bodies. It is the intent of the program to graduate students who are:

- Ready to acknowledge the importance of ensuring dignity, independence, and wellness for persons with disabilities;
- Dedicated to adhering to the key values, standards, and codes of ethics as set forth by state and national licensing and certifying bodies;
- Engaged in reflective, creative problem-solving;
- Responsive to the needs of persons with disabilities;
- Sensitive to the collaborative therapeutic relationship;
- Involved in leadership roles to develop and enhance services;
- Able to act as a responsible advocate for persons with disabilities.

Students who graduate from the MSCR program are prepared to work with clients in a variety of settings; including schools and universities, state workforce systems, veteran services, advocacy and non-profit agencies, employee assistance programs, private forensic practice, and hospital settings. The program actively recruits students from diverse populations.

The Master of Science in Clinical Rehabilitation Counseling (MSCR) degree program is a distance education, 60 semester credit hour graduate program, designed to provide a comprehensive exposure to the field of Clinical Rehabilitation Counseling.

The MSCR program was designed specifically for people who experience barriers to attending traditional types of graduate programs. The program is ideal for people who are employed full-time, who live in rural or isolated areas; have family or personal responsibilities

that prevent them from taking on-campus study; or who simply cannot take extended time off to attend school. TTUHSC uses a variety of methods and technologies to maximize the students' educational experience, including web and internet-based technologies, web conferencing teleconferencing, hard copy, and on-site practicum and internship experiences. These and other strategies are employed to ensure that all students, regardless of geographic location, are able to participate to the maximum degree possible in all aspects of their program. Students are not required to come to the TTUHSC campus.

Clinical Education

Clinical education is an integral aspect of the program. The MSCR program complies with all requirements for practicum and clinical internships as set forth by the relevant accrediting and certifying organizations. In order to meet these requirements, Clinical Rehabilitation Counseling students will be required to complete two clinical experiences during their program. First, all students will participate in a 100 hour supervised rehabilitation counseling practicum, which fosters personal growth, provides active learning experiences, enhances student insights into individual, group, and organizational behavior, and introduces students to counseling approaches and the rehabilitation issues that affect service delivery. Delivered on a distance basis, these experiences will combine applied instruction by faculty with supervised practicum experiences in approved clinical sites, either at the student's place of employment (when appropriate) or in approved rehabilitation settings.

Second, all students will be required to complete a 600-hour supervised internship in a rehabilitation setting. Students who are employed in a clinical rehabilitation counseling setting may, with program and employer approval, utilize these locales for their internship experiences.

Professional Liability Insurance

All MSCR students are required to obtain and provide proof of individual counseling liability insurance before being allowed to participate in their clinical experiences. This requirement is in effect as of Fall 2020.

Mission Statement

The mission of the Master of Science in Clinical Rehabilitation Counseling (MSCR) program at Texas Tech University Health Sciences Center forwards the mission of the University by providing a practitioner training program focused on the unique needs of diverse communities, especially in rural settings. We are committed to preparing entry-level clinical rehabilitation counselors to work competently and ethically through the mastery of evidence-based practices. Our focus centers on empowering people with disabilities to make informed choices, build viable careers, and live more independently within the community.

Program Goals

The goal of the program is to prepare students with the counseling and rehabilitation knowledge and skills to assist people with a wide range of physical and psychiatric disabilities, chronic conditions or diseases, and social disabilities in achieving their education and career goals.

The objectives of our program are linked to our mission statement. They are to provide:

- Educational experiences that facilitate the development of knowledge, attitudes, and skills necessary to practice as qualified clinical rehabilitation counselors with a diverse population in a wide variety of contexts.
- Learning opportunities to support the ability to implement culturally responsive and ethically sound clinical rehabilitation counseling practices throughout their careers, and to advocate for individuals with disabilities and the profession.
- Clinical training experiences focused on translating acquired knowledge, attitudes, and skills to evidence-based practice in a wide range of real-world opportunities.

The MSCR program strives to accomplish our mission, goals, and objectives by:

- Recruiting, educating, and graduating a diverse population of students who are prepared to provide clinical rehabilitation counseling services in a variety of employment settings.

- Providing a rigorous academic environment that provides a solid foundation to prepare entry-level Clinical Rehabilitation Counselors who meet national certification standards.
- Working closely with the public and private rehabilitation communities to ensure well-trained graduates are considered valued employees.
- Developing a faculty that is valued by our students and the rehabilitation community for our teaching, research, and service.
- Achieving the highest quality program possible within the constraints of available financial, human, technological, and time resources.
- Developing commitment within students to empower individuals with disabilities to identify and maximize their resources to meet their developmental, vocational, independent living, and educational needs.
- Instilling within students a commitment to developing a life-long commitment to learning professionalism continuing education throughout their career.

Certification and Licensure

Upon completion of the MSCR program, students will possess the competencies and experiences necessary to take the Certified Rehabilitation Examination (CRC), National Counselor Examination for Licensure and Certification (NCE) as a Nationally Certified Counselor (NCC). Successful graduates can be credentialed as a Certified Rehabilitation Examination (CRC), National Certified Counselor (NCC), and apply for licensure as a professional counselor (LPC) in most states.

Admission to the Program

The MSCR Program enrolls students in both the Fall and Spring Semesters. Students applying for the Fall semester must submit an application by June 1 and those applying for the Spring semester must submit an application by November 1.

Individuals applying to the program should already hold a bachelor's degree from a regionally accredited college or university, preferably in a related area such as psychology, social work, special education, sociology, nursing, and related disciplines, however, all disciplines are accepted. To be considered for admission, it is recommended that applicants meet one of the following GPA requirements:

- An overall grade point average GPA of 2.7 on a 4.0 scale OR
- A minimum cumulative GPA in the last 60 semester hours of courses of 2.7 or higher from all college credit is required.
- Applicants with lower GPAs may be considered based upon their work experience in a human services or related field for (3) or more years.

Graduate Record Examination (GRE) or Millers Analogies Test (M.A.T.) scores are NOT required for entry into the MSCR program. Prior work or volunteer experience in human service settings is considered a valuable attribute for applicants but is not mandatory. Students may transfer up to 9 credit hours, if applicable, with program approval. Persons with disabilities are strongly encouraged to apply.

Application Process

Students will submit a completed application form, transcripts, an essay from the applicant outlining their rationale for applying to the program, 2 letters of reference, and a resume. Qualified candidates may be contacted for an interview.

It is the applicant's responsibility to assure that all supporting documentation is received by the Office of Admissions and Student Affairs. Application materials and detailed information on application procedures and admission criteria can be accessed via the Texas Tech University Health Sciences Center, School of Health Professions website at **http://www.ttuhsc.edu/health-professions/admissions/application.aspx**. Applications for non-degree-seeking students wishing to participate in selected MSCR courses may be accepted with prior approval. Please contact the program director for more information.

MSCR Curriculum

CORE COURSEWORK

Courses		Credit Hours
HPCR 1002	Foundations for Interprofessional Collaborative Practice	0
HPCR 5301	Introduction to Counseling & Ethical Development	3
HPCR 5302	Counseling Theories	3
HPCR 5303	Human Growth & Development	3
HPCR 5304	Career Counseling	3
HPCR 5305	Psychopathology & Diagnosis	3
HPCR 5307	Multicultural Counseling	3
HPCR 5308	Research & Statistics	3
HPCR 5311	Addictions Counseling	3
HPCR 5312	Assessment	3
HPCR 5318	Abnormal Behavior: Treatment Planning and Case Management	3
		Total Hours = 30

SPECIALTY COURSEWORK

Courses		Credit Hours
HPCR 5330	Foundations of Rehabilitation Counseling & Ethical Development	3
HPCR 5331	Medical Aspects of Disability	3
HPCR 5332	Psychosocial Aspects of Disability	3
HPCR 6050	Comprehensive Examination	0
		Total Hours = 9

EXPERIENTIAL COURSEWORK

Course		Credit Hours
HPCR 5340	Micro Counseling Techniques	3
HPCR 5342	Group Counseling Techniques	3
HPCR 5344	Couples, Marriage, and Family Counseling Methods	3
		Total Hours = 9

CLINICAL EXPERIENCES

**Requires individual professional counseling liability insurance policy*

Course		Credit Hours
HPCR 5360	Practicum	3
HPCR 6001	Internship	9
		Total Hours = 12

Master of Science in Clinical Rehabilitation Counseling (MSCR) Course Descriptions

HPCR 1002 Foundations for Interprofessional Collaborative Practice (0:0:0,O) An introduction to broad concepts related to interprofessional core competencies for healthcare providers.

HPCR 5301 Introduction to Counseling and Ethical Development (3:3:0,O) This course introduces students to the profession of counseling, including: the history of the counseling profession, accreditation, certification and licensure requirements, laws and regulations governing counseling, and the professional associations and code of ethics. The course is designed to explore and shape the role identity of persons providing direct counseling treatment intervention. Additional topics include telehealth, consultation, supervision, and self-care strategies.

HPCR 5302 Counseling Theories (3:3:0,O) This course provides an introduction to theories and models of counseling. Students will explore individual, group, and family counseling theories and practices. This course encourages students not only to explore theories of counseling and psychotherapy, but also their personal beliefs and values in an effort to develop a personal model of counseling.

HPCR 5303 Human Growth and Development (3:3:0,O) The purpose of this class is to develop an understanding of human growth and development honoring both normative and non-normative experiences. Students will use this knowledge to develop the skills and attitudes necessary to provide ethical counseling services to diverse individuals across the lifespan.

HPCR 5304 Career Counseling (3:3:0,O) This course is designed to inform students of the theories, roles and techniques in the practice of career counseling. Topics include career counseling theories, working with special populations, job development and placement, work-site modifications, assistive technology, and work place supports.

HPCR 5305 Psychopathology and Diagnosis (3:3:0,O) The purpose of this class is the exploration of the range of personality and behavioral disorders as described in the DSM-5. Focusing on process, students will explore descriptive criteria, etiology, assessment, and diagnosis. Additional topics include theories of psychopathology, common psychopharmacological treatments and medications, and equity and diversity issues.

HPCR 5307 Multicultural Counseling (3:3:0,O) This course focuses on the theories underlying multicultural counseling, identity development and social justice, and their application to practice. Topics addressed include race, ethnicity, gender, disability, and socioeconomic issues; racial and cultural identity formation; and oppression, privilege, social justice, and advocacy. Course materials and learning activities provide opportunities for students to apply their knowledge of multicultural and diversity theories and issues to examine their own development as counselors to specific client populations and to their communities.

HPCR 5308 Research and Statistics (3:3:0,O) This course provides the student with an exploration of current trends in research in counseling and related fields; basic research design, methodologies, analysis, and interpretation; a discussion of the applications of research methodologies, findings, and interpretations in guiding and evaluating counseling practice (e.g.-choosing interventions, planning assessments, evaluating results, etc.); and an introduction to research statistics.

HPCR 5311 Addictions Counseling (3:3:0,O) A thorough review of addictions including models of addiction, assessment, treatment, and interactions within interprofessional treatment settings. Common topics include specific issues related to alcohol, drugs, gambling, sex and food/eating.

HPCR 5312 Assessment (3:3:0,O) This course focuses on measurement and appraisal tasks for professional counseling. Special topics related to clinical rehabilitation, addiction, and clinical mental health counseling assessment are presented. Common topics include a comprehensive study of commonly used assessment tools as well as techniques.

HPCR 5318 Abnormal Behavior: Treatment Planning and Case Management (3:3:0,O) This course focuses on treatment planning and case management practices for abnormal human behavior. Topics include the principles of understanding dysfunction in human behavior, the case management process, service coordination, client advocacy, and treatment planning strategies.

HPCR 5330 Foundations of Rehabilitation and Ethical Development (3:3:0,O) Introduction to the history and philosophy of rehabilitation and the legislative and policy background underpinning the modern delivery of rehabilitation counseling services. Exploration of the organizational structure of current rehabilitation counseling services, and the legal and ethical standards that guide them are emphasized. Discussion of societal issues, trends, and developments in rehabilitation, and their impact upon consumer review, choice, and personal responsibility.

HPCR 5331 Medical Aspects of Disability (3:3:0,O) Introduction to the medical aspects and implications of disability. Review of medical terminology, functional limitations, medical treatment and vocational implications as they apply to rehabilitation counseling. The identification of appropriate medical intervention resources is discussed.

HPCR 5332 Psycho-Social Aspects of Disability (3:3:0,O) The purpose of this class is the exploration of the psychological and social aspects of disability, with particular emphasis on the impact of the disability experience from the perspective of the person with disability. The implications of each disorder on the client's personal, social and occupational functioning will be addressed. Primary focus is centered on understanding the experience of disability, it's social and

psychological implications for persons with disabilities, family, support systems, and the general population.

HPCR 5340 Micro Counseling Techniques (3:3:0,O) This course provides an in-depth focus on the exploration, development, and practice of micro-skills, the essential building blocks of counseling. Training allows for observed development and peer practice in a synchronous online setting. Advanced study of counseling-related telehealth is included. Students must have passed HPCR/HPMC/HPAC 5302 and 5307 or equivalents before enrolling.

HPCR 5342 Group Counseling Techniques (3:3:0,O) This course is designed to prepare counselors to become knowledgeable and skillful in using the theoretical constructs and technical skills of group counseling. Attention is given to theories of counseling, elements of leadership in group counseling, healthy and dysfunctional behaviors, culturally diverse perspectives, and legal and ethical issues. Training allows for observed development and peer practice in a synchronous online setting. Students must have passed HPCR/HPMC/HPAC 5340 before enrolling.

HPCR 5344 Couples, Marriage, and Family Counseling Methods (3:3:0,O) This course is designed to prepare counselors to use the theoretical constructs and technical skills used in couples, marriage and family counseling settings. Training allows for observed development and peer practice in a synchronous online setting. Students must have passed HPCR/HPMC/HPAC 5340 and 5342 before enrolling.

HPCR 5360 Practicum (3:3:7,H) This course provides for the application of theory and the development of counseling skills under supervision. Includes both synchronous online class and on-site experiences in settings that facilitate the development of basic counseling and practice skills. This course may be repeated for credit. Completion of this course is a prerequisite for the internship phase of the program. Students must have passed HPCR/HPMC/HPAC 5312 and 5342 before enrolling.

HPCR 6001 Internship (3-9:0:1-40,F) An immersion experience of supervised practice within a counseling services setting. Students will serve as a counseling professional under the supervision of a fully qualified practitioner. Mandatory group supervision by faculty in an online setting. Requires a total of 600 clock-hours of supervised clinical practice throughout the 9 required credit hours. Student will work with their advisor to determine the appropriate number of credit hours for which to register each semester. Students must have passed the Practicum course for their specialty before enrolling. Students may enroll in course multiple times.

HPCR 6050 Comprehensive Examination (0:0:0,O) The comprehensive examination is designed to assess counseling students' knowledge across the common domains, and relevant specialty area, of counselor preparation. The comprehensive exam is graded on a Pass/Fail basis.

Master of Science in Clinical Mental Health Counseling (MSMH)

Our program is accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP).

500 Montgomery Street, Suite 350
Alexandria, VA, 22314
703.535.5990
http://www.cacrep.org

The MHC Profession

Mental health counselors provide and coordinate services for people with a range of behavioral health concerns. Providing treatment and support to individuals and families, services are provided in both individual and group contexts. Assisting clients in developing strategies to cope with and recover from the symptoms of behavioral disorders, emphasis is placed on returning to optimal emotional functioning. Many mental health counselors work in facilities that involve interprofessional relationships with other healthcare providers. This is done through a range of activities, including appraisal, individual and group counseling, treatment planning, referral and coordination with other service providers, and assisting clients to cope effectively with their environment and function as independently as possible.

Program Description

This Mental Health Counselor education curriculum is designed to involve the learner as an active participant in the essential knowledge, skills, and attitudes necessary for competent practice in the field; and conforms closely to the stated requirements for the graduate education of mental health counseling professionals as set forth by accrediting and certification bodies. It is the intent of the program to graduate students who are:

- Ready to acknowledge the importance of ensuring dignity, independence, and wellness for persons with behavioral disorders;
- Dedicated to adhering to the key values, standards, and codes of ethics as set forth by state and national licensing and certifying bodies;
- Engaged in reflective, creative problem-solving;
- Sensitive to the collaborative therapeutic relationship;
- Involved in leadership roles to develop and enhance service delivery systems;
- Able to act as a responsible advocate for affected clients and their families.

Graduates of the program can seek employment in behavioral or mental health centers, state agencies, hospitals, healthcare facilities, non-profit organizations, prisons, probation and corrections agencies, insurance companies, health management organizations, educational institutions, and research organizations. The program actively recruits students from diverse populations.

The Master of Science in Clinical Mental Health Counseling (MSMH) degree program is a distance education, 60 semester credit hour graduate program, designed to provide a comprehensive exposure to the field of Mental Health Counseling.

The MSMH program was designed specifically for people who experience barriers to attending traditional types of graduate programs. The program is ideal for people who are employed full-time, who live in rural or isolated areas; have family or personal responsibilities that prevent them from taking on-campus study; or who simply cannot take extended time off to attend school. TTUHSC uses a variety of methods and technologies to maximize the students' educational experience, including web and internet-based technologies, web

conferencing teleconferencing, hard copy, and on-site practicum and internship experiences. These and other strategies are employed to ensure that all students, regardless of geographic location, are able to participate to the maximum degree possible in all aspects of their program. Students are not required to come to the TTUHSC campus.

Clinical Education

Clinical education is an integral aspect of the program. The MSMH program complies with all requirements for practicum and clinical internships as set forth by the relevant accrediting and certifying organizations. In order to meet these requirements, Mental Health Counseling students will be required to undertake two forms of practical education during their program. First, all students will participate in a 100 hour supervised mental health counseling practicum, which fosters personal growth, provides active learning experiences, enhances student insights into individual, group, and organizational behavior, and introduces students to counseling approaches and the issues that affect service delivery. Delivered on a distance basis, these experiences will combine applied instruction by faculty with supervised practicum experiences in off-campus settings, either at the student's place of employment (when appropriate) or in designated clinical settings.

Second, all students are required to undertake a 600-hour supervised internship in a mental health focused clinical setting. Students employed in Mental Health Counseling settings may, with Program approval, utilize these locales for their internship experiences. Students not so employed shall be assisted in locating placements in appropriate, supervised clinical settings.

Professional Liability Insurance

All MSMH students are required to obtain and provide proof of individual counseling liability insurance before being allowed to participate in their clinical experiences.

Mission Statement

The mission of the Master of Science in Clinical Mental Health Counseling program at Texas Tech University Health Sciences Center is to prepare entry-level Mental Health Counselors to work competently and ethically through the mastery of evidence-based counseling practices. Our focus centers on producing competent and compassionate counseling professionals who understand the unique needs of persons with mental health concerns across their lifespans in diverse communities, workplaces, personal relationships, and activities.

Program Goals

The goal of the program is to prepare counselors with the counseling knowledge, attitudes, and skills to assist clients with mental health concerns to use their own resources and opportunities to meet their developmental, educational, and interpersonal needs.

The MSMH program strives to accomplish our mission, goals, and objectives by:

- Recruiting, educating, and graduating a diverse population of students who are prepared to provide mental health counseling services in a variety of employment settings.
- Providing a rigorous academic environment that provides a solid foundation to prepare entry-level Mental Health Counselors who meet national certification standards.
- Working closely with the public and private counseling communities to ensure well-trained graduates are considered valued employees.
- Developing a faculty that is valued by our students and the counseling community for our teaching, research, and service.
- Achieving the highest quality program possible within the constraints of available financial, human, technological, and time resources.
- Developing commitment within students to empower individuals with mental health concerns to identify and maximize their resources to meet their developmental, vocational, independent living, and educational needs.

- Instilling within students a commitment to developing a life-long commitment to learning professionalism continuing education throughout their career.

Certification and Licensure

Upon completion of the MSMH program, students will possess the competencies and experiences necessary to take the national certification examinations, and if successful, be credentialed as a Nationally Certified Counselor (NCC). In addition, graduates of the MSMH program will be able to take the National Counselor Examination (NCE) and apply for licensure as a Licensed Professional Counselor (LPC) in most states.

Admission to the Program

The MSMH Program has a rolling admission policy, however, students applying for the Fall semester must submit an application by June 1 and those applying for the Spring semester must submit an application by November 1.

Individuals applying to the program should already hold a bachelor's degree from a regionally accredited college or university, preferably in a related area such as psychology, social work, counseling, special education, sociology, nursing, and related disciplines, however, all disciplines are accepted.

To be considered for admission, applicants must meet the following requirement:

1. Bachelor's degree from an accredited university with a minimum overall GPA of 3.0 from all previous institutions, OR
2. Bachelor's degree from an accredited university with a minimum overall GPA of 3.0 in the last 60 semester hours of courses or ANY graduate study.

Graduate Record Examination (GRE) or Millers Analogies Test (M.A.T.) scores are NOT required for entry into the MSMH program. Prior work or volunteer experience in human service settings is considered a valuable attribute for applicants, but is not mandatory. Students may transfer up to 9 credit hours, if applicable, with program approval. Persons with disabilities are strongly encouraged to apply.

Application Process

Students will submit a completed application form, transcripts, letter from the applicant outlining their rationale for applying to the program, 2 letters of reference, and a resume. Qualified candidates may be contacted for an interview.

It is the applicant's responsibility to assure that all supporting documentation is received by the Admissions Department. Application materials and detailed information on application procedures and Admission criteria can be accessed via the Texas Tech University Health Sciences Center, School of Health Professions website at http://www.ttuhsc.edu/health-professions/admissions/application.aspx. Applications for non-degree-seeking students wishing to participate in selected MSMH courses may be accepted with prior approval. Please contact the program director for more information.

MSMH Curriculum

CORE COURSEWORK

Course		Credit Hours
HPMC 1002	Foundations for Interprofessional Collaborative Practice	0
HPMC 5301	Introduction to Counseling & Ethical Development	3
HPMC 5302	Counseling Theories	3
HPMC 5303	Human Growth & Development	3
HPMC 5304	Career Counseling	3
HPMC 5305	Psychopathology & Diagnosis	3

HPMC 5307	Multicultural Counseling	3
HPMC 5308	Research & Statistics	3
HPMC 5311	Addictions Counseling	3
HPMC 5312	Assessment	3
HPMC 5318	Abnormal Behavior: Treatment Planning and Case Management	3
		Total Hours = 30

SPECIALTY COURSEWORK

Course		Credit Hours
HPMC 5330	Foundations of Mental Health Counseling and Ethical Development	3
HPMC 5331	Crisis Counseling	3
HPMC 5332	Psychopharmacology for Mental Health	3
HPMC 6050	Comprehensive Examination	0
		Total Hours = 9

EXPERIENTIAL COURSEWORK

Course		Credit Hours
HPMC 5340	Micro Counseling Techniques	3
HPMC 5342	Group Counseling Techniques	3
HPMC 5340	Couples, Marriage, and Family Counseling Methods	3
		Total Hours = 9

CLINICAL EXPERIENCES

**Requires individual professional counseling liability insurance policy*

Course		Credit Hours
HPMC 5360	Practicum	3
HPMC 6001	Internship	9
		Total Hours = 12

Master of Science in Clinical Mental Health Counseling (MSMH) Course Descriptions

HPMC 1002 Foundations for Interprofessional Collaborative Practice (0:0:0,O) An introduction to broad concepts related to interprofessional core competencies for healthcare providers.

HPMC 5301 Introduction to Counseling and Ethical Development (3:3:0,O) This course introduces students to the profession of counseling, including: the history of the counseling profession, accreditation, certification and licensure requirements, laws and regulations governing counseling, and the professional associations and code of ethics. The course is designed to explore and shape the role identity of persons providing direct counseling treatment intervention. Additional topics include telehealth, consultation, supervision, and self-care strategies.

HPMC 5302 Counseling Theories (3:3:0,O) This course provides an introduction to theories and models of counseling. Students will explore individual, group, and family counseling theories and practices. This course encourages students not only to explore theories of counseling and psychotherapy, but also their personal beliefs and values in an effort to develop a personal model of counseling.

HPMC 5303 Human Growth and Development (3:3:0,O) The purpose of this class is to develop an understanding of human growth and development honoring both normative and non-normative experiences. Students will use this knowledge to develop the skills and attitudes necessary to provide ethical counseling services to diverse individuals across the lifespan.

HPMC 5304 Career Counseling (3:3:0,O) This course is designed to inform students of the theories, roles and techniques in the practice of career counseling. Topics include career counseling theories, working with special populations, job development and placement, work-site modifications, assistive technology, and work place supports.

HPMC 5305 Psychopathology and Diagnosis (3:3:0,O) The purpose of this class is the exploration of the range of personality and behavioral disorders as described in the DSM-5. Focusing on process, students will explore descriptive criteria, etiology, assessment, and diagnosis. Additional topics include theories of psychopathology, common psychopharmacological treatments and medications, and equity and diversity issues.

HPMC 5307 Multicultural Counseling (3:3:0,O) This course focuses on the theories underlying multicultural counseling, identity development and social justice, and their application to practice. Topics addressed include race, ethnicity, gender, disability, and socioeconomic issues; racial and cultural identity formation; and oppression, privilege, social justice, and advocacy. Course materials and learning activities provide opportunities for students to apply their knowledge of multicultural and diversity theories and issues to examine their own development as counselors to specific client populations and to their communities.

HPMC 5308 Research and Statistics (3:3:0,O) This course provides the student with an exploration of current trends in research in counseling and related fields; basic research design, methodologies, analysis, and interpretation; a discussion of the applications of research methodologies, findings, and interpretations in guiding and evaluating counseling practice (e.g.-choosing interventions, planning assessments, evaluating results, etc.); and an introduction to research statistics.

HPMC 5311 Addictions Counseling (3:3:0,O) A thorough review of addictions including models of addiction, assessment, treatment, and interactions within interprofessional treatment settings. Common topics include specific issues related to alcohol, drugs, gambling, sex and food/eating.

HPMC 5312 Assessment (3:3:0,O) This course focuses on measurement and appraisal tasks for professional counseling. Special topics related to clinical rehabilitation, addiction, and clinical mental health counseling assessment are presented. Common topics include a comprehensive study of commonly used assessment tools as well as techniques.

HPMC 5318 Abnormal Behavior: Treatment Planning and Case Management (3:3:0,O) This course focuses on treatment planning and case management practices for abnormal human behavior. Topics include the principles of understanding dysfunction in human behavior, the case management process, service coordination, client advocacy, and treatment planning strategies.

HPMC 5330 Foundations of Mental Health Counseling and Ethical Development (3:3:0,O) Introduction to the history and philosophy of mental health counseling, and the legislative and policy background underpinning the modern delivery of counseling services. Exploration of the organizational structure of current counseling services, and the legal and ethical standards that guide them are emphasized. Discussion of societal issues, trends, and developments in mental health counseling, and their impact upon client review, choice, and personal responsibility.

HPMC 5331 Crisis Counseling (3:3:0,O) This course provides an overview of the theories, techniques, and applications for counseling in crisis, trauma, and grief to include, but not limited to: natural disasters, man-made disasters, trauma, violent crime, military and/or community violence, and long term effects of crisis and trauma.

HPMC 5332 Psycho-Pharmacology for Mental Health (3:3:0,O) Introduction to the use of psychotropic medications for the treatment of mental disorders as applied to children, adolescents and adults. Review the function of the central nervous systems and the role of neurotransmitters on the etiology of mental disorders. Address basic principles of pharmacodynamics and pharmacokinetics. Provides knowledge essential for counselors to understand drug impact and raise informed questions when seeking psychiatric consultation.

HPMC 5340 Micro Counseling Techniques (3:3:0,O) This course provides an in-depth focus on the exploration, development, and practice of micro-skills, the essential building blocks of counseling. Training allows for observed development and peer practice in a synchronous online setting. Advanced study of counseling-related telehealth is included. Students must have passed HPCR/HPMC/HPAC 5302 and 5307 or equivalents before enrolling.

HPMC 5342 Group Counseling Techniques (3:3:0,O) This course is designed to prepare counselors to become knowledgeable and skillful in using the theoretical constructs and technical skills of group counseling. Attention is given to theories of counseling, elements of leadership in group counseling, healthy and dysfunctional behaviors, culturally diverse perspectives, and legal and ethical issues. Training allows for observed development and peer practice in a synchronous online setting. Students must have passed HPCR/HPMC/HPAC 5340 before enrolling.

HPMC 5344 Couples, Marriage, and Family Counseling Methods (3:3:0,O) This course is designed to prepare counselors to use the theoretical constructs and technical skills used in couples, marriage and family counseling settings. Training allows for observed development and peer practice in a synchronous online setting. Students must have passed HPCR/HPMC/HPAC 5340 and 5342 before enrolling.

HPMC 5360 Practicum (3:3:7,H) This course provides for the application of theory and the development of counseling skills under supervision. Includes both synchronous online class and on-site experiences in settings that facilitate the development of basic counseling and practice skills. This course may be repeated for credit. Completion of this course is a prerequisite for the internship phase of the program. Students must have passed HPCR/HPMC/HPAC 5312 and 5342 before enrolling.

HPMC 6001 Internship (3-9:0:1-40,F) An immersion experience of supervised practice within a counseling services setting. Students will serve as a counseling professional under the supervision of a fully qualified practitioner. Mandatory group supervision by faculty in an online setting. Requires a total of 600 clock-hours of supervised clinical practice throughout the 9 required credit hours. Student will work with their advisor to determine the appropriate number of credit hours for which to register each semester. Students must have passed the Practicum course for their specialty before enrolling. Students may enroll in course multiple times.

HPMC 6050 Comprehensive Examination (0:0:0,O) The comprehensive examination is designed to assess counseling students' knowledge across the common domains, and relevant specialty area, of counselor preparation. The comprehensive exam is graded on a Pass/Fail basis.

Bachelor of Science in Healthcare Management (BSHM)

Our Mission

The mission of the Bachelor of Science in Healthcare Management (BSHM) program is to prepare students to be successful, competent, and ethical managers in the evolving U.S. healthcare system. The program meets the needs of professionals and students who desire a flexible means to complete their degree in an online format.

Our Program

The BSHM program operates through online instruction to provide broad exposure to the skills, knowledge, and abilities needed to prepare students to enter management and leadership positions within healthcare organizations. Applicants can transfer college credits to complete the 120 credit hour requirement for a bachelor's degree. Transfer credits from previous courses are considered on a case-by-case basis. Students enrolled in the BSHM program are required to complete the final six academic hours through the BSHM program courses.

An applicant's previously completed college coursework determines which degree concentration is followed. The two-degree concentrations are the Healthcare Professional Concentration and the Executive Management Concentration.

Healthcare Professional Concentration

Concentration Options:

- Certified Radiology Technologists
- Emergency Medical Services
- Respiratory Care Practitioners
- Occupational Therapy Assistants
- Physical Therapy Assistants
- Licensed Vocational Nurses
- Clinical Laboratory Technicians
- Medical Assistant
- Dental Hygienist
- Pharmacy Technician
- Surgical Technician
- Medical Sonographer
- Nuclear Medicine Technologist

Students entering the Healthcare Professional Concentration must be certified, licensed, or registered in one of the health science concentration options as recognized by their specific clinical specialty's certification licensure or registration accrediting body. Other healthcare clinical concentrations will also be considered. Academic credits earned in one of the health science concentrations will also be considered. Academic credits earned in one of the health science concentrations may provide up to 48 Technical Credit Hours. Information on the Texas Common Core curriculum can be found at **https://www.ttuhsc.edu/health-professions/admissions/texas-common-core.aspx**.

The Healthcare Professional Concentration curriculum is composed of:

- Texas Common Core, 42 hours.
- BSHM Healthcare Professional Concentration Core Courses, 27 hours

- Advanced Case Study, 3 hours
- Technical/Approved Health Professions Credits, 48 hours

Executive Management Concentration

Students who do not have a certification, license, or registration may be considered for admission to the Executive Management Concentration. Students accepted must have completed at least 42 college credit hours and the Texas Common Core requirements. Information on the Texas Common Core curriculum can be found at https://www.ttuhsc.edu/health-professions/admissions/texas-common-core.aspx.

The Executive Management Concentration curriculum is composed of:

- Texas Common Core, 42 hours
- BSHM Healthcare Management Concentration Core Courses, 34 hours
- Healthcare Management Advanced Case Study, 8 hours
- Healthcare Management Electives, 12 hours
- Technical Credits, 24 hours.

Admission to the Program

The BSHM program begins three times a year, in the Summer, Fall, and Spring. The application will open on January 1 for Summer, March 1 for Fall, and August 1 for Spring. The deadline for receipt of the application, supporting documentation, and application fee is May 1st for Summer, August 1st for Fall, and December 1st for Spring.

Admission Requirements

Executive Concentration: Completion of the Texas Common Core curriculum for a baccalaureate degree, as well as a minimum cumulative grade point average (GPA) of 2.5 on a 4.0 scale effective summer 2019. Students admitted as an executive concentration student will be required to complete 24 hours of technical credits. These credits must be pre-approved by the academic advising committee.

Professional Concentration: A certification, license, or registration in a health science concentration, completion of the Texas Common Core curriculum for a baccalaureate degree, certification/licensure/registration in a professional field. Additionally, applicants must have a minimum cumulative grade point average (GPA) of 2.5 on a 4.0 scale.

To be considered for admission to the Bachelor of Science in Healthcare Management (BSHM) program, applicants must have a minimum cumulative grade point average (GPA) of 2.5 on a 4.0 scale. Additionally, applicants to the Bachelor of Science in Healthcare Management (BSHM) program must have completed all of the 42 credit hours of the Texas Common Core requirements to be considered for admission. Information on the Texas Common Core curriculum can be found at https://www.ttuhsc.edu/health-professions/admissions/texas-common-core.aspx.

Application Process

Applications may be submitted at any time. It is in the best interest of the applicant to apply as early as possible prior to the semester in which the applicant plans to begin. Applications must be completed online at https://www.ttuhsc.edu/health-professions/bachelor-of-science-healthcare-management/admissions-requirements.aspx.

Additional application materials should be sent to the Texas Tech University Health Sciences Center, Office of the Registrar, 3601 4th Street, Stop 8310, Lubbock, Texas 79430.

BSHM Curriculum

The program consists of a combination of technical semester credit hours and upper-level BSHM undergraduate courses. Courses will

rotate and students will register as they appear each semester. Students will select courses from their degree plan and register each semester to complete the 120-hour degree plan objective. The distance education format relies primarily on internet-based (HUB/SAKAI) course offerings. The program requires the completion of all required Texas Common Core courses prior to enrollment in the BSHM courses.

Technical Credits

The intent of the Technical Credit portion of the BSHM degree is to tailor the student's degree plan to achieve one's career goals following graduation.

Technical Credits – Healthcare Professional Concentration

Students entering the program as noted previously with training in a healthcare concentration from an accredited institution of higher education may qualify for transferring up to 48 clinical course credit(s) to the technical credit portion of the degree plan. Other healthcare clinical concentrations will also be considered.

A grade of a "C" or better is required for all technical credit coursework. All credits must be completed prior to enrollment in HPHM 4341.

Technical Credits - Executive Management Concentration

Students who qualify for the Executive Management Concentration must complete BSHM technical/elective courses.

A grade of a "C" or better is required for all technical credit coursework. All credits must be completed prior to enrollment in HPHM 4478.

Required Core Courses for the Healthcare Professional & Executive Management Concentrations

HPHM 4302	Healthcare Financial Management
HPHM 4303	Principles of Human Resources Management
HPHM 4304	Management & Leadership in Healthcare Organizations
HPHM 4311	Principles of Health Systems Policy & Management
HPHM 4313	Community Health Issues
HPHM 4314	Quality, Patient Safety, & Risk Management in Healthcare
HPHM 4317	Research Methods & Statistics in Healthcare
HPHM 4318	Healthcare Law & Ethics
HPHM 4334	Principles of Health Economics & Policy

Required Core Courses for the Executive Management Concentration

HPHM 4306	Healthcare Strategy & Marketing
HPHM 4401	Fundamentals of Health Informatics & Data Analytics

Advanced Capstone Courses

HPHM 4341	Advanced Interprofessional Case Study (Professional)
HPHM 4477	Case Study I - Strategic Management (Executive Concentration)

HPHM 4478 Case Study II - Healthcare Analysis & Policy Development (Executive Concentration)

Elective Courses

HPHM 4305 Fundamentals of Project Management

HPHM 4308 Principles of Organizational Behavior & Theory

HPHM 4312 Health Insurance & Managed Care

HPHM 4315 Regulatory Requirements in Long Term Care & Current Concepts in Gerontology

HPHM 4320 Long-Term Care Policy & Management

HPHM 4322 Principles of Revenue Cycle Management & Budgeting in Healthcare Organizations

HPHM 4323 Emergency Management Disaster Preparedness/Response & Recovery in Healthcare

HPHM 4324 Advanced Topics in Decision-Making & Leadership in Healthcare Organizations

HPHM 4333 Fundamentals of Population Health

HPHM 4335 Healthcare Operations & Supply Chain Management

HPHM 4336 Fundamentals of Epidemiology & Applied Biostatistics

HPHM 4337 Healthcare Business Innovation & Entrepreneurship

Bachelor of Science in Healthcare Management (BSHM) Course Descriptions

HPHM 1002 Foundations of Interprofessional Collaborative Practice with TeamSTEPPS Essentials (0:0:0,O) An introduction to broad concepts related to four interprofessional core competencies for healthcare providers.

HPHM 4302 Healthcare Financial Management (3:3:0,O) This course examines the basic principles of healthcare financial management. Topics will include healthcare financial systems, reporting, analysis, control, revenue planning, cost accounting, budgeting, and resource management allocation.

HPHM 4303 Principles of Human Resources Management (3:3:0,O) This course provides an overview of interpersonal dynamics, conflict resolution, and supervisor responsibilities. Topics include task analysis, developing position descriptions, recruiting, employee supervision, labor law, benefit programs, and employment contracts. Includes a review of case studies that demonstrate the impact of the human resource functions in healthcare organizations.

HPHM 4304 Management and Leadership in Healthcare Organizations (3:3:0,O) This course provides an overview of operations management and practical decision-making by analyzing the day-to-day operations for a healthcare supervisor. Identification of problem solving approaches to problems in personnel staffing, development, leading, directing, performance measurement, conflict, confrontation, and decision making.

HPHM 4305 Fundamentals of Project Management (3:3:0,O) This course provides an introduction to methods for management and launching of capital projects. Topics include financial consideration, procurement, site preparation, contracting, scheduling, and acceptance for operational readiness.

HPHM 4306 Healthcare Strategy and Marketing (3:3:0,O) This course covers the principles and application of marketing in healthcare delivery systems. Topics include the concepts and tools needed to conduct a community needs assessment, market research, and the creation of a business plan for the delivery of healthcare services.

HPHM 4308 Principles of Organizational Behavior and Theory (3:3:0,O) This course offers an overview of group and organizational structures and dynamics that affect individual, group and organizational behavior. Topics include performance, job satisfaction, motivation, groups, decision-making and task design.

HPHM 4311 Principles of Health Systems Policy and Management (3:3:0,O) This course provides a review of the healthcare system, both the public and private sector. It examines the system's organizational structures and the legislative, legal, and market impacts upon the current integrated delivery system. The course will review all levels such as healthcare systems (For-Profit and Not-For-Profit), inpatient facilities, hospital based services, outpatient services, home health agencies, sub-acute care facilities, and long term care. Topics include rural healthcare issues, areas designated as medically under-served and health professional shortage areas (HPSAs), legislation, healthcare operations, and regional networks.

HPHM 4312 Health Insurance and Managed Care (3:3:0,O) This course examines principles of managed care and contemporary issues in the organization and administration of managed healthcare organizations. Topics include claims processing, prospective payment systems, coding, revenue cycle management, fraud and abuse, and recover audit contractors.

HPHM 4313 Community Health Issues (3:3:0,O) This course provides a review of national, state, and local community agencies; preventive health services, public health, wellness, personal fitness, stress management, changing lifestyles, and analysis of national issues in the past 50 years. Includes a review of statistical principles used by management in the healthcare industry. Topics will cover community health in a defined population, determining prevalence rates, origins and causes, mortality and morbidity rates, and determining effectiveness of healthcare services.

HPHM 4314 Quality, Patient Safety, and Risk Management in Healthcare (3:3:0,O) The course provides and overview of the principles of quality management and enterprise risk management, including the concepts of Lean, the high reliability organization, and outcomes management. Quality review organizations and accreditors, as well as evidence based risk practices will be included.

HPHM 4315 Regulatory Requirements in Long Term Care and Current Concepts in Gerontology (3:3:0,O) This course provides an overview of the physical, psychosocial, cognitive, cultural, and environmental factors that affect a person as they age. Topics include financial and administrative issues that

affect patient services, adaptive equipment, assistive technology, and community resources. Also presented is an analysis and application of regulatory requirements of certified and licensed long term care facilities.

HPHM 4317 Research Methods and Statistics in Healthcare (3:3:0,O) This course provides an introduction to descriptive and inferential statistics, quantitative and qualitative research designs and how to apply these for clinical and managerial operations in a healthcare organization.

HPHM 4318 Healthcare Law and Ethics (3:3:0,O) This course provides an introduction to the regulatory, legal, and ethical issues related to the healthcare industry. Topics of study are: reimbursement issues, utilization review, privacy, patient rights, malpractice, and long-term regulatory issues; with regard to: federal, state, and local statutes.

HPHM 4320 Long-Term Care Policy and Management (3:3:0,O) This course provides an overview of the nursing home industry and the managerial requirements associated with long term care institutions. Topics of study focus on an introduction to: state and federal regulatory aspects of facility management, healthcare delivery systems, reimbursement and human resources administration.

HPHM 4322 Principles of Revenue Cycle Management and Budgeting in Healthcare Organizations (3:3:0,O) This course examines the revenue cycle process from the delivery of the service, the direct or third-party reimbursement processes and the overall auditing and compliance cycle. This operational process will be strategically linked in creating, operating and improving different types of budgets. Students will appy managerial and strategic decision-making techniques (while considering fiscal data, regulatory laws and policies) such as analyzing systems, incorporating organization goals, identifying performance issues, and exploring how budget systems impact employee and patient behaviors.

HPHM 4323 Emergency Management, Disaster Prepardness/Response and Recovery in Healthcare (3:3:0,O) This course focuses on examining health needs and health care delivery methods to prepare for, respond to, recover from, and mitigate impacts of crisis. Current and proposed federal, state, local, and private nonprofit disaster recovery methods are discussed. Further, this course addresses discussion of the cycle of planning, training, equipping, exercising and mission continuity processes as they relate to systems of health and wellness.

HPHM 4324 Advanced Topics in Decision-Making and Leadership in Healthcare Organizations (3:3:0,O) This course reviews the complexities involved in the decision-making processes and the inter and intra-relationships among leadership theories and techniques. Students will consider the following concepts, as applied to healthcare organizations, to include but not limited to, systems thinking, resource allocation, prioritization, comparative analysis, time management, indirect/direct elements of risk/return an influence. This course will advance students' understanding regarding efficient and effective decision-making and the overall impact tactic, operational and strategic leadership decisions can have on an organization's overall effectiveness.

HPHM 4333 Fundamentals of Population Health (3:3:0,O) This course explores the fundamentals of population health by addressing distinguishing characteristics of populations defined by geography, diagnosis and/or point of care. It describes how clinical and non-clinical evidence is used to measure health-related outcomes, analyze patterns, communicate results, identify best practices and implement effective interventions.

HPHM 4334 Principles of Health Economics and Policy (3:3:0,O) This course introduces the concepts of economic theory and analysis within the health services industry, focusing on healthcare consumption, supply and demand, healthcare resource allocation, and the impact of government intervention on the delivery of healthcare.

HPHM 4337 Healthcare Business Innovation and Entrepreneurship (3:3:0,O) This course provides an overview of the momentum of change in the healthcare industry. Business trends will be explored, as well as, methods to critically evaluate the potential of innovation technologies, start-up companies, or business entities. Creative partnering through alliances, mergers, and acquisitions will be explored. Interaction with the TTU Innovation Hub and other TTUHSC related resources will occur.

HPHM 4341 Advanced Interprofessional Case Study (Professional) (3:3:0,O) This course is the capstone course for the professional concentration. This course focuses upon written, oral, audio and visual communication skills as practiced with the scope of a healthcare leader or manager in their daily work. Students in this course will work as a member of an interdisciplinary team to develop a comprehensive plan for a new healthcare facility, clinic, product line or service. The final project will allow the student to demonstrate competency across various business domains with the BSHM program.

HPHM 4401 Fundamentals of Health Informatics and Data Analytics (4:4:0,O) A course in basic concepts and tools for collecting and analyzing data used by healthcare organizations. Basic processes of creating, maintaining, archiving medical information, and managing for legal requirements, security, privacy, and confidentiality will be explored.

HPHM 4477 Case Study I-Strategic Management (Executive Concentration) (4:4:0,O) Students enhance their knowledge within the Healthcare field by application of the concepts, principles and tools acquired from the various healthcare management courses. Topics addressed include: financial analysis, industry analysis, internal analysis, competitive advantage, marketing, strategic analysis and planning.

HPHM 4478 Case Study II Healthcare Analysis and Policy Development (Executive) (4:4:0,O) In this executive concentration capstone course, students apply their knowledge within the healthcare field by the ethical and innovation application of the concepts, principles and tools acquired from the various program courses. Students address: financial analysis, industry analysis, internal analysis, marketing, strategic analysis, planning, as well as, policy analysis and development. Students will be required to complete a guided independent research project and problem-based case studies. Prerequisites include: HPHM 4302, 4303, 4304, 4306, 4311, 4313, 4314, 4317,4318, 4334, 4401 and 4477.

Master of Science in Healthcare Administration (MSHA)

Program Description

The goal of the Master of Science in Healthcare Administration is to offer a superior graduate level program consisting of evidence-based research, a focused management-based curriculum, individualized instruction, and mechanisms for personal and professional growth as a leader in the healthcare field.

The MSHA Program is designed to provide practicing clinicians, allied health providers, and administrators with skills that will allow them to excel as healthcare leaders. The increasing complexity of theoretical and applied knowledge required for healthcare leadership and the growing demand for innovative problem solvers have necessitated the development of a cost-effective graduate program geared toward future healthcare leaders.

The degree is entirely online, designed specifically to increase its availability to as many working healthcare leaders as possible. The use of Sakai, in association with the Internet, will provide a top-quality educational program requiring no coursework requirements on a traditional campus. The program is focused towards the practicing clinician, allied health provider, administrator, or other executive working in, or supporting, the healthcare system.

Admission to the Program

The MSHA program begins three times a year, in the Summer, Fall and Spring. The application period will open on January 1st for Summer, March 1st for Fall, and on August 1st for Spring. The deadline for the receipt of the application, supporting documentation, and application fee is April 1st for Summer, July 1st for Fall and December 1st for Spring.

Application Process

To be considered for admission, applicants must have:

- Bachelor's degree from an accredited university with a minimum cumulative GPA of 2.7.

The following are considered in the admissions process:

- All official college transcripts
- Minimum cumulative GPA of 2.7

It is in the best interest of the applicant to apply as early as possible. Applicants should understand that fulfillment of the basic requirements does not guarantee admission.

MSHA Curriculum

MSHA students entering the program will be required to complete 36 semester hours with passing grades and a cumulative GPA of 2.7 or better to meet degree requirements. They will include 30 hours of core class requirements and 6 hours of elective courses. HPHA 5314, Healthcare Administration Capstone, will be taken in the student's last term.

REQUIRED CORE COURSES

HPHA 5305	Principles of Management & Leadership in Healthcare
HPHA 5306	Healthcare Delivery System
HPHA 5307	Human Resources Management in Healthcare

HPHA 5309	Healthcare Research Methods & Statistics
HPHA 5310	Health Law & Ethics
HPHA 5311	Healthcare Finance
HPHA 5312	Strategic Planning & Marketing in Healthcare
HPHA 5313	Healthcare Economics & Policy
HPHA 5314	Healthcare Administration Capstone
HPHA 5330	Health Informatics & Data Analytics

ELECTIVES*

HPHA 5302	Medical Sociology
HPHA 5318	Organizational Behavior in Healthcare
HPHA 5320	Health Insurance & Reimbursement
HPHA 5321	Healthcare Operations & Supply Chain Management
HPHA 5322	Quality, Patient Safety & Risk Management
HPHA 5323	Healthcare Business Innovation & Entrepreneurship
HPHA 5324	Health Systems Engineering
HPHA 5325	Long Term Care Administration
HPHA 5326	Healthcare Decision Sciences and Business Analysis
HPHA 5327	Comparative Health Systems

**Students must complete any two of the elective courses.*

Master of Science in Healthcare Administration (MSHA) Course Descriptions

HPHA 1002 Foundations for Interprofessional Collaborative Practice (0:0:0,O) An introduction to broad concepts related to interprofessional core competencies for healthcare providers.

HPHA 5302 Medical Sociology (3:6:0,O) This course provides an introduction to central topics in the sociology of medicine, health, and illness. Topics include but are not limited to: epidemiology, history of medicine in the West, public health, the social stratification of illness, the medical profession, and health care provision, access and delivery. In exploring these topics, emphasis will be placed on how socio-economic factors such as age, gender, ethnicity, race, and financial status affect health care.

HPHA 5305 Principles of Management & Leadership in Healthcare (3:6:0,O) The emphasis of this course is on understanding the principles of management and leadership theory and application in health organizations. Topics include personality assessments, leadership competencies and skills, leadership models, outcomes measurement, and ethics in health leadership. Key concepts of management including planning, organizing, decision making, motivation, and communication will be addressed.

HPHA 5306 Healthcare Delivery System (3:6:0,O) This course provides an introduction to healthcare services, offering students an overview of the U.S. healthcare delivery system and the important components of the system. The course will examine the healthcare delivery system broadly and explore contemporary issues affecting the institutions that provide healthcare and are designed to protect the health of the American public. The course will cover the historical development of the U.S. healthcare system, the changing roles of healthcare providers, major health programs, determinants of health, disparities in health, and healthcare finance. The goal of the course is to provide students with the necessary skills to be effective participants in efforts to improve the U.S. healthcare system.

HPHA 5307 Human Resources Management in Healthcare (3:6:0,O) This course introduces students to the principles of managing human resources in healthcare organizations. Concepts presented include supervision, teamwork, recruitment and selection, performance management and evaluation, compensation and benefits, motivation, training and development, and employment and labor law. Students will learn effective methods of strategically managing human resources and incorporating these within the overall strategic plan of the organization.

HPHA 5309 Healthcare Research Methods and Statistics (3:3:0,O) This course will provide a broad framework for understanding and applying commonly used research methodologies and data analysis techniques in healthcare management. The course will review quantitative and qualitative research, research design, and methodology. Basic concepts of interpretation and application of statistics such as types of distributions, concepts of significance testing, and

introduction of basic descriptive and inferential statistics are included. The goals are to prepare students to design, analyze, interpret, report, and critically evaluate research.

HPHA 5310 Health Law and Ethics (3:6:0,O) This course provides an overview of legal, regulatory, and ethical issues in healthcare. Topics include patient consent, privacy, confidentiality, torts, contract law, corporate liability, malpractice, antitrust, fraud and abuse, and key federal regulations. Students will analyze and discuss legal and ethical considerations in providing health services and learn to apply these considerations in decision making as a healthcare administrator.

HPHA 5311 Healthcare Finance (3:3:0,O) This course introduces students to the core concepts of financial management in healthcare, including interpretation of financial reports, financial ratio analysis, cost and profit analysis, planning and budgeting, time value analysis, financing, investments, capital budgeting, and current accounts management. The purpose of this class is to assist the student in developing the necessary analytical ability, attitudes, and decision making skills required of a healthcare manager in a changing environment.

HPHA 5312 Strategic Planning & Marketing in Healthcare (3:6:0,O) The purpose of this class is to integrate key aspects of strategic planning and marketing in healthcare. The class examines strategic planning techniques, concepts, and practices, as well as leadership responsibilities regarding the creation of mission, vision, goals, and objective statements. The course integrates marketing with strategic planning such that the key elements of marketing and the complementary roles of public relations, advertising and sales are captured in the organizational analysis.

HPHA 5313 Healthcare Economics and Policy (3:6:0,O) The course introduces the concepts of economic theory and analysis within the health services industry focusing on healthcare consumption, supply and demand, healthcare resource allocation, and the impact of health policy on the delivery of healthcare in the U.S.

HPHA 5314 Healthcare Administration Capstone (3:3:0,O) This course provides students the opportunity to integrate and apply key competencies and skills learned in the MSHA program to a healthcare setting. MSHA students will work with the course instructor to develop and structure a project to be completed over the course of a semester. This final project will allow the student to demonstrate the ability to analyze and propose solutions to healthcare issues, as well as to exhibit proficiency in business writing, research, and project development and implementation skills common among senior healthcare executives. Prerequisite: This course may only be taken in the student's last semester of the program. Students must have approval from the Program Director in order to register for this course.

HPHA 5318 Organizational Behavior in Healthcare (3:6:0,O) The purpose of this course is to help students gain an appreciation of the theory of organizations and how this theory shapes the way healthcare administrators come to think about their administrative responsibilities and the range of options available to them through the literature. Understanding the attitudes and behaviors of individuals and groups in healthcare organizations will also be emphasized. Students will learn about organizational strategy that draws from and integrates a number of disciplines, including organization theory, finance, planning, and marketing. Course concepts will be applied in a series of cases.

HPHA 5320 Health Insurance and Reimbursement (3:6:0,O) This course provides an overview of health insurance, including public and private payers, self-funded insurance, managed care, health insurance markets, and policy changes that impact these areas. In addition, the course will cover healthcare payment systems and reimbursement methods of various payers in the health services marketplace.

HPHA 5321 Healthcare Operations & Supply Chain Management (3:6:0,O) This course examines operational issues in healthcare management. Healthcare operations topics include systems analysis, forecasting, facility location and design models, decision analysis techniques, inventory control, CQI and statistical quality control. The course also integrates key components of supply chain management, including strategic sourcing and purchasing, acquisition, logistics, inventory management, and point of use applications, providing understanding, knowledge and evaluation models to operate and manage an organization's enterprise resource planning and management system.

HPHA 5322 Quality, Patient Safety, & Risk Management (3:6:0,O) This course introduces the concepts of health care risk and quality management and how these domains go hand in hand with patient safety. Class work addresses the major elements of risk management program including claims management, risk financing, risk reduction, and emergency preparedness. A "systems" approach to health care quality is provided including performance improvement methodologies, tools and strategic initiatives to address continuous quality improvement. Appropriate standards, laws, and regulatory requirements are covered with special emphasis on compliance with Joint Commission accreditation.

HPHA 5323 Healthcare Business Innovation & Entrepreneurship (3:6:0,O) This course will explore the evolving world of healthcare innovation from a business perspective to include the entrepreneurial side of human health advancements. Technology is an institutional imperative driving innovation through value-chain optimization and strategic convergence and/or divergence across all sub-sectors within healthcare, including sectors such as pharmaceuticals, biotechnology, medical devices and health informatics. The course will evaluate the entrepreneurial process, strategic thinking and new venture exploration while focusing on rapid growth and technological implementation and close considerations within the healthcare sector.

HPHA 5324 Health Systems Engineering (3:3:0,O) This course examines healthcare operations from a systems perspective. Systems modeling and system design concepts will be considered in the design and operationof healthcare systems. Key healthcare systems that focus on patient flow, patient safety, capacity planning, inventory management and supply chain management, and staffing are considered. In designing and operating healthcare facilities it is also important to consider how different parts of the system interact with one another and to consider how changes made to one part of a system can have unintended consequences on other parts of the system. This course also considers key aspects of change management and challenges of implementing process improvement.

HPHA 5325 Long Term Care Administration (3:3:0,O) This course provides an overview of the physical, psychosocial, cognitive, cultural, and environmental factors that affect a person as they age. Topics include financial and administrative issues that affect patient services, adaptive equipment, assistive technology, and community resources. Also present is an analysis and application of regulatory requirements of certified and licensed long term care facilites.

HPHA 5326 Healthcare Decision Sciences & Business Analysis (3:6:0,O) This course emphasizes data management and analytic skills and knowledge to support healthcare organizations in improving patient safety, quality, population health and business/marketing stratgies. Topics include master data management principles, advanced analytics, electronic clinical quality measures, pay for performance, process control charts and fundamentals of quality improvement science. Students will develop skills in team-based projects to manage and analyze healthcare data to support improvement strategies.

HPHA 5327 Comparative Health Systems (3:3:0,O) This course provides an introduction to healthcare services from a global perspective, offering U.S. students a comparative overview of various global and international healthcare delivery systems. The course will examine these systems broadly in terms of their core business models as well as explore contemporary issues, best-practices, and innovations that may have utility for the U.S. health system and practicing executives. The goal of the course is to provide students with an integrative view and perspective of health systems around the world to add to the healthcare body of knowledge from a systems perspective.

HPHA 5330 Health Informatics & Data Analytics (3:6:0,O) This course will introduce the student to the uses of information technology and data analytics as they apply to healthcare, including the basic structure and function of computers, information retrieval, electronic health records, physician order entry, telemedicine, consumer health informatics, security, privacy, and confidentiality in the electronic environment, HIPAA regulations, ethics, computerized medical imaging, decision support, and the use of data analytics in healthcare. The course will provide the student with the fundamental knowledge necessary to practice within the modern healthcare environment and communicate with information technology (IT) personnel.

Graduate Certificate in Health Informatics and Data Analytics (CRHI)

Program Description

A Graduate Certificate in Health Informatics and Data Analytics (CRHI) is available for working professionals who would like to expand their knowledge and further their education in health informatics and data analytics without pursuing a full graduate degree in healthcare administration. It is a flexible, 100% online, 12-semester hour program, provided in an accelerated 8-week format.

Up to two courses that meet the academic requirements are eligible to transfer into the Master of Science in Healthcare Administration program should you choose to continue toward the MSHA degree.

Admission to the Program

The CRHI certificate program begins three times a year, in the Summer, Fall and Spring. The application period will open on January 1st for Summer, March 1st for Fall, and August 1st for Spring. The deadline for the receipt of the application, supporting documentation, and application fee is April 1st for Summer, July 1st for Fall and December 1st for Spring.

Application Process

To be considered for admission, applicants must have one of the following qualifications:

- Bachelor's degree from an accredited university with a minimum cumulative GPA of 2.7.

The following are considered in the admissions process:

- All official college transcripts
- Minimum cumulative GPA of 2.7

It is in the best interest of the applicant to apply as early as possible. Applicants should understand that fulfillment of the basic requirements does not guarantee admission.

CRHI Curriculum

Students admitted to the CRHI program will be required to complete 12 semester credit hours with passing grades and a cumulative GPA of 2.7 or better to meet the certificate requirements.

REQUIRED COURSES

HPHC 5309	Healthcare Research Methods & Statistics
HPHC 5326	Healthcare Decisions Sciences & Business Analysis
HPHC 5330	Health Informatics & Data Analytics

ELECTIVES*

HPHC 5306	Healthcare Delivery System
HPHC 5311	Healthcare Finance
HPHC 5321	Healthcare Operations & Supply Chain Management

**Students must complete one of the electives.*

Optional Electives for MSHA Graduates*

HPHC 5322	Quality, Patient Safety, and Risk Management
HPHC 5323	Healthcare Business & Entrepreneurship
HPHC 5324	Health Systems Engineering

Four courses are required for this certificate.

A maximum of two courses may be transferred from the MSHA program to the Certificate Program or from the Certificate ot the MSHA Program.

*It is preferred that students take courses 5326 and 5321 within the Certificate program. If an MSHA student has taken either, or both, of those courses as electives within the MSHA program, then they may take an optional elective to make up for each of those courses.

CHRI graduates may enroll in the MSHA program. They may transfer two core courses from the Certificate Program into the MSHA program. If they took 5306 or 5311 within the certificate program they'll need to take an additional elective within the MSHA program to make up for that core course.

Graduate Certificate in Health Informatics and Data Analytics (CRHI) Course Descriptions

HPHC 5302 Medical Sociology (3:3:0,O) This course provides an introduction to central topics in the sociology of medicine, health, and illness. Topics include but are not limited to: epidemiology, history of medicine in the West, public health, the social stratification of illness, the medical profession, and health care provision, access and delivery. In exploring these topics, emphasis will be placed on how socio-economic factors such as age, gender, ethnicity, race, and financial status affect health care.

HPHC 5306 Healthcare Delivery System (3:3:0,O) This course provides an introduction to healthcare services, offering students an overview of the U.S. healthcare delivery system and the important components of the system. The course will examine the healthcare delivery system broadly and explore contemporary issues affecting the institutions that provide healthcare and are designed to protect the health of the American public. The course will cover the historical development of the U.S. healthcare system, the changing roles of healthcare providers, major health programs, determinants of health, disparities in health, and healthcare finance. The goal of the course is to provide students with the necessary skills to be effective participants in efforts to improve the U.S. healthcare system.

HPHC 5309 Healthcare Research Methods and Statistics (3:3:0,O) This course will provide a broad framework for understanding and applying commonly used research methodologies and data analysis techniques in healthcare management. The course will review quantitative and qualitative research, research design, and methodology. Basic concepts of interpretation and application of statistics such as types of distributions, concepts of significance testing, and introduction of basic descriptive and inferential statistics are included. The goals are to prepare students to design, analyze, interpret, report, and critically evaluate research.

HPHC 5311 Healthcare Finance (3:3:0,O) This course introduces students to the core concepts of financial management in healthcare, including interpretation of financial reports, financial ratio analysis, cost and profit analysis, planning and budgeting, time value analysis, financing, investments, capital budgeting, and current accounts management. The purpose of this class is to assist the student in developing the necessary analytical ability, attitudes, and decision making skills required of a healthcare manager in a changing environment.

HPHC 5318 Organizational Behavior in Healthcare (3:3:0,O) The purpose of this course is to help students gain an appreciation of the theory of organizations and how this theory shapes the way healthcare administrators come to think about their administrative responsibilities and the range of options available to them through the literature. Understanding the attitudes and behaviors of individuals and groups in healthcare organizations will also be emphasized. Students will learn about organizational strategy that draws from and integrates a number of disciplines, including organization theory, finance, planning, and marketing. Course concepts will be applied in a series of cases.

HPHC 5321 Healthcare Operations and Supply Chain Management (3:3:0,O) This course examines operational issues in healthcare management. Healthcare operations topics include systems analysis, forecasting, facility location and design models, decision analysis techniques, inventory control, CQI and statistical quality control. The course also integrates key components of supply chain management, including strategic sourcing and purchasing, acquisition, logistics, inventory management, and point of use applications, providing understanding, knowledge and evaluation models to operate and manage an organization's enterprise resource planning and management system.

HPHC 5322 Quality, Patient Safety, & Risk Management (3:3:0,O) This course introduces the concepts of health care risk and quality management and how these domains go hand in hand with patient safety. Class work addresses the major elements of risk management program including claims management, risk financing, risk reduction, and emergency preparedness. A "systems" approach to health care quality is provided including performance improvement methodologies, tools and strategic initiatives to address continuous quality improvement. Appropriate standards, laws, and regulatory requirements are covered with special emphasis on compliance with Joint Commission accreditation.

HPHC 5323 Healthcare Business Innovation & Entrepreneurship (3:3:0,O) This course will explore the evolving world of healthcare innovation from a business perspective to include the entrepreneurial side of human health advancements. Technology is an institutional imperative driving innovation through value-chain optimization and strategic convergence and/or divergence across all sub-sectors within healthcare, including sectors such as pharmaceuticals, biotechnology, medical devices and health informatics. The course will evaluate the entrepreneurial process, strategic thinking and new venture exploration while focusing on rapid growth and technological implementation and close considerations within the healthcare sector.

HPHC 5324 Health Systems Engineering (3:3:0,O) This course examines healthcare operations from a systems perspective. Systems modeling and system design concepts will be considered in the design and operationof healthcare systems. Key healthcare systems that focus on patient flow, patient safety, capacity planning, inventory management and supply chain management, and staffing are considered. In designing and operating healthcare facilities it is also important to consider how different parts of the system interact with one another and to consider how changes made to one part of a system can have unintended consequences on other parts of the system. This course also considers key aspects of change management and challenges of implementing process improvement.

HPHC 5326 Healthcare Decision Sciences and Business Analysis (3:3:0,O) This course emphasizes data management and analytic skills and knowledge to support healthcare organizations in improving patient safety, quality, population health and business/marketing stratgies. Topics include master data management principles, advanced analytics, electronic clinical quality measures, pay for performance, process control charts and fundamentals of quality improvement science. Students will develop skills in team-based projects to manage and analyze healthcare data to support improvement strategies.

HPHC 5330 Health Informatics and Data Analytics (3:3:0,O) This course will introduce the student to the uses of information technology and data analytics as they apply to healthcare, including the basic structure and function of computers, information retrieval, electronic health records, physician order entry, telemedicine, consumer health informatics, security, privacy, and confidentiality in the electronic environment, HIPAA regulations, ethics, computerized medical imaging, decision support, and the use of data analytics in healthcare. The course will provide the student with the fundamental knowledge necessary to practice within the modern healthcare environment and communicate with information technology (IT) personnel.

Graduate Certificate in Healthcare Finance and Economics (CRHF)

Program Description

A Graduate Certificate in Healthcare Finance and Economics (CRHF) is available for working professionals who would like to expand their knowledge and further their education in healthcare finance and economics without pursuing a full graduate degree in healthcare administration. It is a flexible, 100% online, 12-semester hour program, provided in an accelerated 8-week format.

Up to two courses that meet the academic requirements are eligible to transfer into the Master of Science in Healthcare Administration program should you choose to continue on towards the MSHA degree.

Admission to the Program

The CRHF certificate program begins three times a year, in the Summer, Fall and Spring. The application period will open on January 1st for Summer, March 1st for Fall, and August 1st for Spring. The deadline for the receipt of the application, supporting documentation, and application fee is April 1st for Summer, July 1st for Fall and December 1st for Spring.

Application Process

To be considered for admission, applicants must have one of the following qualifications:

- Bachelor's degree from an accredited university with a minimum cumulative GPA of 2.7.

The following are considered in the admissions process:

- All official college transcripts
- Minimum cumulative GPA of 2.7

It is in the best interest of the applicant to apply as early as possible. Applicants should understand that fulfillment of the basic requirements does not guarantee admission.

CRHF Curriculum

Students admitted to the CRHF program will be required to complete 12 semester credit hours with passing grades and a cumulative GPA of 2.7 or better to meet the certificate requirements.

REQUIRED COURSES

HPHC 5311	Healthcare Finance
HPHC 5313	Healthcare Economics & Policy
HPHC 5320	Health Insurance & Reimbursement*

ELECTIVES*

HPHC 5321	Healthcare Operations & Supply Chain Management*
HPHC 5323	Business Innovation & Entrepreneurship in Healthcare*

**Students must complete one of the electives.*

Optional Electives for MSHA graduates*

HPHC 5318 Organizational Behavior in Healthcare*

HPHC 5322 Quality, Patient Safety, and Risk Management*

Four courses are required for this certificate.

A maximum of two core courses (5311 and 5313) may be transferred from the MSHA program to the Certificate program.

*It is preferred that students take courses 5320 and either 5321 or 5323 within the Certificate program. If an MSHA students has taken one or two of those courses as electives within the MSHA program, then they may take an optional elective to make up for each of those courses.

CRHF graduates may enroll in the MSHA program. They may transfer two core courses from the Certificate Program into the MSHA program.

Graduate Certificate in Healthcare Finance and Economics (CRHF) Course Descriptions

HPHC 5302 Medical Sociology (3:3:0,O) This course provides an introduction to central topics in the sociology of medicine, health, and illness. Topics include but are not limited to: epidemiology, history of medicine in the West, public health, the social stratification of illness, the medical profession, and health care provision, access and delivery. In exploring these topics, emphasis will be placed on how socio-economic factors such as age, gender, ethnicity, race, and financial status affect health care.

HPHC 5311 Healthcare Finance (3:3:0,O) This course introduces students to the core concepts of financial management in healthcare, including interpretation of financial reports, financial ratio analysis, cost and profit analysis, planning and budgeting, time value analysis, financing, investments, capital budgeting, and current accounts management. The purpose of this class is to assist the student in developing the necessary analytical ability, attitudes, and decision making skills required of a healthcare manager in a changing environment.

HPHC 5313 Healthcare Economics and Policy (3:3:0,O) The course introduces the concepts of economic theory and analysis within the health services industry focusing on healthcare consumption, supply and demand, healthcare resource allocation, and the impact of health policy on the delivery of healthcare in the U.S.

HPHC 5318 Organizational Behavior in Healthcare (3:3:0,O) The purpose of this course is to help students gain an appreciation of the theory of organizations and how this theory shapes the way healthcare administrators come to think about their administrative responsibilities and the range of options available to them through the literature. Understanding the attitudes and behaviors of individuals and groups in healthcare organizations will also be emphasized. Students will learn about organizational strategy that draws from and integrates a number of disciplines, including organization theory, finance, planning, and marketing. Course concepts will be applied in a series of cases.

HPHC 5320 Health Insurance and Reimbursement (3:3:0,O) This course provides an overview of health insurance, including public and private payers, self-funded insurance, managed care, health insurance markets, and policy changes that impact these areas. In addition, the course will cover healthcare payment systems and reimbursement methods of various payers in the health services marketplace.

HPHC 5321 Healthcare Operations and Supply Chain Management (3:3:0,O) This course examines operational issues in healthcare management. Healthcare operations topics include systems analysis, forecasting, facility location and design models, decision analysis techniques, inventory control, CQI and statistical quality control. The course also integrates key components of supply chain management, including strategic sourcing and purchasing, acquisition, logistics, inventory management, and point of use applications, providing understanding, knowledge and evaluation models to operate and manage an organization's enterprise resource planning and management system.

HPHC 5322 Quality, Patient Safety, & Risk Management (3:3:0,O) This course introduces the concepts of health care risk and quality management and how these domains go hand in hand with patient safety. Class work addresses the major elements of risk management program including claims management, risk financing, risk reduction, and emergency preparedness. A "systems" approach to health care quality is provided including performance improvement methodologies, tools and strategic initiatives to address continuous quality improvement. Appropriate standards, laws, and regulatory requirements are covered with special emphasis on compliance with Joint Commission accreditation.

HPHC 5323 Healthcare Business Innovation & Entrepreneurship (3:3:0,O) This course will explore the evolving world of healthcare innovation from a business perspective to include the entrepreneurial side of human health advancements. Technology is an institutional imperative driving innovation through value-chain optimization and strategic convergence and/or divergence across all sub-sectors within healthcare, including sectors such as pharmaceuticals, biotechnology, medical devices and health informatics. The course will evaluate the entrepreneurial process, strategic thinking and new venture exploration while focusing on rapid growth and technological implementation and close considerations within the healthcare sector.

Graduate Certificate in Health Systems Policy and Management (CRHS)

Program Description

A Graduate Certificate in Health Systems Policy and Management (CRHS) is available for working professionals who would like to expand their knowledge and further their education in health systems policy and management without pursuing a full graduate degree in healthcare administration. It is a flexible, 100% online, 12-semester hour program, provided in an accelerated 8-week format.

Up to two courses that meet the academic requirements are eligible to transfer in the Master of Science in Healthcare Administration program should you choose to continue on towards the MSHA graduate degree.

Admission to the Program

The CRHS certificate program begins three times a year, in the Summer, Fall and Spring. The application period will open on January 1st for Summer, March 1st for Fall, and August 1st for Spring. The deadline for the receipt of the application, supporting documentation, and application fee is April 1st for Summer, July 1st for Fall and December 1st for Spring.

Application Process

To be considered for admission, applicants must have one of the following qualifications:

- Bachelor's degree from an accredited university with a minimum cumulative GPA of 2.7.

The following are considered in the admissions process:

- All official college transcripts
- Minimum cumulative GPA of 2.7

It is in the best interest of the applicant to apply as early as possible. Applicants should understand that fulfillment of the basic requirements does not guarantee admission.

CRHS Curriculum

Students admitted to the CRHS program will be required to complete 12 semester hours with passing grades and a cumulative GPA of 2.7 or better to meet the certificate requirements.

REQUIRED COURSES

HPHC 5310	Health Law & Ethics
HPHC 5312	Strategic Planning & Marketing in Healthcare
HPHC 5313	Healthcare Economics & Policy

ELECTIVES*

HPHC 5306	Healthcare Delivery System
HPHC 5321	Healthcare Operations & Supply Chain Management
HPHC 5318	Organizational Behavior in Healthcare

HPHC 5320 Health Insurance & Reimbursement

HPHC 5323 Healthcare Business Innovation and Entrepreneurship

**Students must complete one of the electives.*

This certificate is not open to MSHA graduates. This certificate is a distillation of the MSHA curriculum. Therefore, the MSHA degree supersedes it in prestige and knowledge base.

CRHS graduates may enroll into the MSHA program. They may transfer two core courses from the Certificate Program into the MSHA program. They will need to take additional electives within the MSHA program to make up for each of the core courses (over 2) that they've taken within the certificate program.

Graduate Certificate in Health Systems Policy and Management (CRHS) Course Descriptions

HPHC 5302 Medical Sociology (3:3:0,O) This course provides an introduction to central topics in the sociology of medicine, health, and illness. Topics include but are not limited to: epidemiology, history of medicine in the West, public health, the social stratification of illness, the medical profession, and health care provision, access and delivery. In exploring these topics, emphasis will be placed on how socio-economic factors such as age, gender, ethnicity, race, and financial status affect health care.

HPHC 5306 Healthcare Delivery System (3:3:0,O) This course provides an introduction to healthcare services, offering students an overview of the U.S. healthcare delivery system and the important components of the system. The course will examine the healthcare delivery system broadly and explore contemporary issues affecting the institutions that provide healthcare and are designed to protect the health of the American public. The course will cover the historical development of the U.S. healthcare system, the changing roles of healthcare providers, major health programs, determinants of health, disparities in health, and healthcare finance. The goal of the course is to provide students with the necessary skills to be effective participants in efforts to improve the U.S. healthcare system.

HPHC 5310 Health Law and Ethics (3:3:0,O) This course provides an overview of legal, regulatory, and ethical issues in healthcare. Topics include patient consent, privacy, confidentiality, torts, contract law, corporate liability, malpractice, antitrust, fraud and abuse, and key federal regulations. Students will analyze and discuss legal and ethical considerations in providing health services and learn to apply these considerations in decision making as a healthcare administrator.

HPHC 5312 Strategic Planning and Marketing in Healthcare (3:3:0,O) The purpose of this class is to integrate key aspects of strategic planning and marketing in healthcare. The class examines strategic planning techniques, concepts, and practices, as well as leadership responsibilities regarding the creation of mission, vision, goals, and objective statements. The course integrates marketing with strategic planning such that the key elements of marketing and the complementary roles of public relations, advertising and sales are captured in the organizational analysis.

HPHC 5313 Healthcare Economics and Policy (3:3:0,O) The course introduces the concepts of economic theory and analysis within the health services industry focusing on healthcare consumption, supply and demand, healthcare resource allocation, and the impact of health policy on the delivery of healthcare in the U.S.

HPHC 5318 Organizational Behavior in Healthcare (3:3:0,O) The purpose of this course is to help students gain an appreciation of the theory of organizations and how this theory shapes the way healthcare administrators come to think about their administrative responsibilities and the range of options available to them through the literature. Understanding the attitudes and behaviors of individuals and groups in healthcare organizations will also be emphasized. Students will learn about organizational strategy that draws from and integrates a number of disciplines, including organization theory, finance, planning, and marketing. Course concepts will be applied in a series of cases.

HPHC 5321 Healthcare Operations and Supply Chain Management (3:3:0,O) This course examines operational issues in healthcare management. Healthcare operations topics include systems analysis, forecasting, facility location and design models, decision analysis techniques, inventory control, CQI and statistical quality control. The course also integrates key components of supply chain management, including strategic sourcing and purchasing, acquisition, logistics, inventory management, and point of use applications, providing understanding, knowledge and evaluation models to operate and manage an organization's enterprise resource planning and management system.

Graduate Certificate in Health Systems Engineering and Management (CRHE)

Program Description

A Graduate Certificate in Health Systems Engineering and Management (CRHE) is available for working professionals who would like to expand their knowledge and further their education in health systems engineering and management without pursuing a full graduate degree in healthcare administration. It is a flexible, 100% online, 12-semester hour program, provided in an accelerated 8-week format.

Up to two courses that meet the academic requirements are eligible to transfer into the Master of Science in Healthcare Administration program should you choose to continue towards the MSHA degree.

Admission to the Program

The CRHE certificate program begins three times a year, in the Summer, Fall and Spring. The application period will open on January 1st for Summer, March 1st for Fall, and August 1st for Spring. The deadline for the receipt of the application, supporting documentation, and application fee is April 1st for Summer, July 1st for Fall and December 1st for Spring.

Application Process

To be considered for admission, applicants must have one of the following qualifications:

- Bachelor's degree from an accredited university with a minimum cumulative GPA of 2.7.

The following are considered in the admissions process:

- All official college transcripts
- Minimum cumulative GPA of 2.7

It is in the best interest of the applicant to apply as early as possible. Applicants should understand that fulfillment of the basic requirements does not guarantee admission.

CRHE Curriculum

Students admitted to the CRHE program will be required to complete 12 semester credit hours with passing grades and a cumulative GPA of 2.7 or better to meet the certificate requirements.

REQUIRED COURSES

HPHC 5306	Healthcare Delivery System
HPHC 5321	Healthcare Operations & Supply Chain Management
HPHC 5322	Quality, Patient Safety, and Risk Management
HPHC 5324	Health Systems Engineering

Optional electives for MSHA graduates*

HPHC 5318	Organizational Behavior in Healthcare*
HPHC 5326	Healthcare Decision Sciences and Business Analytics*

Four courses are required for this certificate.

A maximum of two courses (one of which will be 5306) may be transferred from the MSHA program to the certificate program.

*HPHC 5324 is a required course in this certificate curriculum

**It is preferred that students take courses 5321 and 5322 within the Certificate program. If an MSHA student has taken either or both of those courses are electives within the MSHA program, then they may take an optional elective to make up for each of those courses.

CRHE graduates may enroll in the MSHA program. They may transfer two courses from the Certificate Program into the MSHA program, one of which should be core course 5306.

Graduate Certificate in Health Systems Engineering and Management (CRHE) Course Descriptions

HPHC 5302 Medical Sociology (3:3:0,O) This course provides an introduction to central topics in the sociology of medicine, health, and illness. Topics include but are not limited to: epidemiology, history of medicine in the West, public health, the social stratification of illness, the medical profession, and health care provision, access and delivery. In exploring these topics, emphasis will be placed on how socio-economic factors such as age, gender, ethnicity, race, and financial status affect health care.

HPHC 5306 Healthcare Delivery System (3:3:0,O) This course provides an introduction to healthcare services, offering students an overview of the U.S. healthcare delivery system and the important components of the system. The course will examine the healthcare delivery system broadly and explore contemporary issues affecting the institutions that provide healthcare and are designed to protect the health of the American public. The course will cover the historical development of the U.S. healthcare system, the changing roles of healthcare providers, major health programs, determinants of health, disparities in health, and healthcare finance. The goal of the course is to provide students with the necessary skills to be effective participants in efforts to improve the U.S. healthcare system.

HPHC 5318 Organizational Behavior in Healthcare (3:3:0,O) The purpose of this course is to help students gain an appreciation of the theory of organizations and how this theory shapes the way healthcare administrators come to think about their administrative responsibilities and the range of options available to them through the literature. Understanding the attitudes and behaviors of individuals and groups in healthcare organizations will also be emphasized. Students will learn about organizational strategy that draws from and integrates a number of disciplines, including organization theory, finance, planning, and marketing. Course concepts will be applied in a series of cases.

HPHC 5321 Healthcare Operations and Supply Chain Management (3:3:0,O) This course examines operational issues in healthcare management. Healthcare operations topics include systems analysis, forecasting, facility location and design models, decision analysis techniques, inventory control, CQI and statistical quality control. The course also integrates key components of supply chain management, including strategic sourcing and purchasing, acquisition, logistics, inventory management, and point of use applications, providing understanding, knowledge and evaluation models to operate and manage an organization's enterprise resource planning and management system.

HPHC 5322 Quality, Patient Safety, & Risk Management (3:3:0,O) This course introduces the concepts of health care risk and quality management and how these domains go hand in hand with patient safety. Class work addresses the major elements of risk management program including claims management, risk financing, risk reduction, and emergency preparedness. A "systems" approach to health care quality is provided including performance improvement methodologies, tools and strategic initiatives to address continuous quality improvement. Appropriate standards, laws, and regulatory requirements are covered with special emphasis on compliance with Joint Commission accreditation.

HPHC 5324 Health Systems Engineering (3:3:0,O) This course examines healthcare operations from a systems perspective. Systems modeling and system design concepts will be considered in the design and operationof healthcare systems. Key healthcare systems that focus on patient flow, patient safety, capacity planning, inventory management and supply chain management, and staffing are considered. In designing and operating healthcare facilities it is also important to consider how different parts of the system interact with one another and to consider how changes made to one part of a system can have unintended consequences on other parts of the system. This course also considers key aspects of change management and challenges of implementing process improvement.

HPHC 5326 Healthcare Decision Sciences and Business Analysis (3:3:0,O) This course emphasizes data management and analytic skills and knowledge to support healthcare organizations in improving patient safety, quality, population health and business/marketing stratgies. Topics include master data management principles, advanced analytics, electronic clinical quality measures, pay for performance, process control charts and fundamentals of quality improvement science. Students will develop skills in team-based projects to manage and analyze healthcare data to support improvement strategies.

Graduate Certificate in Long Term Care Administration (CRLA)

Program Description

A Graduate Certificate in Long Term Care Administration (CRLA) is available for working professionals who would like to expand their knowledge and further their education in long term care administration without pursuing a full graduate degree in healthcare administration. It is a flexible, 100% online, 15-semester hour program, provided in an accelerated 8-week format.

Up to three courses that meet the academic requirements are eligible to transfer into the Master of Science in Healthcare Administration program should you choose to continue towards the MSHA degree.

For more information about Texas nursing facility administrators licensing, please visit the DADS website at

https://hhs.texas.gov/doing-business-hhs/licensing-credentialing-regulation/credentialing/nf-administrators-licensing-enforcement.

Admission to the Program

The CRLA certificate program begins three times a year, in the Summer, Fall and Spring. The application period will open on January 1st for Summer, March 1st for Fall, and August 1st for Spring. The deadline for the receipt of the application, supporting documentation, and application fee is April 1st for Summer, July 1st for Fall and December 1st for Spring.

Application Process

To be considered for admission, applicants must have one of the following qualifications:

- Bachelor's degree from an accredited university with a minimum cumulative GPA of 2.7.

The following are considered in the admissions process:

- All official college transcripts
- Minimum cumulative GPA of 2.7

It is in the best interest of the applicant to apply as early as possible. Applicants should understand that fulfillment of the basic requirements does not guarantee admission.

CRLA Curriculum

Students admitted to the CRLA program will be required to complete 15 semester credit hours with passing grades and a cumulative GPA of 2.7 or better to meet the certificate requirements.

REQUIRED COURSES

HPHC 5310	Health Law & Ethics
HPHC 5311	Healthcare Finance
HPHC 5312	Strategic Planning & Marketing in Healthcare
HPHC 5325	Long Term Care Administration

ELECTIVES*

HPHC 5307 Human Resources Management in Healthcare

HPHC 5322 Quality, Patient Safety & Risk Management

**Students must complete one of the electives.*

Optional electives for MSHA graduates**

HPHC 5302 Medical Sociology

HPHC 5320 Health Insurance and Reimbursement

HPHA 5307 is a required course for the state licensure exam. Students who have not completed this course previously as an MSHA student should take HPHA 5307 as their elective course.

Five courses are required for this certificate.

A maximum of three courses (5310, 5311, and 5312) may be transferred from the MSHA program into the Long-term Care Administration certificate program.

MSHA graduates should take 5322 and 5325 within the certificate program.

An MSHA graduate will have completed courses 5310, 5311, and 5312, and 5307 as core courses within the MSHA program. If an MSHA graduate has taken course 5325 as one of their electives within the MSHA program they will have fulfilled the didactic requirements for licensure and will not need the Long-Term Care Administration certificate. However, they may still earn the Long-Term Care Administration certificate, if they so desire, by taking two of the available electives.

**If an MSHA graduate has taken course 5322 and/or course 5325 as an elective within the MSHA program they will need to taken one of the available electives to make up for each.

CRLA graduates may enroll in the MSHA program. They may transfer three courses into the MSHA program.

They will take additional electives to make up for the core courses (over 3) they've taken within the certificate program.

Graduate Certificate in Long Term Care Administration (CRLA) Course Descriptions

HPHC 5302 Medical Sociology (3:3:0,O) This course provides an introduction to central topics in the sociology of medicine, health, and illness. Topics include but are not limited to: epidemiology, history of medicine in the West, public health, the social stratification of illness, the medical profession, and health care provision, access and delivery. In exploring these topics, emphasis will be placed on how socio-economic factors such as age, gender, ethnicity, race, and financial status affect health care.

HPHC 5307 Human Resources Management in Healthcare (3:3:0,O) This course introduces students to the principles of managing human resources in healthcare organizations. Concepts presented include supervision, teamwork, recruitment and selection, performance management and evaluation, compensation and benefits, motivation, training and development, and employment and labor law. Students will learn effective methods of strategically managing human resources and incorporating these within the overall strategic plan of the organization.

HPHC 5310 Health Law and Ethics (3:3:0,O) This course provides an overview of legal, regulatory, and ethical issues in healthcare. Topics include patient consent, privacy, confidentiality, torts, contract law, corporate liability, malpractice, antitrust, fraud and abuse, and key federal regulations. Students will analyze and discuss legal and ethical considerations in providing health services and learn to apply these considerations in decision making as a healthcare administrator.

HPHC 5311 Healthcare Finance (3:3:0,O) This course introduces students to the core concepts of financial management in healthcare, including interpretation of financial reports, financial ratio analysis, cost and profit analysis, planning and budgeting, time value analysis, financing, investments, capital budgeting, and current accounts management. The purpose of this class is to assist the student in developing the necessary analytical ability, attitudes, and decision making skills required of a healthcare manager in a changing environment.

HPHC 5312 Strategic Planning and Marketing in Healthcare (3:3:0,O) The purpose of this class is to integrate key aspects of strategic planning and marketing in healthcare. The class examines strategic planning techniques, concepts, and practices, as well as leadership responsibilities regarding the creation of mission, vision, goals, and objective statements. The course integrates marketing with strategic planning such that the key elements of marketing and the complementary roles of public relations, advertising and sales are captured in the organizational analysis.

HPHC 5318 Organizational Behavior in Healthcare (3:3:0,O) The purpose of this course is to help students gain an appreciation of the theory of organizations and how this theory shapes the way healthcare administrators come to think about their administrative responsibilities and the range of options available to them through the literature. Understanding the attitudes and behaviors of individuals and groups in healthcare organizations will also be

emphasized. Students will learn about organizational strategy that draws from and integrates a number of disciplines, including organization theory, finance, planning, and marketing. Course concepts will be applied in a series of cases.

HPHC 5320 Health Insurance and Reimbursement (3:3:0,O) This course provides an overview of health insurance, including public and private payers, self-funded insurance, managed care, health insurance markets, and policy changes that impact these areas. In addition, the course will cover healthcare payment systems and reimbursement methods of various payers in the health services marketplace.

HPHC 5322 Quality, Patient Safety, & Risk Management (3:3:0,O) This course introduces the concepts of health care risk and quality management and how these domains go hand in hand with patient safety. Class work addresses the major elements of risk management program including claims management, risk financing, risk reduction, and emergency preparedness. A "systems" approach to health care quality is provided including performance improvement methodologies, tools and strategic initiatives to address continuous quality improvement. Appropriate standards, laws, and regulatory requirements are covered with special emphasis on compliance with Joint Commission accreditation.

HPHC 5325 Long Term Care Administration (3:3:0,O) This course provides an overview of the physical, psychosocial, cognitive, cultural, and environmental factors that affect a person as they age. Topics include financial and administrative issues that affect patient services, adaptive equipment, assistive technology, and community resources. Also present is an analysis and application of regulatory requirements of certified and licensed long term care facilites.

Bachelor of Science in Medical Laboratory Science (MLS)

This program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

5600 N River Rd., Suite 720
Rosemont, IL 60018
(773) 714-8880

Program Description

The clinical laboratory plays a major role in diagnostic medicine. Graduates of the Program in Medical Laboratory Science (medical technology) analyze patient specimens for indications of disease. Results of these tests are used by the physician in confirming the patient's diagnosis and in prescribing therapy. Academic preparation for a career in medical laboratory science is a four-year baccalaureate degree, including a clinical preceptorship. Two years of prerequisite courses in chemistry, mathematics, biology, microbiology, and liberal arts precede a two-year professional component dealing specifically with medical laboratory science. The professional program combines didactic instruction with student laboratory experience, followed by clinical practice in affiliated laboratories.

The TTUHSC Medical Laboratory Science program culminates in the Bachelor of Science degree in Medical Laboratory Science. Graduates of the program are eligible to sit for a national certification examination.

TTU Honors College students accepted into the MLS program may complete honors college credit in the School of Health Professions and graduate with the honors designation.

Individuals seeking a second Bachelor's degree are welcome to apply to the B.S. in MLS program.

Special Features

Candidates seeking a degree in medical laboratory science have the option of pursuing the Bachelor of Science in medical laboratory science tract offered at the Lubbock campus or the second-degree online track for students who already hold a Bachelor of Science degree. A third track is available for students who wish to earn a certificate in medical laboratory science. All three tracts are eligible to sit for the national certification in clinical laboratory science through the American Society of Clinical Pathology Board of Certification (BOC).

Some states require additional state licensure (California, Florida, Georgia, Hawaii, Louisiana, Montana, Nevada, New York, North Dakota, Puerto Rico, Rhode Island, Tennessee, and West Virginia). Since each state has its own set of rules and guidelines, you must contact the licensure agency in each state for information about these requirements which can be found at https://www.ascp.org/content/board-of-certification/verify-credentials.

Essential Functions/Technical Standards

Essential functions and technical standards represent the essential non-academic requirements that students must master to successfully participate in and complete the program. Please consider your ability to meet these functions as you read through the list below of the technical abilities and skills. Students must meet the following technical standards with or without reasonable accommodations.

1. **Mobility:** The student must have adequate gross mobility in order to maneuver in a timely and safe fashion throughout the department. The student must be able to lift his or her arms above shoulder height in order to place or remove items of ten pounds or less from shelves. The student must be able to bend over at the waist or squat (waist and knees) in order to place and remove items of ten pounds or less from drawers and cabinets.

2. **Manual Dexterity:** The student must have adequate fine motor skills to be able to manipulate small objects in a safe and precise manner. Examples would include (but are not limited to) being able to operate a computer keyboard; dial a telephone; handle cuvettes, sample cups, pipette tips, and reagent vials; pick up glass slides from tabletop, manipulate tools and instruments used in

the clinical laboratory (including a microscope and pipettes); collect specimens, and use a pen or pencil in order to communicate effectively in writing for coursework and clinical/fieldwork/preceptorship to ensure patient/client safety.

3. **Auditory Acuity:** The student must be able to hear well enough to respond to significant sounds in a clinical lab. Examples would include (but are not limited to) being able to hear signals generated from instrumentation that may indicate normal operating status, critical sample value or equipment malfunction, and being able to hear and follow verbal instruction from a coworker or supervisor in order to ensure patient safety. (National Patient Safety Goals NPSG)

4. **Verbal Communication Skills:** The student must be able to orally communicate professionally to persons on the telephone or other health care workers listening specifically, to the student in-person to ensure patient safety. (National Patient Safety Goals NPSG)

5. **Visual Acuity to read, write, discern colors, and use a microscope:** The student must have adequate eyesight such that he/she can recognize and distinguish gradients of color (such as on a urine reagent strip and special stains), read numbers and words either on a video display screen, computer printout, or legible handwriting, and interpret lines and points on graphs and charts to ensure patient safety.

6. **Intellectual, Conceptual, Integrative, and Quality Skills:** The student must possess the ability to develop and exhibit organizational problem-solving skills. Specifically, the student must have the ability to measure, calculate, analyze, interpret, synthesize, and evaluate data; have the ability to learn to perform duties and assignments in a timely manner while under stress and in a variety of settings; exhibit the maturity to accept feedback and demonstrate professional conduct in the classroom, laboratory, and at the preceptorship site.

7. **Social Behavior Skills:** Demonstrate respect for individual, social, and cultural differences in fellow students, faculty, staff, patients, clients, and patients'/clients' families during clinical/fieldwork/preceptorship/and academic interactions. Demonstrate flexibility and the ability to adjust to changing situations and uncertainty in academic and clinical/fieldwork/ preceptorship situations. Conduct oneself in an ethical and legal manner, demonstrating honesty, integrity, and professionalism in all interactions and situations.

Admission to the Bachelor of Science in Medical Laboratory Science Program

This program begins in August of each year. Third-year students (juniors) seeking admission must have the required number of semester hours of credit for admission. All courses must be completed prior to beginning the professional program. A personal interview is the final part of the admissions review.

Application Process

Applications are considered on a rolling basis for acceptance into the professional program. Individual applications are reviewed once materials have been received; therefore, it is in the applicant's best interest to complete their application, including submission of required documentation, as early as possible. Fulfillment of the basic requirements does not guarantee admission. The following is required for an individual to be considered for the MLS program:

- Completion of the Texas Common Core, Information on the Texas Common Core curriculum can be found at https://www.ttuhsc.edu/health-professions/admissions/texas-common-core.aspx.
- Specific prerequisite courses must be completed before applying to the professional phase of the Medical Laboratory Science program.
- A minimum overall GPA of 2.5 on a 4.0 scale and a grade of "C" or better in each standard science prerequisite course is required. GPA calculations are based on the required courses.
- Applicants that have not completed the required prerequisites, must submit a plan of completion at the time of application to the SHP Office of Admissions. All prerequisites must be completed by August of the enrollment year.

Applicants who meet the above listed requirements and are deemed competitive candidates for admission will be invited to TTUHSC for an interview. The admissions committee selects the most qualified applicants for admission by considering the following: cumulative GPA, prerequisite science GPA, interview scores, student essay, and other factors.

Prerequisite Course Requirements

Students wishing to enter the Medical Laboratory Science program should choose either the standard, pre-med or pre-PA option. Substitution of courses may be authorized by the Program Director.

Texas Common Core Requirements (42 minimum hours)

Information on the Texas Common Core curriculum can be found at https://www.ttuhsc.edu/health-professions/admissions/texas-common-core.aspx.

STANDARD OPTION SCIENCE PREREQUISITES*

	Credit Hours
General Chemistry I with lab	4
General Chemistry II with lab	4
Biology I or A&P I with lab	4
Biology II or A&P II with lab	4
Microbiology with lab	4
Intro to Organic or Organic Chemistry I with lab	4
Genetics or science elective	3-4
	Total Hours = 27

**These hours may be included as part of your Texas Common Core.*

Pre-Med Option Prerequisites

The pre-med mentor program is designed to provide direction to students interested in attending medical school following the completion of a degree in medical laboratory science. The primary purpose of this program is to help the student, by means of meetings and counseling, to prepare for and apply to medical school. Preparation for the Medical College Admission Test (MCAT), the admission interview, and other aspects of personal preparation are considered. The goal of this program is to provide to those students with both academic and professional potential the best opportunity to successfully gain admission to medical school.

STANDARD PREREQUISITES PLUS THE FOLLOWING:

Required Course	Semester Hours
Organic Chemistry II	4
Physics I & II	8
Calculus I or Statistics	3
Biochemistry	4

**Must verify with medical school of choosing as prerequisites vary per school.*

Pre-Physician Assistant Option Prerequisites

STANDARD PREREQUISITES PLUS THE FOLLOWING:

Required Course	Semester Hours

Anatomy & Physiology	8
Organic Chemistry or Biochemistry	4
Genetics	4
Psychology	3

GPA: overall cumulative GPA of a 3.0 and a CASPA science GPA of a 3.0 on a 4.0 scale

GRE

Must verify with PA school of choosing as prerequisites vary per school.

*For additional requirements for the Pre-Med and Pre-PA options, please visit our website (**http://www.ttuhsc.edu/health-professions/**) or contact the Office of Admissions and Student Affairs 806.743.3220 or **health.professions@tttuhsc.edu.***

- All science courses must be intended for science majors
- Prerequisite courses completed in the last 7 years are preferred
- Required prerequisite courses must be taken at a regionally accredited US or Canadian college or university. Transfer credit from a school outside the US or Canada will not apply to the required prerequisite courses.
- Applicants that have not completed the required prerequisites must submit a plan of completion at the time of application to the SHP Office of Admissions. All prerequisites must be completed by August of the enrollment year.

Bachelor of Science in Medical Laboratory Science (MLS) Master of Science in Healthcare Administration (MSHA) Dual Track

The Master of Science in Healthcare Administration (MSHA) track within the medical laboratory science program (MLS) will prepare graduates for entry-level practice and management in the clinical laboratory with a strong foundation in management theories and practices specifically related to leading and managing a clinical laboratory.

Qualifications

A candidate for the MSHA program must meet prerequisite requirements for the standard option within the MLS program and have been accepted into the MLS program. The minimum overall GPA for a candidate to be considered for the MSHA track is an overall 3.0 GPA on a 4.0 GPA scale. The candidate will apply to the MSHA program in the spring semester of their first year enrolled in the MLS program.

Bachelor of Science in Medical Laboratory Science Program Curriculum

The following courses are offered once each year in the semester listed and must be taken in sequence unless granted permission by the course director and Program Director. The course plan is the same for the standard, pre-med, and pre-PA options.

FIRST-YEAR (JUNIORS)

Fall Semester Courses		Credit Hours
HPML 3110	Professional Issues in MLS	1
HPML 3400	Clinical Chemistry I	4

HPML 3405	Clinical Bacteriology I	4
HPML 3455	Principles of Immunology	4
		Total Hours = 13

Spring Semester Courses		Credit Hours
HPML 3450	Clinical Chemistry II	4
HPML 3460	Clinical Bacteriology II	4
HPML 3470	Clinical Hematology I	4
HPML 4405	Molecular Diagnostics	4
		Total Hours = 16

SECOND-YEAR (SENIORS)

Summer I Semester Courses		Credit Hours
HPML 3310	Urinalysis & Body Fluids	3
HPML 4300	Applied Statistics and Research	3
HPML 4420	Laboratory Management	4
HPML 4455	Clinical Parasitology and Mycology	4
		Total Hours = 14

Fall Semester Courses		Credit Hours
HPML 3465	Immunohematology I	4
HPML 4385	Clinical Correlations	3
HPML 4480	Hematology II	4
HPML 4440	Clinical Preceptorship I	4
		Total Hours = 15

Spring Semester Courses		Credit Hours
HPML 4105	Senior Seminar	1
HPML 4741	Clinical Preceptorship II	7

HPML 4842	Clinical Preceptorship III	8
		Total Hours = 16

Total Hours Required (Standard Option)	**Credit Hours**
Prerequisites	58
Professional Curriculum	74
	Total Hours = 131

Total Hours Required (Pre-Med Option)	**Credit Hours**
Prerequisites	69
Professional Curriculum	74
	Total Hours = 142

Total Hours Required (Pre-PA Option)	**Credit Hours**
Prerequisites	58
Professional Curriculum	74
	Total Hours = 131

During professional studies, students are required to adhere to all program policies and academic and behavioral guidelines as outlined in the Student Handbook and Clinical Preceptorship Manual.

MLS/MSHA Dual Track Curriculum

Students accepted into the MSHA program will be required to complete 36 semester hours to meet degree requirements. This will include 30 hours of core requirements within the MSHA program and 7 credit hours of requirements within the Medical Laboratory Science program.

MSHA CORE COURSES

HPHA 5306	Healthcare Delivery System
HPHA 5307	Human Resource Management in Healthcare
HPHA 5310	Health Law & Ethics
HPHA 5311	Healthcare Finance
HPHA 5312	Strategic Planning & Marketing in Healthcare
HPHA 5313	Healthcare Economics & Policy
HPHA 5314	Healthcare Administration Capstone (final course in the program)
HPHA 5330	Health Informatics & Data Analytics

Choose two of the following electives:

HPHA 5302 Medical Sociology

HPHA 5318 Organizational Behavior in Healthcare

HPHA 5320 Health Insurance & Reimbursement

HPHA 5321 Healthcare Operations & Supply Chain Management

HPHA 5322 Quality, Patient Safety & Risk Management

HPHA 5323 Healthcare Business Innovation and Entrepreneurship

HPHA 5324 Health Systems Engineering

HPHA 5325 Long Term Care Administration

HPHA 5326 Healthcare Decision Sciences and Business Analysis

HPHA 5327 Comparative Health

MLS CORE COURSES

HPML 4420 Laboratory Management

HPML 4300 Applied Statistics and Research

Matriculation of the MLS to MSHA program FIRST YEAR and SECOND YEAR are spent completing prerequisites for MLS program, as well as completing Texas Common Core curriculum.

THIRD YEAR (1st year in MLS Program)

Fall Semester Courses		Credit Hours
HPML 3400	Clinical Chemistry I	4
HPML 3405	Clinical Bacteriology I	4
HPML 3455	Principles of Immunology	4
HPML 3110	Professional Issues in MLS	1
		Total Hours = 13

Spring Semester Courses		Credit Hours
HPML 4405	Molecular Diagnostics	4
HPML 3450	Clinical Chemistry II	4
HPML 3460	Clinical Bacteriology II	4

HPML 3470	Clinical Hematology I	4
		Total Hours = 16

Apply to the TTUHSC MSHA Program.

FOURTH YEAR (2nd year in MLS Program)

Summer I Semester Courses		Credit Hours
HPML 3310	Urinalysis & Body Fluids	3
*HPML 4300	Applied Statistics and Research	3
*HPML 4420	Laboratory Management	4
HPML 4455	Clinical Parasitology and Mycology	4
		Total Hours = 14

Full Summer Semester Course	Credit Hours
Take one course in the MSHA program	3
	Total Hours = 3

Fall Semester Courses		Credit Hours
HPML 4385	Clinical Correlations	3
HPML 3465	Immunohematology I	4
HPML 4480	Hematology II	4
HPML 4440	Clinical Preceptorship I	4
		Total Hours = 15

Spring Semester Courses		Credit Hours
HPML 4741	Clinical Preceptorship II	7
HPML 4842	Clinical Preceptorship III	8
HPML 4105	Senior Seminar	1
		Total Hours = 16

Complete Requirements for BSMLS.

FIFTH YEAR (MSHA courses)

Students will complete 30 hours in total in the MSHA program, in the following semesters:

- Summer Semester
- Fall Semester (Fall I 8-week term & Fall 2 8-week term)
- Spring Semester (Spring I 8-week term & Spring 2 8-week term)

TOTAL 30 hours

The Healthcare Administration Capstone course (HPHA 5314) should be taken in the final semester.

COMPLETE REQUIREMENTS FOR MSHA & graduate with MSHA degree

Bachelor of Science in Medical Laboratory Science (MLS) Course Descriptions

HPML 1002 Foundations of Interprofessional Collaborative Practice with TeamSTEPPS Essentials (0:0:0,O) An introduction to broad concepts related to interprofessional core competencies for healthcare providers.

HPML 3110 Professional Issues in MLS (1:1:0,H) An overview and introduction to the profession.

HPML 3310 Urinalysis & Body Fluids (3:4:3,F) Analysis of the physical, chemical, and microscopic parameters of urine and body fluids. Special emphasis is placed on understanding kidney function and pathology.

HPML 3400 Clinical Chemistry I (4:3:4,F) An introduction to the basic principles, methodologies, and physiology of clinical chemistry.

HPML 3405 Clinical Bacteriology I (4:3:6,F) Study of the isolation, cultivation, identification, and susceptibility testing of pathogenic bacteria. The taxonomy, physiology, and pathogenesis of medically important bacteria are covered.

HPML 3450 Clinical Chemistry II (4:3:4,F) Prerequisite: HPML 3400. The qualitative and quantitative chemical analysis of blood and other body fluids. Correlation of test results to health and disease states.

HPML 3455 Principles of Immunology (4:3:3,F) Fundamentals of immunology and the human immune system. An introduction to the theory, practical application, and technical performance of immunologic and serologic procedures used in diagnostic laboratory medicine.

HPML 3460 Clinical Bacteriology II (4:3:6,F) Prerequisite: HPML 3405. A continuation of HPCS 3405 with an emphasis in clinical virology, clinical correlations, and case studies and bioterrorism.

HPML 3465 Immunohematology I (4:3:4,F) Prerequisite: HPML 3455. The theory, practical application, and technical performance of blood bank procedures required for transfusion of blood, blood components, and the handling and storage of blood components. Correlation of test results to normal and abnormal physiology.

HPML 3470 Clinical Hematology I (4:3:4,F) An introduction to the study of coagulation, blood cells, blood forming organs, and related diagnostic laboratory procedures.

HPML 4105 Senior Seminar (1:1:0,O) A comprehensive review of topics in clinical laboratory science.

HPML 4300 Applied Statistics and Research (3:3:0,O) Introduction to descriptive, inferential, and non-parametric statistics related to basic and clinical science. Introduction to the process of basic and clinical research and research design. Application of statistical analysis to assigned research projects.

HPML 4385 Clinical Correlations (3:3:0,H) Review of current topics and case studies in clinical laboratory science.

HPML 4405 Molecular Diagnostics (4:3:3,F) Introduction to basic genetics and genetic testing techniques used in molecular and forensic pathology.

HPML 4420 Laboratory Management (4:4:0,O) An introduction to management with emphasis upon management issues and concerns specific to the clinical laboratory.

HPML 4440 Clinical Preceptorship I (4:1:3,F) A course designed for the senior student to begin preparation for supervised clinical practicum in an affiliated clinical laboratory.

HPML 4455 Clinical Parasitology and Mycology (4:4:6,F) Prerequisite: HPML 3405, 3460. Study of medically significant protozoan and helminthic parasites and their vectors and pathogenic fungi. Emphasis is placed on laboratory methods and isolation and identification of these agents of disease.

HPML 4480 Hematology II (4:3:4,F) Prerequisite: HPML 3470. The study of blood cells and their abnormalities with emphasis on disease processes.

HPML 4741 Clinical Preceptorship II (7:0:40,F) An intermediate supervised clinical practicum in an affiliated clinical laboratory.

HPML 4842 Clinical Preceptorship III (8:0:40,F) An advanced supervised clinical practicum in an affiliated clinical laboratory.

Post Baccalaureate Certificate in Medical Laboratory Science

Admission to the Post-Baccalaureate Certificate in Medical Laboratory Science Program

This is a 12-month online, certificate tract in medical laboratory science for students who have completed a four-year science degree from an accredited university. Didactic material is delivered online and laboratory sessions are conducted via one, six-day session in the Fall and Spring semesters. Additionally, a clinical laboratory preceptorship is required during the final semester. Students who complete the requirements for the certificate are eligible to sit for the national certification examination through the American Society of Clinical Pathology Board of Certification (BOC).

GPA Requirement

- Candidates must have an overall 3.0 GPA based on a 4.0 scale and a 3.0 science GPA on a 4.0 scale.
- No more than 9 hours of prerequisites may be in progress at the time of application.
- Two letters of recommendation. One professional & one academic.

Prerequisite Course Requirements for MLS Certificate

Courses must be completed with a C or above to be considered for prerequisite credit.

Required Course	Semester Hours
Biological Sciences w/ laboratory *Biology I & II or A&P I & II, and other approved science elective*	12
Basic Chemistry w/ laboratory *General Chemistry I & II*	8
Organic Chemistry w/ laboratory	4
Microbiology w/ laboratory	4
Statistics	3

**Recommended courses: Immunology, Biology I & II, Anatomy, Physiology, Genetics, Cell Biology, & upper division Microbiology.*

Texas Tech University Health Sciences Center Post-Baccalaureate Certificate in Medical Laboratory Science/Medical Technology/Technologist

Program Length: 12 months

Students Graduating on Time

N/A* of Title IV students complete the program within 12 months

*Fewer than 10 students enrolled in this program. This number has been withheld to preserve the confidentiality of the students.

Program Costs*

$11,615 for in-state tuition and fees
$24,360 for out-of-state tuition and fees
$2,100 for books and supplies
$13,285 for off-campus room and board
Other Costs: No other costs provided.
Visit the website for more program cost information
*The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.

Students Borrowing Money

69% of students who attend this program borrow money to pay for it.
The typical graduate leaves with
N/A in debt
*Fewer than 10 students completed this program within normal time. This number has been withheld to preserve the confidentiality of the students.
The typical monthly loan payment
N/A* per month in student loans with N/A* interest rate.
*Fewer than 10 students completed this program within normal time. This number has been withheld to preserve the confidentiality of the students.
The typical graduate earns
not provided per year after leaving this program.

Graduates Who Got Jobs

96% of program graduates got jobs according to the accreditor job placement rate
Program graduates are employed in the following fields:
Health Specialties Teachers, Postsecondary

Licensure Requirements

*Program has no licensure requirements in any state.

Additional Information

Note, all items are based on Second Degree & Post Baccalaureate Certificate Programs in Medical Laboratory Science, NOT solely Laboratory Certificate as we cannot separate the survey as it is anonymous. Total for both Second Degree & Post Baccalaureate Certificate programs for the 2016 graduating class was 36. Of the 36, 26 were Post Baccalaureate Certificate graduates.

Date Created 7/5/2017
These disclosures are required by the U.S. Department of Education

Post-Baccalaureate Certificate in Medical Laboratory Science Curriculum

Fall Semester Courses		Credit Hours
HPML 4147	Clinical Immunology	1
HPML 4341	Foundations of Hemastasis	3
HPML 4343	Foundations of Clinical Chemistry	3

HPML 4345	Foundations of Clinical Microbiology	3
HPML 4450	Clinical Laboratory Practice I	4
		Total Hours = 13

Spring Semester Courses		Credit Hours
HPML 4144	Analysis of Body Fluids	1
HPML 4145	Principles of Molecular Diagnostics	1
HPML 4146	Advanced Microbiology	1
HPML 4242	Advanced Hematology	2
HPML 4348	Foundations of Immunohematology	3
HPML 4451	Clinical Laboratory Practice II	4
		Total Hours = 13

Summer Semester Courses		Credit Hours
HPML 4149	Principles of Laboratory Management	1
HPML 4153	Seminar	1
HPML 4752	Preceptorship	7
		Total Hours = 9

Post Baccalaureate Certificate in Medical Laboratory Science Course Descriptions

HPML 1002 Foundations of Interprofessional Collaborative Practice with TeamSTEPPS Essentials (0:0:0,O) An introduction to broad concepts related to interprofessional core competencies for healthcare providers.

HPML 4144 Analysis of Body Fluids (1:1:0,O) A concise review of analysis of the physical, chemical, and microscopic parameters of urine and other body fluids. Some emphasis is placed on understanding kidney function and pathology.

HPML 4145 Principles of Molecular Diagnostics (1:1:0,O) An introduction to the basic principles of genetics and the practice of genetic testing techniques with an emphasis on human genetic disease.

HPML 4146 Advanced Microbiology (1:1:0,O) A study of pathogenic mycobacteria, viral agents, fungi, and medically significant protozoan and helminthic parasites. Study includes overview of transmission and associated diseases and emphasis on laboratory isolation and identification of these pathogens.

HPML 4147 Clinical Immunology (1:1:0,O) Fundamentals of immunology and the human immune system. An introduction to the theory, practical application, and technical performance of immunologic and serologic procedures used in diagnostic laboratory medicine.

HPML 4149 Principles of Laboratory Management (1:1:0,O) An introduction to management with emphasis upon management issues and concerns specific to the clinical laboratory.

HPML 4153 Seminar (1:1:0,O) A comprehensive review of topics in clinical laboratory science.

HPML 4242 Advanced Hematology (2:2:0,O) A concise review of hematological disorders. The diagnostic implications and laboratory diagnosis of anemias, polycythemias, leukemias, and lymphomas is included.

HPML 4341 Foundations of Hemostasis (3:3:0,O) A concise review of the process of coagulation, platelet hemostasis, and the structure and related function of red and white blood cells.

HPML 4343 Foundations of Clinical Chemistry (3:3:0,O) An introduction to the principles and practice of clinical chemistry. Correlation of chemistry test results to health and disease states is included.

HPML 4345 Foundations of Clinical Microbiology (3:3:0,O) A study of medically important bacteria and associated diseases. Emphasis is placed on laboratory diagnosis, including cultivation, isolation, identification, and susceptibility testing of bacterial pathogens.

HPML 4348 Foundations of Immunolohematology (3:3:0,O) The theory, practical application, and technical performance of blood bank procedures required for transfusion of blood, blood components, and the handling and storage of blood components. Correlation of test results to normal and abnormal

physiology.

HPML 4450 Clinical Laboratory Practice I (4:0:48,F) A laboratory experience that exposes students to basic procedures and skills needed to satisfactorily perform testing in a clinical lab setting. Topics include pre-analytical, analytical, and post-analytical components of Hemostasis, Clinical Chemistry, and Clinical Microbiology testing.

HPML 4451 Clinical Laboratory Practice II (4:0:48,F) A laboratory experience that exposes students to procedures and skills needed to satisfactorily perform testing in a clinical lab setting. Topics include pre-analytical, analytical, and post-analytical components of: Advanced Hematology, Analysis of Body Fluids, Molecular Diagnostics, Advanced Microbiology, Clinical Immunology, and Immunohematology testing.

HPML 4752 Clinical Preceptorship (7:0:40,F) An advanced supervised clinical practicum in an affiliated clinical laboratory.

Second Degree Bachelor of Science in Medical Laboratory Science

Admission to the Second Degree Bachelor of Science in Medical Laboratory Science Program

This is a 12-month online, second-degree tract in medical laboratory science for students who have completed a four-year science degree from an accredited university. Didactic material is delivered online and laboratory sessions are conducted via one, six-day session in the Fall and Spring semesters. Additionally, a clinical laboratory preceptorship is required during the final semester.

Students who complete the requirements for the degree are eligible to sit for the national certification examination through the American Society of Clinical Pathology Board of Certification (BOC).

GPA Requirement

- Candidates must have an overall 3.0 GPA based on a 4.0 scale and a 3.0 science GPA on a 4.0 scale.
- No more than 9 hours of prerequisite courses may be in progress at the time of application.
- Two letters of recommendation. One professional & one academic.

Prerequisite Course Requirements for MLS Second Degree

Courses must be completed with a "C" or above to be considered for prerequisite credit.

Required Course	Semester Hours
Biological Sciences w/ laboratory *Biology I & II or A&P I & II, and other approved science elective*	12
Basic Chemistry w/ laboratory *General Chemistry I & II*	8
Organic Chemistry w/ laboratory	4
Microbiology w/ laboratory	4
Statistics	3

**Recommended courses: Immunology, Biology I & II, Anatomy, Physiology, Genetics, Cell Biology, & upper division Microbiology.*

Texas Common Core Requirements (42 minimum hours)

Information on the Texas Common Core curriculum can be found at https://www.ttuhsc.edu/health-professions/admissions/texas-common-core.aspx.

Graduates Not from Texas Public Universities

A second bachelor's degree sought by a student who did not graduate from a public Texas university must include the required Texas Core Curriculum. Information on the Texas Common Core curriculum can be found at https://www.ttuhsc.edu/health-professions/admissions/texas-common-core.aspx.

Second Degree Bachelor of Science in Medical Laboratory Science Curriculum

Fall Semester Courses		Credit Hours
HPML 4147	Clinical Immunology	1
HPML 4341	Foundations of Hemastasis	3
HPML 4343	Foundations of Clinical Chemistry	3
HPML 4345	Foundations of Clinical Microbiology	3
HPML 4450	Clinical Laboratory Practice I	4
		Total Hours = 13

Spring Semester Courses		Credit Hours
HPML 4144	Analysis of Body Fluids	1
HPML 4145	Principles of Molecular Diagnostics	1
HPML 4146	Advanced Microbiology	1
HPML 4242	Advanced Hematology	2
HPML 4348	Foundations of Immunohematology	3
HPML 4451	Clinical Laboratory Practice II	4
		Total Hours = 13

Summer Semester Courses		Credit Hours
HPML 4149	Principles of Laboratory Management	1
HPML 4153	Seminar	1
HPML 4752	Preceptorship	7
		Total Hours = 9

Second Degree Bachelor of Science in Medical Laboratory Science Course Descriptions

HPML 1002 Foundations of Interprofessional Collaborative Practice with TeamSTEPPS Essentials (0:0:0,O) An introduction to broad concepts related to interprofessional core competencies for healthcare providers.

HPML 4144 Analysis of Body Fluids (1:1:0,O) A concise review of analysis of the physical, chemical, and microscopic parameters of urine and other body fluids. Some emphasis is placed on understanding kidney function and pathology.

HPML 4145 Principles of Molecular Diagnostics (1:1:0,O) An introduction to the basic principles of genetics and the practice of genetic testing techniques with an emphasis on human genetic disease.

HPML 4146 Advanced Microbiology (1:1:0,O) A study of pathogenic mycobacteria, viral agents, fungi, and medically significant protozoan and helminthic parasites. Study includes overview of transmission and associated diseases and emphasis on laboratory isolation and identification of these pathogens.

HPML 4147 Clinical Immunology (1:1:0,O) Fundamentals of immunology and the human immune system. An introduction to the theory, practical application, and technical performance of immunologic and serologic procedures used in diagnostic laboratory medicine.

HPML 4149 Principles of Laboratory Management (1:1:0,O) An introduction to management with emphasis upon management issues and concerns specific to the clinical laboratory.

HPML 4153 Seminar (1:1:0,O) A comprehensive review of topics in clinical laboratory science.

HPML 4242 Advanced Hematology (2:2:0,O) A concise review of hematological disorders. The diagnostic implications and laboratory diagnosis of anemias, polycythemias, leukemias, and lymphomas is included.

HPML 4341 Foundations of Hemostasis (3:3:0,O) A concise review of the process of coagulation, platelet hemostasis, and the structure and related function of red and white blood cells.

HPML 4343 Foundations of Clinical Chemistry (3:3:0,O) An introduction to the principles and practice of clinical chemistry. Correlation of chemistry test results to health and disease states is included.

HPML 4345 Foundations of Clinical Microbiology (3:3:0,O) A study of medically important bacteria and associated diseases. Emphasis is placed on laboratory diagnosis, including cultivation, isolation, identification, and susceptibility testing of bacterial pathogens.

HPML 4348 Foundations of Immunolohematology (3:3:0,O) The theory, practical application, and technical performance of blood bank procedures required for transfusion of blood, blood components, and the handling and storage of blood components. Correlation of test results to normal and abnormal physiology.

HPML 4450 Clinical Laboratory Practice I (4:0:48,F) A laboratory experience that exposes students to basic procedures and skills needed to satisfactorily perform testing in a clinical lab setting. Topics include pre-analytical, analytical, and post-analytical components of Hemostasis, Clinical Chemistry, and Clinical Microbiology testing.

HPML 4451 Clinical Laboratory Practice II (4:0:48,F) A laboratory experience that exposes students to procedures and skills needed to satisfactorily perform testing in a clinical lab setting. Topics include pre-analytical, analytical, and post-analytical components of: Advanced Hematology, Analysis of Body Fluids, Molecular Diagnostics, Advanced Microbiology, Clinical Immunology, and Immunohematology testing.

HPML 4752 Clinical Preceptorship (7:0:40,F) An advanced supervised clinical practicum in an affiliated clinical laboratory.

Master of Science in Molecular Pathology (MP)

This program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

5600 N River Rd., Suite 720
Rosemont, IL 60018
(773) 714-8880

Program Description

Developments in biotechnology in the past two decades have led to the the adoption of molecular and genomic information into the patient care model. Molecular Pathology provides medical results through analysis of DNA and RNA to provide diagnosis, prognosis, or personalized treatment recommendations. Molecular diagnostics is the fastest-growing discipline in the modern clinical laboratory. The rapid growth of genomics and molecular techniques available to the healthcare professional is dramatically changing the detection, treatment, and assessment of disease. The diagnostic molecular scientist is a professional who is qualified by academic and applied education to provide service in the molecular diagnosis of acquired, inherited and infectious diseases. The goal of molecular diagnostics is to enhance the value of clinical laboratory services by providing an environment in which new tests based on the application of knowledge and new techniques at the most basic cellular level (i.e. molecular techniques) can be established, validated and applied to the testing of patient specimens.

The TTUHSC Molecular Pathology program culminates in the Master of Science degree in Molecular Pathology. To further molecular pathology among health professions, the American Society for Clinical Pathology Board of Certification (ASCP-BOC) has developed a national certification examination for the Certified Laboratory Technologist in Molecular Biology, MB(ASCP).

Special Features

The twelve-month program includes 39 credit hours of didactic (classroom and laboratory) experience and three credit hours of mentored, clinical molecular diagnostic experience including biomedical research (clinical preceptorship). The clinical experiences are structured to provide skill and practice in diagnostic techniques, quality assurance, and interpreting and reporting patient results. The clinical experience is an integral part of the curriculum and students pay regular tuition and fees for enrollment.

Technical Standards

Technical standards represent the essential non-academic requirements that students must master to successfully participate in and complete the program. Please consider your ability to meet these functions as you read through the list below of the technical abilities and skills that students must possess. An individual must meet the following technical standards with or without reasonable accommodations.

1. **Mobility:** The student must have adequate gross mobility in order to maneuver in a timely and safe fashion throughout the department. The student must be able to lift his or her arms above shoulder height in order to place or remove items of ten pounds or less from shelves. The student must be able to bend over at the waist or squat (waist and knees) in order to place and remove items of ten pounds or less from drawers and cabinets.

2. **Manual Dexterity:** The student must have adequate fine motor skills to be able to manipulate small objects in a safe and precise manner. Examples would include (but are not limited to) being able to operate a computer keyboard; dial a telephone; handle pipettes, pipette tips, and reagent vials; manipulate tools and instruments used in the clinical laboratory; collect specimens, and use a pen or pencil in order to communicate effectively in writing for coursework and clinical/fieldwork/preceptorship to ensure patient/client safety.

3. **Auditory Acuity:** The student must be able to hear well enough to respond to significant sounds in a clinical lab. Examples would include (but are not limited to) being able to hear signals generated from instrumentation that may indicate normal operating status, critical sample value, or equipment malfunction, and being able to hear and follow verbal instruction from a coworker or supervisor in order to ensure patient safety. (National Patient Safety Goals)

4. **Verbal Communication Skills:** The student must be able to orally communicate professionally to persons on the telephone or other health care workers listening specifically, to the student in person to ensure patient safety. (National Patient Safety Goals)

5. **Visual Acuity to read, write, discern colors, and use a microscope:** The student must have adequate eyesight such that he/she can recognize and distinguish gradients of color (such as on an ELISA assay), read numbers and words either on a video display screen, computer printout, or legible handwriting, and interpret lines and points on graphs and charts to ensure patient safety.

6. **Intellectual, Conceptual, Integrative, and Quality Skills:** The student must possess the ability to develop and exhibit organizational problem solving skills. Specifically, the student must have the ability to measure, calculate, analyze, interpret, synthesize and evaluate data in a short period of time; have the ability to learn to perform duties and assignments in a timely manner while under stress and in a variety of settings; exhibit the maturity to accept feedback and demonstrate professional conduct in the classroom, laboratory, and at the preceptorship site.

7. **Social Behavior Skills:** Demonstrate respect for individual, social, and cultural differences in fellow students, faculty, staff, patients, clients, and patients'/clients' families during clinical/fieldwork/preceptorship/and academic interactions. Demonstrate flexibility and the ability to adjust to changing situations and uncertainty in academic and clinical/fieldwork/ preceptorship situations. Conduct oneself in an ethical and legal manner, demonstrating honesty, integrity, and professionalism in all interactions and situations.

Application Process

Applications are considered on a rolling basis for acceptance into the program. Applications must be received by February 1st to be considered for summer enrollment of that year. The program begins at the end of May each year. It is a 1 year lock-step program. All course work must be completed prior to beginning the professional program.

The following is required for an individual to be considered for the MP program:

- A cumulative and prerequisite grade point average of 2.75 or above (on a 4.0 scale) is necessary to qualify for admissions.
- Graduate of a NAACLS accredited Medical Laboratory Scientist Program (cumulative 2.75 GPA) with a national certification in clinical laboratory science **OR** Graduate of an accredited university with a bachelor's degree in a science discipline (including the listed prerequisite courses below).
- The GRE is not required.

All qualified candidates selected by the MP admissions committee will be invited for an on-campus interview.

Prerequisite Course Requirements

Required Course	Semester Hours
College Algebra or higher	3
General Chemistry with laboratory	8
Microbiology	4
*Biochemistry	3-4
*Genetics	3-4
General Biology	8
*Organic Chemistry	8

**MLS graduates are exempt from some of the prerequisites. Please contact the Office of Admissions and Student Affairs for more information.*

Curriculum

The following courses are offered once each year in the semester listed and must be taken in sequence unless granted permission by

the course director and Program Director.

Summer Semester Courses		Credit Hours
HPMP 5100	Issues in Molecular Pathology	1
HPMP 5104	Laboratory Fundamentals	1
HPMP 5300	Research Design & Statistical Analysis	3
HPMP 5406	Molecular Biology of the Cell	4
		Total Hours = 9

Fall Semester Courses		Credit Hours
HPMP 5309	Human Molecular Genetics	3
HPMP 5341	Graduate Research I	3
HPMP 5407	Principles of Molecular Pathology	4
HPMP 5805	Applied Molecular Techniques I	8
		Total Hours = 18

Spring Semester Courses		Credit Hours
HPMP 5102	Graduate Seminar	1
HPMP 5301	Management of Molecular Laboratory	3
HPMP 5342	Clinical Preceptorship	3
HPMP 5408	Applied Molecular Techniques II	4
HPMP 5441	Graduate Research II	4
		Total Hours = 15

Master of Science in Molecular Pathology (MP) Course Descriptions

HPMP 1002 Foundations for Interprofessional Collaborative Practice (0:0:0,O) An introduction to broad concepts related to interprofessional core competencies for healthcare providers.

HPMP 5000 Audit (0:0:0,F) Audit

HPMP 5098 Special Topics (1-6:0:1-6,H) Prerequisite: Permission from the Program Director. This course involves an independent project designed to meet the individual student's needs and/or interests. This may include, but is not limited to, a research project, or course/skill review.

HPMP 5100 Issues in Molecular Pathology (1:3:0,F) Presentation of current topics regarding the biomedical application of genetic information. Ethical issues and professionalism will also be discussed.

HPMP 5102 Graduate Seminar (1:1:0,F) Career preparation and independent study and prep for external certification in Molecular Pathology.

HPMP 5104 Laboratory Fundamentals (1:1:4,F) Introduction to the fundamental laboratory concepts and skills used in molecular diagnostics. Topics include nucleic acid isolation, spectrophotometry, electrophoresis, laboratory math, and pipetting.

HPMP 5300 Research Design and Statistical Analysis (3:6:0,F) Introduction to the process of basic and clinical research design. Critical evaluation of the scientific literature will be a focus. Introduction to descriptive, parametric, and non-parametric statistics.

HPMP 5301 Management of the Molecular Laboratory (3:3:0,O) Business and management principles relative to laboratory management and administration will be presented. The purpose, function, and utilization of laboratory services, specimen procurement, patient education and consent, regulatory issues, and quality assurance are discussed. Specific requirements regarding accreditation of molecular pathology clinical laboratories will be reviewed and discussed. Co-requisite HPMP 5102.

HPMP 5309 Human Molecular Genetics (3:3:0,O) Advanced human molecular genetics with an emphasis on the causative factors and diagnosis of human disease. The fundamental principles of medical genetics, including basic Mendelian genetics, the molecular and biochemical basis of genetics, developmental genetics, genetics of complex diseases, cancer, and epigenetics will be studied. Genetic counseling, carrier screening and prenatal diagnosis will be discussed.

HPMP 5341 Graduate Research I (3:3:4,F) Prerequisite: HPMP 5400. Topics include the application of molecular techniques in the design and creation of clinical procedures, clinical assays, critical evaluation of scientific literature, writing a scientific article and peer review. Writing intensive.

HPMP 5342 Clinical Preceptorship (3:0:40,F) Supervised advanced molecular clinical practicum in an affiliated laboratory with emphasis on patient testing, quality assurance, and case studies assessment. Co-Requisite HPMP 5102

HPMP 5406 Molecular Biology of the Cell (4:6:0,H) Comprehensive survey course in eukaryotic molecular cell biology. Course covers the fundamental concepts of DNA and RNA structure and function, gene replication, transcription and expression, cell-cell communication and cell death in the eukaryotic system. A strong background in biology is assumed.

HPMP 5407 Principles of Molecular Pathology (4:4:0,H) Presentation of the basis of human disease with regard to the major determinants of disease in the context of molecular pathology. Survey of the clinical laboratory that includes common laboratory assays (Hematology, Clinical Chemistry, and Microbiology) addresses the purpose, function, and utilization of laboratory services. Specimen procurement, patient education and consent, and quality assurance are discussed.

HPMP 5408 Applied Molecular Techniques II (4:4:16,F) Co-requisite HPMP 5102 Prerequisite: AHMP 5805. Continuation of Applied Molecular Techniques I with advanced training and technical experience in the use of DNA and RNA technologies applied to the clinical setting.

HPMP 5441 Graduate Research II (4:1:0,F) Co-Requisite HPMP 5102 Prerequisite: AHMP 5341. Advanced research projects. Topics include a research project in molecular diagnosis and/or biomedical science. Project comprises of assay design and validation, and culminates in a public research presentation. Writing Intensive.

HPMP 5805 Applied Molecular Techniques I (8:4:16,F) Introduction to basic genetic testing techniques used in molecular and forensic pathology with discussion of quality laboratory practice including quality control, quality assurance, and quality improvement. Lab component will focus on the use of DNA technologies in clinical settings.

HPMP 6000 Clinical Application of Genetics Elective (0:1:0,F) Through lectures, discussions, workshops, and lab tours students will gain an understanding of medical genetics and learn skills needed to successfully practice genetic counseling in clinical settings as well as ethical decision making, case preparation, the interview, family history, risk assessment, and patient education. The elective's goal is to provide an overview of medical genetics from pathological, psychological, pharmacological, social, legal, ethical, and environmental perspectives.Student must gain approval from Program Director to enroll in this course.

Master of Physician Assistant Studies (PA)

The Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA) has granted Accreditation-Continued status to the Texas Tech University Health Sciences Center School of Health Professions Physician Assistant Program sponsored by Texas Tech University Health Sciences Center. 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 2033. The review date is contingent upon continued compliance with the Accreditation Standards and ARC-PA policy.

The program's accreditation history can be viewed on the ARC-PA website at ***https://www.arc-pa.org/accreditation-history-texas-tech-university/****.*

The PA Profession

The Master of Physician Assistant Studies program prepares students for a career in one of the fastest-growing and rewarding health care fields. Physician Assistants (PAs) are educated through academic and clinical training as medical providers who are licensed to practice medicine as part of the healthcare team. PAs take medical histories, perform physical examinations, order and interpret diagnostic tests, diagnose and treat illnesses, write prescriptions, counsel patients on preventative care, and assist in surgery.

A PA exercises considerable autonomy in medical decision-making, but the supervising physician and state laws determine the full scope of a PA's practice. PAs deliver health care to diverse patients of all ages in the full spectrum of medical specialties.

Program Description

Based in Midland, Texas, and located on the campus of Midland College, the Texas Tech University Health Sciences Center PA Program is one of the programs in the Department of Laboratory Sciences and Primary Care in the School of Health Professions and offers a Master of Physician Assistant Studies (MPAS) degree. The curriculum is an intensive 27-month medical education program with a focus on primary care and family medicine and consists of academic and clinical components.

Mission

The mission of the Texas Tech University Health Sciences Center School of Health Professions Physician Assistant Program is to provide comprehensive medical education to physician assistant students. Through an environment of academic excellence and the promotion of life-long learning and professionalism, graduates will be prepared to practice patient-centered primary care, increasing access to healthcare for communities of West Texas and beyond.

Technical Standards

A student admitted into the TTUHSC Physician Assistant Program must meet basic and essential requirements that are necessary for obtaining employment and performing as a Physician Assistant. The technical standards each student must master include cognitive, physical, and behavioral characteristics that are identified in the following:

1. **Observation:** The applicant/student must possess the ability to observe required demonstrations, visual presentations in lectures and laboratories, and written and audiovisual presentations. Examples of perceptual abilities include but are not limited to gross and microscopic studies of organisms, cadaver dissections, and various diagnostic tests such as interpretation of echocardiograms, digital and wavelength readings, and graphic or radiographic images. The applicant/student must be able to observe patients accurately and completely, both at distance and closely using functional visual, hearing, and somatic sensation.

2. **Communication:** The applicant/student must possess the ability to communicate effectively with patients to elicit information, including nonverbal communications, and describe changes in mood, activity, and posture with immediate assessment of the information provided. Individuals must possess the ability to communicate effectively with clinical preceptors and other members of the healthcare team, didactic and clinical faculty, and colleagues. The applicant/student must possess the ability to effectively

and sensitively communicate in oral, written, and electronic form with patients and members of the health care team in order to provide safe and effective patient care.

3. **Motor:** The applicant/student must possess sufficient gross and fine motor function, equilibrium, and sensation to elicit information from patients through customary techniques for physical assessment such as visual observation/inspection, palpation, percussion, and auscultation as well as carry out diagnostic maneuvers and technical procedures involved in the practice of medicine and surgery. Examples reasonably required of physician assistants include cardiopulmonary resuscitation, application of pressure to stop bleeding, venous and arterial punctures, suturing, pelvic and rectal exams, obstetrical maneuvers, and opening of obstructed airways.

4. **Intellectual, Conceptual, Integrative, and Quantitative abilities:** The applicant/student must possess the ability to comprehend three-dimensional relationships and spatial relationships of structures; and be able to collect, organize, prioritize, analyze and synthesize large amounts of detailed and complex information to apply in problem-solving and decision-making in clinical and educational settings including lectures, laboratories, small group discussions, and clinical settings.

5. **Behavioral and Social Attributes:** The applicant/student must be able to tolerate physical and mental taxing workloads, function effectively under stress, adapt to changing environments, display flexibility, and function in the face of uncertainty inherent in the evaluation and treatment of patients. The applicant/student must have the emotional health to fully use his/her intellectual ability, exercise good judgment, and complete all responsibilities necessary to the diagnosis and care of patients. The applicant/student must possess integrity, compassion, and effective interpersonal skills to interact with patients and members of the health care team with sensitivity to cultural differences. The applicant/student must be able to understand and apply the concepts of medical ethics and demonstrate ethical behavior.

Admission to the Program

The PA Program begins in late May each year. The application cycle will open in late April each year. The application deadline for all materials to be received by the TTUHSC School of Health Professions Admissions Office is October 1. Additional information is available on the program website at: http://www.ttuhsc.edu/health-professions. Priority in applications review is given to those applicants with all materials received by August 1.

Application Process

Applicants must complete both a CASPA application and a supplemental application.
The CASPA application can be accessed through the following link: https://caspa.liaisoncas.com/applicant-ux/#/login
The supplemental application can be accessed through the following link: http://www.ttuhsc.edu/health-professions
Applications are considered on a rolling basis for acceptance into the professional program. Individual applications are reviewed once materials have been received; therefore, it is in the applicant's best interest to complete their application, including submission of required documentation, as early as possible. Fulfillment of the basic requirements does not guarantee admission. All official transcripts need to be submitted to CASPA. You will only need to send updated transcripts to our office. Transcripts must be in a sealed envelope from the institution and must have been printed within the last year. The following is required for an individual to be considered for the MPAS program:

- Baccalaureate Degree
- Official GRE scores (code 3652)
- A minimum overall and science GPA of 3.0 on a 4.0 scale is required. The CASPA calculated GPA will be utilized.
- Completed (or plan to complete) prerequisite coursework (see table below) with a grade of "C" or higher. Applicants with more than 9 hours of prerequisite courses in progress will not be reviewed.
- CASPA application with three letters of recommendation
- AP and CLEP credit will not be accepted for any science prerequisite courses.

Holistic Admissions Process

Applications are considered on a rolling basis for acceptance into the professional PA program. Individual applications are reviewed once all required materials have been received; therefore, it is in the applicant's best interest to complete their application, including submission of required documentation, as early as possible. Fulfillment of the basic requirements does not guarantee admission. An ideal candidate has a strong work ethic and exemplifies the program mission with a commitment to academic excellence, primary care,

and increasing access for diverse and underserved communities of West Texas and Beyond. They will have a combination of life, work, and academic experience that demonstrates their ability to perform under the demands of a rigorous, challenging academic and professional program.

The selection process for the TTUHSC PA Program is highly competitive. Applicants must meet the minimum prerequisite requirements. Each year, a large number of completed applications are received for a limited number of class positions. The Admissions Committee takes a broad range of factors into consideration as we select candidates who will best exemplify the mission of the PA Program, including:

- Quality and quantity of academic preparation and evidence of strong performance
- Promotion of activities improving the health of communities similar to those of West Texas
- Evidence of community service, leadership, or other nonacademic and extracurricular activities; including awards and honors
- Overcoming barriers to education
- Background experiences contributing to and promoting diversity in organizations and community
- Strength of letters of recommendation
- Strength of personal statement
- Superior interpersonal communication skills evaluated by the application submission and required interview process

Special consideration may be given to the following applicants: Residents from the 108 counties in the service are of TTUHSC; Veterans or Military; Residents from underserved populations; or Residents from economically or environmentally disadvantaged backgrounds.

The TTUHSC School of Health Professions is pleased to partner with other colleges and universities to streamline the application process for our healthcare degree programs, including the PA program. For additional information, please see our **Partner Institutions** website.

Admission offers are effective for matriculation only in the year of the application cycle and will not be transferred to subsequent years. Re-application is required if a candidate intends to matriculate within a cycle year that differs from their application year. Deferrals to another class year are not granted except in cases of required military duty. Offers of admission are contingent on candidate's intent to complete the program within the matriculation year in a continuous fashion without planned periods of leave for any reason.

Interviews are offered to the most competitive applicants based on a holistic review process. Applicants may not be accepted without a personal interview.

Prerequisite Course Requirements

Required Course	Semester Hours
Genetics	3
Microbiology	4
Anatomy (human preferred)	4
Physiology (human preferred)	4
Organic Chemistry or Biochemistry	4
Psychology	3
Statistics	3

**A&P I and II may fulfill Anatomy and Physiology requirement.*

*All required science courses must be intended for science majors. Required prerequisite courses must be taken at a regionally accredited US or Canadian college or university. Transfer credit from a school outside of the US or Canada will not apply to the required prerequisite courses. Prerequisite courses completed in the last 7 years are preferred. AP and CLEP credit will not be accepted for any science prerequisite courses.

PA Curriculum

FIRST-YEAR

First Summer Semester Courses		Credit Hours
HPPA 5191	Professional Development I	1
HPPA 1002	Interprofessional Collaborative Practice	0
HPPA 5306	Pharmacology I	3
HPPA 5406	Basic Sciences I	4
HPPA 5501	Human Anatomy	5
HPPA 5261	Clinical Skills I	2
		Total Hours = 15

First Fall Semester Courses		Credit Hours
HPPA 5392	Professional Development II	3
HPPA 5307	Pharmacology II	3
HPPA 5308	Basic Sciences II	3
HPPA 5120	Clinical Medicine: Dermatology	1
HPHA 5121	Clinical Medicine: Opthalmology	0.5
HPHA 5122	Clinical Medicine: Ears, Nose, and Throat	1
HPHA 5123	Clinical Medicine: Gastroenterology/Nutrition	1.5
HPHA 5124	Clinical Medicine: Hematology/Oncology	1
HPHA 5125	Clinical Medicine: Infectious Disease	1
HPHA 5326	Clinical Medicine: Psychiatry/Behavioral Science	3
HPHA 5462	Clinical Skills II	4
		Total Hours = 22

First Spring Semester Courses	Credit Hours

HPPA 5193	Professional Development III	1
HPPA 5427	Clinical Medicine: Cardiovascular	4
HPPA 5128	Clinical Medicine: Endocrinology	1
HPPA 5429	Clinical Medicine: Musculoskeletal	4
HPPA 5130	Clinical Medicine: Neurology	1.5
HPPA 5231	Clinical Medicine: Pulmonary	2
HPHA 5132	Clinical Medicine: Renal	1.5
HPPA 5333	Clinical Medicine: Essentials of Pediatrics	3
HPHA 5363	Clinical Skills III	3
		Total Hours = 21

SECOND-YEAR

Second Summer Semester Courses		Credit Hours
HPPA 6302	Cultural Competency for the Physician Assistant	3
HPPA 5194	Professional Development IV	1
HPPA 5134	Clinical Medicine: Genitourinary	0.5
HPPA 5235	Clinical Medicine: Reproductive	2
HPPA 5136	Clinical Medicine: Essentials of Geriatrics	0.5
HPPA 5237	Clinical Medicine: Essentials of Surgery	2.5
HPPA 5238	Clinical Medicine: Essentials of Emergency Medicine	2.5
HPPA 5364	Clinical Skills IV	3
		Total Hours = 15

Second Fall		Credit Hours
HPPA 6294	Evidence-Based Medicine I	2
Second Spring		
HPPA 6195	Evidence-Based Medicine II	1

Third Summer

HPPA 6196	Professional Development IV	1

Clinical Year (Second Fall, Second Spring, & Third Summer Courses)		Credit Hours
HPPA 6601	Family Medicine Clerkship	6
HPPA 6602	Internal Medicine Clerkship	6
HPPA 6603	Prenatal Care & Gynecology Clerkship	6
HPPA 6604	Pediatric Clerkship	6
HPPA 6605	Emergency Medicine Clerkship	6
HPPA 6606	Selective Clerkship	6
HPPA 6607	Psychiatry Clerkship	6
HPPA 6608	Surgery Clerkship	6
		Total Hours = 52

Total Hours = 125

Master of Physician Assistant Studies (PA) Course Descriptions

HPPA 1002 Foundations for Interprofessional Collaborative Practice (0:0:0,O) An introduction to broad concepts related to interprofessional core competencies for healthcare providers.

HPPA 5000 Audit (0:0:0,F) Audit

HPPA 5120 Clinical Medicine: Dermatology (1:1:0,F) This course is designed to cover foundational principles of Clinical Medicine related to the dermatology. Instruction will cover the application of basic science, clinical presentation, evaluation, diagnosis, management of common conditions, and preventative medicine. Content is accomplished through lectures, case discussions, and laboratories as appropriate.

HPPA 5121 Clinical Medicine: Opthalmology (.5:.5:0,F) This course is designed to cover foundational principles of Clinical Medicine related to ophthalmology. Instruction will cover the application of basic science, clinical presentation, evaluation, diagnosis, management of common conditions, and preventative medicine. Content is accomplished through lectures, case discussions, and laboratories as appropriate.

HPPA 5122 Clinical Medicine: Ears, Nose, and Throat (1:1:0,F) This course is designed to cover foundational principles of Clinical Medicine related to the ears, nose, and throat. Instruction will cover the application of basic science, clinical presentation, evaluation, diagnosis, management of common conditions, and preventative medicine. Content is accomplished through lectures, case discussions, and laboratories as appropriate.

HPPA 5123 Clinical Medicine: Gastroenterology/Nutrition (1.5:1.5:0,F) This course is designed to cover foundational principles of Clinical Medicine related to gastroenterology and nutrition. Instruction will cover the application of basic science, clinical presentation, evaluation, diagnosis, management of common conditions, and preventative medicine. Content is accomplished through lectures, case discussions, and laboratories as appropriate.

HPPA 5124 Clinical Medicine: Hematology/Oncology (1:1:0,F) This course is designed to cover foundational principles of Clinical Medicine related to hematology and oncology. Instruction will cover the application of basic science, clinical presentation, evaluation, diagnosis, management of common conditions, and preventative medicine. Content is accomplished through lectures, case discussions, and laboratories as appropriate.

HPPA 5125 Clinical Medicine: Infectious Disease (1:1:0,F) This course is designed to cover foundational principles of Clinical Medicine related to infectious disease. Instruction will cover the application of basic science, clinical presentation, evaluation, diagnosis, and management of common conditions. Content is accomplished through lectures, case discussions, and laboratories as appropriate.

HPPA 5128 Clinical Medicine: Endocrinology (1:1:0,F) This course is designed to cover foundational principles of Clinical Medicine related to endocrinology. Instruction will cover the application of basic science, clinical presentation, evaluation, diagnosis, management of common conditions, and preventative medicine. Content is accomplished through lectures, case discussions, and laboratories as appropriate.

HPPA 5130 Clinical Medicine: Neurology (1.5:1.5:0,O) This course is designed to cover foundational principles of Clinical Medicine related to the neurologic

system. Instruction will cover the application of basic science, clinical presentation, evaluation, diagnosis, management of common conditions, and preventative medicine. Content is accomplished through lectures, case discussions, and laboratories as appropriate.

HPPA 5132 Clinical Medicine: Renal (1.5:1.5:0,O) This course is designed to cover foundational principles of Clinical Medicine related to the renal system. Instruction will cover the application of basic science, clinical presentation, evaluation, diagnosis, management of common conditions, and preventative medicine. Content is accomplished through lectures, case discussions, and laboratories as appropriate.

HPPA 5134 Clinical Medicine: Genitourinary (.5:.5:0,F) This course is designed to cover foundational principles of Clinical Medicine related to the female genitourinary and male genitourinary and reproductive systems. Instruction will cover the application of basic science, clinical presentation, evaluation, diagnosis, management of common conditions, and preventative medicine. Content is accomplished through lectures, case discussions, and laboratories as appropriate.

HPPA 5136 Clinical Medicine: Essentials of Geriatrics (.5:.5:0,F) This course is designed to cover foundational principles of Clinical Medicine related to the geriatric population. Instructions will cover the application of basic science, clinical presentation, evaluation, diagnosis, and management of common conditions. End of life care and functional abilities will be included. Content is accomplished through lectures, case discussions, and laboratories as appropriate.

HPPA 5191 Professional Development I (1:1:0,H) The professional development sequence of courses spans the entire didactic program curriculum and is intended to provide a foundation for clerkships and professional practice. Topics include: PA Profession issues, history of the profession, business of healthcare, concepts of public health (such as: patient safety, quality improvement, and prevention of medical errors), medical ethics, risk management, rules/regulations, personal wellness and professionalism.

HPPA 5193 Professional Development III (1:1:0,F) The professional development sequence of courses spans the entire didactic program curriculum and is intended to provide a foundation for clerkships and professional practice. Topics include: PA Profession issues, history of the profession, business of healthcare, concepts of public health such as: patient safety, quality improvement, and prevention of medical errors, medical ethics, risk management, rules/regulations, personal wellness and professionalism.

HPPA 5194 Professional Development IV (1:1:0,F) The professional development sequence of courses spans the entire didactic program curriculum and is intended to provide a foundation for clerkships and professional practice. Topics include: PA Profession issues, history of the profession, business of healthcare, concepts of public health such as: patient safety, quality improvement, and prevention of medical errors, medical ethics, risk management, rules/regulations, personal wellness and professionalism.

HPPA 5231 Clinical Medicine: Pulmonary (2:2:1,F) This course is designed to cover foundational principles of Clinical Medicine related to the pulmonary system. Instruction will cover the application of basic science, clinical presentation, evaluation, diagnosis, management of common conditions and preventative medicine. Content is accomplished through lectures, case discussions, and laboratories as appropriate.

HPPA 5235 Clinical Medicine: Reproductive (2:2:0,F) This course is designed to cover foundational principles of Clinical Medicine related to female reproductive system including gynecology and obstetrics. Instruction will cover the application of basic science, clinical presentation, evaluation, diagnosis, management of common conditions and preventative medicine. Content is accomplished through lectures, case discussions, and laboratories as appropriate.

HPPA 5237 Clinical Medicine: Essentials of Surgery (2.5:2.5:1,F) This lecture series explores specialized and tertiary health care in the area of surgery and surgical subspecialties. Discussions address protocols, behavior and dress. Workshops enable students to learn and perform procedures essential for clinical practice and the approach to conditions requiring surgical interventions. Content is delivered through lectures, laboratories as appropriate. Case studies and patient education are incorporated into the teaching process.

HPPA 5238 Clinical Medicine: Essentials of Emergency Medicine (2.5:2.5:1,H) This lecture series explores specialized and tertiary health care in the area of emergency medicine. Discussions address protocols, behavior and dress. Workshops enable students to learn and perform procedures essential for clinical practice and the approach to acute conditions requiring emergency interventions. Content is delivered through lectures, laboratories as appropriate. Case studies and patient education are incorporated into the teaching process.

HPPA 5261 Clinical Skills I (2:2:2,F) The Clinical Skills course series encompass all semesters of the didactic year, and it is designed to provide students necessary skills and experiences needed to care for diverse patient populations throughout the lifespan. The course primarily focuses on evidenced-based techniques for patient interviewing, physical examination, ordering and interpreting diagnostics, and documentation. A combination of lectures, clinical vignettes, performance skills laboratories and simulated patient encounters will be employed to foster the learner's problem solving and medical decision-making skills within a collaborative patient-centered team-based model.

HPPA 5306 Pharmacology I (3:3:0,F) This lecture series introduces the actions of basic pharmacologic agents in the human. The mechanism of action, principal actions and adverse reactions of conventional classes of drugs is examined. A review of fundamental pharmacology calculations, measurements and symbols are performed.

HPPA 5307 Pharmacology II (3:3:0,F) This lecture series builds on Pharmacology I. The action and interaction of pharmacological agents is discussed. Therapeutic applications, adverse reactions and contraindications to familiar drugs are considered.

HPPA 5308 Basic Sciences II (3:3:0,O) This course is a continuation of Basic Sciences I. This course series is designed to develop an understanding of normal physiology, neuroscience, genetics, and their relation to disease states. The physiology component covers normal physiology of organ systems. The genetics component reviews the patterns of inheritance. The neuroscience component covers neuroanatomical arrangement, neurophysiology, and concepts of neurochemistry. Students are challenged to apply this knowledge towards problem-solving of scenarios and predictions regarding disease states.

HPPA 5326 Clinical Medicine: Psychiatry/Behavioral Science (3:3:0,F) This course is designed to cover foundational principles of Clinical Medicine related to the dermatological system. Instruction will cover the application of basic science, clinical presentation, evaluation, diagnosis, management of common conditions. Addiction treatment and rehabilitation and violence recognition and prevention will be included. Content is accomplished through lectures, case discussions, and laboratories as appropriate.

HPPA 5333 Clinical Medicine: Essentials of Pediatrics (3:3:0,H) This course is designed to cover foundational principles of Clinical Medicine related to the practice of pediatrics. Instruction will cover the application of basic science, clinical presentation, evaluation, diagnosis, and management of common conditions presenting in infants, toddlers, children and adolescents. Prevention and normal development will be discussed. Content is accomplished through lectures, case discussions, and laboratories as appropriate.

HPPA 5363 Clinical Skills III (3:3:3,F) The Clinical Skills course series encompass all semesters of the didactic year, and it is designed to provide students necessary skills and experiences needed to care for diverse patient populations throughout the lifespan. The course primarily focuses on evidenced-based techniques for patient interviewing, physical examination, ordering and interpreting diagnostics, and documentation. A combination of lectures, clinical vignettes, performance skills laboratories and simulated patient encounters will be employed to foster the learner's problem solving and medical decision-making skills within a collaborative patient-centered team-based model.

HPPA 5364 Clinical Skills IV (3:3:3,F) The Clinical Skills course series encompass all semesters of the didactic year, and it is designed to provide students necessary skills and experiences needed to care for diverse patient populations throughout the lifespan. The course primarily focuses on evidenced-based techniques for patient interviewing, physical examination, ordering and interpreting diagnostics, and documentation. A combination of lectures, clinical vignettes, performance skills laboratories and simulated patient encounters will be employed to foster the learner's problem solving and medical decision-making skills within a collaborative patient-centered team-based model.

HPPA 5392 Professional Development II (3:3:0,F) The professional development sequence of courses spans the entire didactic program curriculum and is intended to provide a foundation for clerkships and professional practice. Topics include: PA Profession issues, history of the profession, business of healthcare, concepts of public health such as: patient safety, quality improvement, and prevention of medical errors, medical ethics, risk management, rules/regulations, personal wellness and professionalism.

HPPA 5406 Basic Sciences I (4:4:0,O) This course series is designed to develop an understanding of normal physiology, neuroscience, genetics, and their relation to disease states. The physiology component covers normal physiology of organ systems. The genetics component reviews the patterns of inheritance. The neuroscience component covers neuroanatomical arrangement, neurophysiology, and concepts of neurochemistry. Students are challenged to apply this knowledge towards problem-solving of scenarios and predictions regarding disease states.

HPPA 5427 Clinical Medicine: Cardiovascular (4:3:1,H) This course is designed to cover foundational principles of Clinical Medicine related to cardiology. Instruction will cover the application of basic science, clinical presentation, evaluation, diagnosis, management of common conditions including rehabilitation, and preventative medicine. Content is accomplished through lectures, case discussions, and laboratories as appropriate.

HPPA 5429 Clinical Medicine: Musculoskeletal (4:3:1,F) This course is designed to cover foundational principles of Clinical Medicine related to orthopedics and rheumatology. Instruction will cover the application of basic science, clinical presentation, evaluation, diagnosis, management of common conditions including rehabilitation, and preventative medicine. Content is accomplished through lectures, case discussions, and laboratories as appropriate.

HPPA 5462 Clinical Skills II (4:4:4,F) The Clinical Skills course series encompass all semesters of the didactic year, and it is designed to provide students necessary skills and experiences needed to care for diverse patient populations throughout the lifespan. The course primarily focuses on evidenced-based techniques for patient interviewing, physical examination, ordering and interpreting diagnostics, and documentation. A combination of lectures, clinical vignettes, performance skills laboratories and simulated patient encounters will be employed to foster the learner's problem solving and medical decision-making skills within a collaborative patient-centered team-based model.

HPPA 5501 Human Anatomy (5:6:10,I) This lecture/laboratory series encompasses a regional study of the gross morphological features of the human body emphasizing functional anatomy. The course lays the foundation for understanding the principles of clinical medicine.

HPPA 6000 Rural Track Seminar (0:0:0,O) This course runs through the clinical year for students on the PA Program Rural Track. Through a variety of learning opportunities, students will augment their learning to better prepare them for rural practice and lifestyle.

HPPA 6195 Evidence Based Medicine II (1:1:0,O) This course is a continuation of Evidence-Based Medicine I. The student will continue inquiry based on the evidence-based research question to produce a final paper or scholarly project.

HPPA 6196 Professional Development V (1:1:0,F) This course completes the course series of the foundations of professional practice. Topics include licensing and credentialing. Student complete the program summative examination and evaluation requirements.

HPPA 6294 Evidence Based Medicine I (2:2:0,O) This course is the first in the series to prepare student to search, interpret, and evaluate the medical literature and its application to patient care. Students learn how to frame research questions, interpret basic biostatistical methods, limits of medical research, types of sampling methods, and the use of common databases. The student will develop an evidenced-based research question as a basis for continued inquiry in the next semester.

HPPA 6302 Cultural Competency for Physician Assistants (3:3:0,H) This course is intended to provide knowledge, skill and attitude competencies in cultural competence. It is intended to build on interviewing skills and will consist of a series of case discussions and readings relevant to socio-cultural factors that may affect the delivery of care to individual patients in a diverse population. Self-awareness will be emphasized as a basis on which clinicians develop the competencies necessary for current and evolving clinical practice in a variety of settings.

HPPA 6601 Family Medicine Clerkship (6:0:40,F) This clerkship provides experience with common diseases and chronic illnesses in the family practice setting. The learning experience includes the family medicine approach to direct care, initial care, comprehensive care and continuity of care. The student participates in the promotion and application of the preventive medicine and wellness maintenance techniques as an important aspect of family practice.

HPPA 6602 Internal Medicine Clerkship (6:0:40,F) This clerkship provides clinical experience with acute and chronic illnesses seen in the general internal medicine practice. Thie student experiences the traditional approach to the comprehensive care of adult patients to include continuity of care. Clinical experience in preventive medicine, health and wellness maintenance techniques, especially in secondary and tertiary settings, is provided.

HPPA 6603 Prenatal Care and Gynecology Clerkship (6:0:40,F) This clerkship provides clinical experience in the care of prenatal and gynecologic patients. This rotation will emphasize the examination of the female patient with focus on the most common gynecologic and prenatal problems and their diagnostic assessment, the formulation of appropriate treatment plans, the utilization of preventive medicine modalities and the evaluation and education of the gynecological and prenatal patient.

HPPA 6604 Pediatric Clerkship (6:0:40,F) The Pediatric clerkship is designed to provide PA students with experience in the specialty of pediatric medicine. This clerkship provides the opportunity for students to gain general pediatric knowledge and to apply that clinical knowledge to the development of the necessary proficiency for a PA to function in a primary care pediatric setting.

HPPA 6605 Emergency Medicine Clerkship (6:0:40,F) The Emergency Medicine clerkship will provide the PA student with experience in the emergency department with urgent and emergent medical problems and with trauma and surgical cases. It includes the emergency approach to direct initial and comprehensive care for patients in the acute care setting.

HPPA 6606 Selective Clerkship (6:0:40,F) The selective clinical clerkship provides the student with an opportunity to choose a clinical experience from the available fields of medicine offered by the program. The rotation allows the student to create an additional knowledge base and to gain clinical experience in a medical sub-specialty or core competency.

HPPA 6607 Psychiatry Clerkship (6:0:40,F) The Psychiatry clerkship provides experience with common acute and chronic psychiatric mental/behavioral health and the approach to assessment and management of mental health conditions.

HPPA 6608 Surgery Clerkship (6:0:40,F) The surgery clerkship provides experience in the presentation and treatment of surgical management of disease and illness. This rotation allows the PA student to experience the approach to and the management of the surgical patient in the preoperative, intra-operative, and postoperative phase of care.

Doctor of Physical Therapy (DPT)

The DPT program at Texas Tech University Health Sciences Center is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 3030 Potomac Ave., Suite 100, Alexandria, Virginia 22305; telephone: (703) 706-3245; email: ***accreditation@apta.org****; website:* ***http://www.capteonline.org****. If needing to contact the program directly, please call 806-743-4525 or email* ***kerry.gilbert@ttuhsc.edu****.*

The Physical Therapy Profession

The profession of physical therapy developed as a result of societal needs during the world wars and the poliomyelitis epidemics in the beginning of the 20th century. Physical therapists practice in a variety of settings with very high levels of professional responsibility. They practice in outpatient clinics, hospitals, rehabilitation facilities, long-term care facilities, patients' homes, schools, industrial settings, and fitness/wellness centers. Physical therapists are an integral part of the healthcare team managing a wide variety of patients across the lifespan in many different settings.

Physical therapy is a profession aimed at restoring maximum function and functional ability to patients following injury, illness, disease, or surgery. Physical therapists develop evidence-based, patient-specific, therapeutic intervention plans to minimize or alleviate impairments, functional limitations, or disabilities. These patient-specific intervention plans are formulated after a detailed physical therapy examination and evaluation. Physical therapists collaborate with a variety of other professionals through consultation, education, and research to provide patient/client services. Physical therapists also act as consultants for businesses, public and private organizations, and their communities to promote health, wellness/fitness, and illness/injury prevention. Physical therapist practice relies on the application of a well-developed body of scientific and clinical knowledge from the foundational, behavioral, clinical, and social sciences. In addition, physical therapists are investigators in basic and applied clinical research, and serve as both academic and clinical faculty members at universities.

After graduating from an accredited physical therapy professional education program, physical therapist candidates must pass a national licensure examination in order to practice physical therapy. Additional licensure requirements for physical therapists vary from state to state, according to practice acts and state regulations that govern the practice of physical therapy.

Program Description

The Texas Tech University Health Sciences Center's Doctor of Physical Therapy (DPT) program is located within the School of Health Professions and the Department of Rehabilitation Sciences.

Increases in the professional responsibility of the physical therapist created a need for continued development of physical therapy professional educational programs across the United States. This development led to the transition of physical therapy programs from bachelor's degree programs to master's degree programs and finally to doctoral degree programs. The TTUHSC School of Health Professions obtained approval to award the Doctor of Physical Therapy (DPT) degree from the Texas Higher Education Coordinating Board in July of 2007.

The mission of the Doctor of Physical Therapy (DPT) program at Texas Tech University Health Sciences Center is to develop collaborative healthcare professionals through innovative teaching, research, and service for West Texas communities and beyond.

The three-year DPT program has two components: academic and clinical. The academic component, via classroom and laboratory experiences, includes applied foundational sciences, behavioral sciences, and clinical sciences. The clinical component consists of 36 weeks of full-time clinical experience. Clinical experiences feature inpatient and outpatient experiences and may include foundational skills, musculoskeletal, neurological and elective settings. Elective settings are designed to meet individual student interests and may include pediatrics, rural health, pelvic floor, sports medicine, etc. Sites for clinical experiences are located primarily throughout Texas and the Southwestern United States but may be located anywhere in the United States mainland. Students should anticipate additional costs during their clinical component of the DPT program. Students must pass a Criminal Background Check in order to

participate in clinical component of the program, and many clinical sites require a drug screening prior to the beginning of the clinical experience. Additionally, most clinical sites have specific vaccination requirements that students must meet in order to participate in a clinical experience in their facility. Costs for criminal background checks, drug screenings, and vaccinations or titers required for clinical experiences are the responsibility of the student.

The TTUHSC DPT program is one program located on three campuses: Amarillo, Lubbock, and Odessa. Class sizes at all campuses are monitored to ensure optimal student/instructor ratios and to maximize comprehensive instructional and laboratory experiences. Faculty and students on all campuses communicate with each other in person, via a synchronous interactive multimedia environment, by e-mail, and by telephone. Students entering the program should possess basic computer skills, including, but not limited to the use of e-mail, accessing the internet, and the use of word processing programs.

Technical Standards

The Doctor of Physical Therapy (DPT) program at Texas Tech University Health Sciences Center (TTUHSC) is a rigorous and intense educational program that places specific professional, intellectual, physical, and social requirements and demands on its students. An objective of the TTUHSC DPT program is to prepare graduates to enter a variety of employment settings and to render care to a broad spectrum of individuals with physical and psychosocial impairments. The technical standards set forth by the DPT program establish the functional capabilities considered necessary for students admitted to this program to achieve the knowledge, skills, and competencies for entry-level practice in didactic (classroom) and clinical educational experiences. The ability to meet these technical standards, with or without accommodations, is required for admission to the DPT program and must be maintained throughout the time a student is enrolled. These technical standards are subject to amendment based on changes in health care/physical therapy scope of practice.

Applicants to the TTUHSC DPT program will be required to verify that they understand and meet these technical standards, or that they believe that with reasonable accommodations they can meet the technical standards.

In keeping with applicable federal and state law regarding disabilities, we are committed to making reasonable accommodations for students with disabilities to enable them to perform successfully in our program. Any student with a disability who is accepted to the DPT program must contact the Student Disability Services (SDS) in the TTUHSC Office of Student Affairs as soon as possible. SDS Staff will determine whether the stated condition qualifies as a disability under applicable laws and work with the program faculty to determine reasonable accommodations.

There are two separate and distinct components in the curriculum for the DPT program: 1) didactic (classroom) component; and 2) clinical component. Accommodations in place for the didactic component may not be the same accommodations available for the clinical component of the curriculum.

To successfully complete the didactic and clinical portions of the TTUHSC DPT program, a student must meet the following technical standards:

1. **Observation**:

   a. Observe a patient using visual, auditory, and palpatory sensory systems as a component of providing safe and effective patient care.

   - Sufficient vision is required to perform components of patient assessment and intervention including (but not limited to) accurate review and interpretation of medical records, observation of patient behaviors and movement, patient inspection, and cadaveric dissection.
   - Sufficient auditory function is required to perform components of patient assessment and intervention including (but not limited to) accurate auscultation and interpretation of sounds from the pulmonary, cardiovascular, gastrointestinal, and musculoskeletal systems.
   - Sufficient tactile sensation is required to perform components of patient assessment and intervention including (but not limited to) accurate palpation and discernment of muscles, bones, joints, lymph nodes, and other subcutaneous or internal structures.

   b. Accurately monitor, through both visual and auditory modalities, materials and equipment used for assessment and treatment of patients.

Note: Participation in the DPT program requires the successful completion of a gross anatomy course, which includes extensive hands-on dissection of human cadavers. Additionally, labs are taught in a co-educational environment, and students are required to practice observation and intervention skills on individuals of both sexes, as well as all body types and genders. In order to simulate patients for assessment and interventions, students are often required to dress in shorts and t-shirts/sports bras to allow appropriate visualization or palpation.

2. **Communication**:

a. Recognize and accurately interpret verbal (oral and written) and non-verbal (facial expression, body language, etc.) communication for the provision of safe and effective patient care.

b. Communicate professionally (orally and in writing) as required for course work and clinical placements to ensure safe and effective patient care.

c. Communicate efficiently (orally and in writing) in order to meet academic and clinical productivity requirements in assigned tasks, patient care, and documentation.

3. **Psychomotor Skills**:

a. Demonstrate sufficient strength and coordination to stabilize and/or move both oneself and patients/subjects in 3-dimensional space for activities including (but not limited to) bed mobility, transfers, locomotion, ambulation, and joint mobilizations safely and effectively.

b. Demonstrate sufficient fine motor coordination for safe and effective hands-on patient assessments and interventions as well as for the manipulation of the environment, materials, and equipment involved in patient care.

c. Sustain necessary physical activity level required for classroom and clinical activities during the defined workday.

d. Demonstrate safe and effective application of knowledge and behaviors as they relate to clinically relevant motor skills.

e. Use technology to meet requirements of coursework and clinical placements (e.g., computer skills including but not limited to internet access, word processing, and spreadsheet programs, learning management systems, and electronic health records).

f. Access transportation for timely attendance to academic courses and clinical placements.

4. **Cognition**:

a. Comprehend, integrate, analyze, and synthesize a large body of information in a reasonable period of time.

b. Read, comprehend, record, and interpret information accurately from patient/caregiver interviews, patient records, diagnostic tests, and equipment to ensure safe and effective patient interactions.

c. Comprehend and accurately interpret the spatial relationships of 3-dimensional structures.

d. Demonstrate the ability and willingness to self-assess academic and clinical skill performance.

5. **Social Behavioral Skills:**

a. Demonstrate respect for all persons (including respect for differences in age, sex, gender, race, nationality, religion, ethnicity, social or economic status, lifestyle, health or disability status, or learning style) during academic and clinical interactions.

b. Develop mature, sensitive, and effective professional relationships with individuals in academic and clinical settings.

c. Demonstrate flexibility and the ability to adjust to changing situations and uncertainty in academic and clinical situations, including the ability to tolerate taxing workloads and to function effectively under stress.

d. Conduct oneself in an ethical and legal manner, demonstrating honesty, integrity, and professionalism in all interactions and situations.

Admission to the Program

The professional phase of the DPT program begins in late May each year. Applications for admissions to the DPT program are considered on a rolling basis with one application deadline (October 1st) each year. Applicants to the physical therapy program should understand that students admitted to the program are assigned to a specific campus (Lubbock, Amarillo, or Odessa), and requests for campus transfers are not typically granted. Students who are unable or unwilling to accept assignment to a specific campus should not accept admission to the DPT program. All students attend classes during the first summer session on the Lubbock campus.

Application Process

All DPT applications are submitted through PTCAS. Please go to http://www.ttuhsc.edu/health-professions/admissions/application.aspx to access the required applications. The application must be verified by PTCAS and the TTUHSC SHP supplemental application must be complete by the application deadline, October 1st. Please note there is a lag in submitting your application to PTCAS and the application being verified. Applicants will need to plan accordingly. It is the applicant's responsibility to ensure all application materials have been received and verified by PTCAS and the SHP Office of Admissions prior to the application deadline.

Individual applications are reviewed and interviews are scheduled for competitive applicants once all materials have been received. It is in the applicant's best interest to complete their application, including submission of transcripts, GRE scores and clinical experience documentation forms, as early as possible. Applicants who have completed all or most of their prerequisite courses at the time of application may be at an advantage during the admission process. Two letters of recommendation are required as part of the application, and should be completed by the following: one from a physical therapist who has observed the applicant during any related volunteer or paid work, and the other from a previous or present instructor, academic counselor, previous or present employers.

GPA Requirements

A minimum of a 3.0 cumulative and 3.0 prerequisite grade point averages (on a four point scale) are required for admission. Competitive GPA's are considered in light of the strength of the applicant pool during the year of application.

GRE Requirement

Competitive GRE scores are required for admission, considering verbal, quantitative, and analytical subscale scores. Competitive GRE scores are dependent upon the strength of the application pool during the year of admission. The GRE code for the TTUHSC DPT Program is 7155.

Experience

Applicants are expected to have some experience within the profession prior to application to the program. This experience may be acquired in several ways, including volunteer work, paid employment, or observations in clinical settings. Applicants are required to have completed at least 50 clock hours of experience in a physical therapy setting with a licensed physical therapist prior to May 1 of the year of matriculation. While applicants are encouraged to gain as much experience in as many different settings (inpatient, outpatient, rehab, acute care, aquatics, wound care, etc.) as possible, observation hours in excess of 50 or the total number of settings observed are not considered as part of the holistic application review.

*Applicants who meet the above-listed requirements and are deemed competitive candidates for admission will be invited to TTUHSC for interviews. Applicants should understand that fulfillment of the basic requirements does not guarantee admission. The admissions committee selects the most qualified applicants from the pool of applicants interviewed considering: cumulative GPA, prerequisite GPA, GRE scores, interview scores, recommendation letters, student essay, and other factors.

Prerequisite Courses

All prerequisite courses must be completed prior to matriculation. Applicants who have completed all or most of their prerequisite coursework at the time of application may be at an advantage during the admissions process. No more than 16 hours of science prerequisite courses may be in process at the time of application. A bachelor's degree is required for admission into the DPT program. In addition, specific DPT program prerequisites are listed below and may be completed at any accredited college or university.

Required Course	Semester Hours
Chemistry I & II (for science majors, lab required)	8
Physics I & II (for science majors, lab required)	8
Biology I & II (for science majors, lab required)	8
Anatomy & Physiology (for science majors, lab required)	8
Psychology	3
Statistics	3
	Total Hours = 38

* Recommended courses: English, technical writing, speech, advanced human physiology, exercise physiology, kinesiology, biomechanics, motor control, developmental psychology.

DPT Curriculum

FIRST-YEAR

Summer Semester Courses		Credit Hours
HPPT 8100	Professional Development	1
HPPT 8203	Functional Anatomy	2
HPPT 8500	Gross Anatomy	5
		Total Hours = 8

Fall Semester Courses		Credit Hours
HPPT 8201	History & Systems Screening	2
HPPT 8205	Evidence-Based Practice I	2
HPPT 8209	Clinical Applied Physiology	2
HPPT 8301	Foundational Skills & Assessment	3
HPPT 8303	Biomechanics	3
HPPT 8407	Pathophysiology	4
		Total Hours = 16

Spring Semester Courses	Credit Hours

HPPT 8212	Pharmacology	2
HPPT 8216	Physical Agents & Modalities	2
HPPT 8310	Therapeutic Exercise	3
HPPT 8314	Inpatient/Integumentary Physical Therapist Practice	3
HPPT 8318	Neuroscience	3
HPPT 8414	Cardiopulmonary Physical Therapist Practice	4
		Total Hours = 17

SECOND-YEAR

Summer Semester Courses		Credit Hours
HPPT 8120	Communication & Clinical Education	1
HPPT 8123	Clinical Reasoning I	1
HPPT 8228	Motor Control	2
HPPT 8222	Clinical Experience I (4 weeks)	2
		Total Hours = 6

Fall Semester Courses		Credit Hours
HPPT 8231	Diagnostic Imaging	2
HPPT 8329	Human Development	3
HPPT 8425	Musculoskeletal Physical Therapist Practice I	4
HPPT 8521	Neuromuscular Physical Therapist Practice	5
		Total Hours = 14

Spring Semester Courses		Credit Hours
HPPT 8114	Evidence-Based Practice II	1
HPPT 8226	Orthotics and Prosthetics	2
HPPT 8327	Health Care and Business Management	3
HPPT 8422	Pediatric Physical Therapist Practice	4
HPPT 8426	Musculoskeletal Physical Therapist Practice II	4

Total Hours = 14

THIRD-YEAR

Summer Semester Courses		Credit Hours
HPPT 8142	Assistive & Adaptive Technology	1
HPPT 8224	Clinical Reasoning II	2
HPPT 8240	Differential Diagnosis	2
HPPT 8246	Advanced Topics in Physical Therapy	2
		Total Hours = 7

Fall Semester Courses		Credit Hours
HPPT 8144	Professional Project	1
HPPT 8453	Clinical Experience II (8 weeks)	4
HPPT 8455	Clinical Experience III (8 weeks)	4
		Total Hours = 9

Spring Semester Courses		Credit Hours
HPPT 8160	Graduate Seminar	1
HPPT 8456	Clinical Experience IV (8 weeks)	4
HPPT 8458	Clinical Experience V (8 weeks)	4
		Total Hours = 9

Total Curriculum Hours = 100

During professional studies, students are required to adhere to all program policies and academic and behavioral guidelines as stated in the TTUHSC Student Affairs Handbook-Code of Professional and Academic Conduct and the DRS Student Handbook. Expenses incurred on/for clinical rotations (such as but not limited to housing, transportation, immunizations, drug screening, and criminal background check) are the responsibility of the student.

Doctor of Physical Therapy (DPT) Course Descriptions

HPPT 1002 Foundations for Interprofessional Collaborative Practice (0:0:0,O) An introduction to broad concepts related to interprofessional core competencies for healthcare providers.

HPPT 8100 Professional Development (1:2:0,F) This course introduces future clinicians to the concepts of professionalism, professional associations, and leadership as they relate to the practice of physical therapy. Additional emphasis will be on the core documents which guide the profession of physical therapy, principles which govern ethical decisions, and ethical issues related to health care providers.

HPPT 8114 Evidence-Based Practice 2 (1:0:1,F) This course prepares students to critically appraise peer-reviewed scientific literature and apply evidence to physical therapist practice. The primary goal of the course is for students to become confident consumers of scientific literature.

HPPT 8120 Communication and Clinical Education (1:3:0,F) This course is designed to improve the students' communication through written, verbal and nonverbal forms, enhance professional behaviors and address issues concerning clinical education. Topics discussed are related to documentation styles, teaching and learning, components of respectful interaction with cultural and generational differences, difficult patients and various age groups. Professional behaviors as they relate to the generic abilities and clinical education will also be addressed, along with using the PT MACS on clinical internships.

HPPT 8123 Clinical Reasoning I (1:2:3,F) This course explores the nature of clinical reasoning in the profession of physical therapy and provides strategies to assist students as they develop their reasoning expertise. Activities in this course sharpen clinical problem-solving strategies used in the context of minimally to moderately complex clinical cases. Knowledge and skills from the curriculum taught to this point will be incorporated. The didactic portion of the course will encourage comprehensive content review through the first academic year of the curriculum. The laboratory portion of the course places an emphasis on case-based competency, problem solving, and patient management. The clinical reasoning process is emphasized through the use of case studies and the application of current practice paradigms within the students' educational exposure.

HPPT 8142 Assistive & Adaptive Technology (1:2:0,F) This course provides a detailed study of assistive technology including manual and powered mobility, standers, gait trainers and technologies that aid manipulation of objects. In addition, current technologies to assess and document architectural barriers will be addressed, including, but not limited to: environmental controls, augmentative communication, and transportation.

HPPT 8144 Professional Project (1:0:1,O) This course applies skills learned in previous evidence-based practice courses, specifically, critically appraising peer-reviewed scientific literature and applying evidence to physical therapy practice. While on clinical experiences, students will integrate evidence-based practice into their clinical experience by developing patient-specific clinical questions and completing literature review and course projects related to the best available scientific evidence to direct patient assessment and care.

HPPT 8160 Graduate Seminar (1:0:1,F) This integrative capstone seminar course format is designed to prepare graduates for the licensure examination and entering the work force. Learning method includes online supplementary review and seminar format.

HPPT 8201 History and Systems Screening (2:1:3,F) This course introduces the history taking and screening skills necessary for the physical therapist to make informed decisions related to patient referral and physical therapy diagnosis vital to a primary care environment. Emphasis is placed on the importance of properly collecting information during the patient interview/chart review as well as appropriate physical screening tests as they relate to the musculoskeletal, neuromuscular, integumentary, cardiopulmonary, and cognitive systems. Lab activities include various history taking activities along with detailed systems review including, but not limited to vital signs and upper and lower quadrant screening. Knowledge gained in this course will assist the physical therapist in clinical decision making as to when to treat a patient and when to refer patients to another healthcare professional.

HPPT 8203 Functional Anatomy (2:2:3,F) This course examines anatomical structure within the context of normal function. Emphasis is placed on joint orientation and description of normal osteokinematic and arthrokinematic components of movement of the upper extremity, lower extremity and spine. Laboratory experiences are designed to promote accurate surface anatomy palpation, visualization of kinematic motion, and recognition of abnormal motion.

HPPT 8205 Evidence-Based Practice 1 (2:2:0,F) This course prepares students to develop the knowledge and skills needed for evidence-based physical therapist practice. Students will obtain requisite knowledge about the research process, including the general features of research designs commonly used in pre-clinical and clinical studies. The fundamental concepts of descriptive and inferential statistics will be explored. Students will learn to apply evidence to clinical practice by integrating evidence, patient values, and clinical experience. Specifically, students will be able to perform all steps involved in evidence-based practice: pose a question based on a patient problem, search the literature for evidence, critically appraise the evidence for validity and reliability, and determine whether the evidence is applicable to clinical practice.

HPPT 8209 Clinical Applied Physiology (2:2:0,F) This course is designed to provide students an understanding of basic exercise physiology with a focus on the acute physiological responses and adaptive changes to exercise across systems, between genders, and over the lifespan. Students will develop their understanding of the body's ability to perform physical work, adapt to stressful situations, and improve its physiological capacities for health and exercise performance.

HPPT 8212 Pharmacology (2:2:0,O) This course provides a survey of pharmacology and covers key concepts related to the cellular actions, therapeutic uses, and side effects of major drug classes used in humans. Basic principles of pharmacology are addressed with focus on the mechanisms of action of classes of drugs and effects of specific drugs on the nervous, musculoskeletal, cardiorespiratory, immune, endocrine, gastrointestinal, and other body systems. Basic principles of pharmacology and their relation with pathophysiology are addressed with focus on and relevant applications to the practice of Physical Therapy.

HPPT 8216 Physical Agents and Modalities (2:1:3,F) This course presents material that allows development of clinical skills fundamental to patient management for the Physical Therapist. Course content includes theory, scientific principles, and clinical applications associated with a Physical Therapy evaluation, assessment, and intervention with physical agents and modalities. This course emphasizes instruction in physical agents and modalities available to the practicing Physical Therapist. These will include: electrophysiology, thermal agents, laser, application of traction, electromyographic (EMG) biofeedback, biomedical compression, alternative and palliative care, soft tissue modalities, and the practical usage of each agent or modality. Both classroom and laboratory learning will be included.

HPPT 8222 Clinical Experience 1 (2:0:40,F) Four weeks of full-time clinical experience (approximately 160 hours) in a Physical Therapy practice setting. During Clinical Experience 1, the student has the opportunity to integrate patient evaluation and management skills in a clinical setting to develop entry-level competencies for entry-level Physical Therapists as defined in the Physical Therapist Manual for the Assessment of Clinical Skills (PT MACS).

HPPT 8224 Clinical Reasoning 2 (2:2:3,F) This course explores the nature of clinical reasoning in the profession of physical therapy and provides strategies to assist students as they develop their reasoning expertise. Activities in this course sharpen clinical problem-solving strategies used in the context of minimally to moderately complex clinical cases. Knowledge and skills from the curriculum taught to this point will be incorporated, emphasizing clinical courses in the curriculum: inpatient/integumentary, cardiopulmonary, musculoskeletal, pediatrics and neuromuscular physical therapist practice. The didactic portion of the course will encourage comprehensive content review through the first and second years of the curriculum in preparation for the licensure examination. The laboratory portion of the course places an emphasis on case-based competency, problem solving, and patient management. The clinical reasoning process is emphasized through the use of case studies and the application of current practice paradigms within the students' educational exposure.

HPPT 8226 Orthotics and Prosthetics (2:2:0,F) This course focuses on orthotic and prosthetic prescription and training based on patient assessment, the materials and designs of devices, and the expected functional outcome of use of the device. Topics include patient evaluation with emphasis on gait analysis, device checkouts, training strategies, and exercise prescription.

HPPT 8228 Motor Control (2:5:0,F) This course examines the principles and theories of motor control, motor learning, and motor development as related to normal motor performance and function. The topics include patient evaluation and management as related to postural control, motor skill acquisition, motor control precision, and motor control sequences.

HPPT 8231 Diagnostic Imaging (2:2:0,F) This course examines the basic science underlying multiple imaging modalities (x-rays, CT, MRI, Nuclear Medicine, Ultrasound, etc.), how each of these differ, and why each is useful for diagnosing certain types of conditions. This course will also introduce evaluation of radiographic studies, in a systematic fashion, in order to correlate the image findings with evidence-based, clinical information. The course will emphasize the anatomy of the components of the musculoskeletal, nervous, and cardiopulmonary systems as it appears on the various imaging modalities. In addition, fracture terminology and the radiographic appearance of common fractures will be covered. The role of the physical therapist both in suggesting imaging studies for their patients and communicating with the radiologist will be a focus.

HPPT 8240 Differential Diagnosis (2:2:3,F) This course examines the differential diagnosis of conditions that may require referral to or examination by a physician or other health care provider. Incorporation of basic to complex case studies from a variety of physical therapy practice settings, trains the student to properly screen for medical disease and to make an informed physical therapy diagnosis. Students will be required to draw upon their comprehensive knowledge of all body systems to distinguish musculoskeletal and neuromuscular pathology from systemic conditions involving medical pathology.

HPPT 8246 Advanced Topics in Physical Therapy (2:4:0,F) This course includes selected advanced topics of interest to the profession of physical therapy. Topics may include, but are not limited to: health and wellness promotion, women's physical therapy, ergonomics, alternative therapies, and biopsychosocial pain patterns. Additional topics of interest may be presented.

HPPT 8301 Foundational Skills and Assessment (3:2:3,F) This course presents foundational tests and measures necessary for the physical therapy examination. Using didactic lecture and clinical laboratory practice, foundational physical therapy skills and assessments are covered including but not limited to: goniometry, manual muscle testing, postural assessment, balance assessment, gait assessment as it relates to gait training, use of assistive devices, transfer training, and general positioning and draping.

HPPT 8303 Biomechanics (3:3:0,F) This course provides students with a fundamental understanding of the biomechanics of the musculoskeletal system and integrated human movement with clinically relevant applications.

HPPT 8310 Therapeutic Exercise (3:2:3,F) This course provides students with the psychomotor skills and reasoning tools necessary to create and implement a plan of care incorporating therapeutic exercise based interventions across the continuum of physical therapy practice. The major therapeutic exercise domains explored include flexibility training, resistance training, cardio-respiratory/aerobic training, relaxation, aquatic exercise, proprioceptive neuromuscular facilitation, balance, coordination, stabilization training and return to function.

HPPT 8314 Inpatient/Integumentary Physical Therapist Practice (3:2:3,F) This course presents material essential to a physical therapist's role in patient/client management in the inpatient setting (i.e., general medicine, surgical practice, acute care, ICU, and post-acute care rehabilitation placement), and the wound care/burn care setting. Utilizing didactic lecture and clinical laboratory practice, material associated with the five elements of the patient/client management by the physical therapist are acquired. These elements include the examination, evaluation of examination results, diagnosis, establishing a prognosis, and instituting appropriate interventions. Specific attention will be given to assessments and interventions within the inpatient/acute care setting and wound care/burn care.

HPPT 8318 Neuroscience (3:3:0,F) This course provides students with a fundamental understanding of the functions and pathologies of the central nervous system (CNS) as a basic science course in the neurorehabilitation curriculum. The emphasis will be on "systems-level neuroanatomy," i.e., functional neuroanatomy (e.g., motor and sensory pathways) and regional neuroanatomy (e.g., organization of spinal cord, brainstem, cerebral cortex, etc.). In addition, information processing by neurons will be addressed by coverage of axon physiology, synaptic neurotransmission and plasticity. The course will first survey the anatomical organization of the CNS, then sensory and motor functions of the CNS, and finish with a description of a number of neurological disorders that have clinical relevance to Physical Therapists.

HPPT 8327 Healthcare and Business Management (3:3:0,F) This course examines healthcare business principles and concepts for the entry-level physical therapist in a clinical setting. Business principles, healthcare regulation, and compliance are applied to a range of clinical settings and organizational structures. The topics include business processes common to all business entities with an emphasis on the unique aspects of healthcare delivery, compliance, payment and daily operational tasks.

HPPT 8329 Human Development (3:3:0,F) This course examines human growth and development issues across the lifespan and theories relevant to the practice of physical therapy. The course focuses on typical development from conception to senescence within the physical, cognitive, social, and emotional domains.

HPPT 8407 Pathophysiology (4:4:0,F) This course provides a survey of clinical pathophysiology and covers key concepts related to the function and biological control of cells, tissues, organs, and body systems as well as structural and functional changes in cells, tissues and organs that underlie human disease. Basic principles of pathophysiology are addressed with focus on the cause, development, progress, and consequences of diseases related to the nervous, musculoskeletal, cardiorespiratory, immune, endocrine, gastrointestinal and other body systems.

HPPT 8414 Cardiopulmonary Physical Therapist Practice (4:3:3,F) This course examines primary and secondary cardiopulmonary impairments that limit patient outcomes in various settings including, intensive care units, long term care facilities, outpatient settings, school settings, and home health care. Emphasis is placed on the components of physical therapy practice – screening, examination, evaluation, diagnosis, prognosis, development of a plan of care, intervention, and evaluation of outcomes. The integration of other health care professionals into patient care will be discussed. Application of the following concepts is included: communication, individual and cultural differences, professional behavior, critical inquiry and clinical decision making, patient and caregiver education, pharmacological management, and management of health care delivery.

HPPT 8422 Pediatric Physical Therapist Practice (4:3:3,F) This course focuses on physical therapist examination, evaluation, interventions, and expected outcomes for pediatric patients with musculoskeletal, neuromuscular, cardiopulmonary, or general medical impairments and functional limitations. The course includes discussion of physical therapist practice in specialized settings such as neonatal intensive care, early childhood intervention programs, and public schools.

HPPT 8425 Musculoskeletal Physical Therapist Practice 1 (4:3:3,F) This course provides an in-depth study of the principles of orthopedic/musculoskeletal examination, evaluation, and intervention, and incorporates a detailed working knowledge of pathologic anatomy as it relates to functional limitation and movement dysfunction. This course provides the foundation for orthopedic intervention through the use of modalities, physical agents, joint mobilization/manipulation, and therapeutic exercise, as well as functional and post-surgical rehabilitation principles.

HPPT 8426 Musculoskeletal Physical Therapist Practice II (4:3:3,F) This course provides an in-depth study of the principles of orthopedic/musculoskeletal examination, evaluation, and intervention, and incorporates a detailed working knowledge of pathologic anatomy as it relates to functional limitation and movement dysfunction. This course provides the foundation for orthopedic intervention through the use of modalities, physical agents, joint mobilization/manipulation, and therapeutic exercise, as well as functional and post-surgical rehabilitation principles.

HPPT 8453 Clinical Experience 2 (4:0:40,F) Eight weeks of full-time clinical experience (approximately 320 hours) in a predetermined specific PT clinical setting. The student has the opportunity to integrate patient management and evaluation skills and to develop entry-level and advanced competencies for entry-level physical therapists as defined in the Physical Therapist Manual for the Assessment of Clinical Skills (PT MACS).

HPPT 8455 Clinical Experience 3 (4:0:40,F) Eight weeks of full-time clinical experience (approximately 320 hours) in a predetermined specific PT clinical setting. The student has the opportunity to integrate patient management and evaluation skills and to develop entry-level and advanced competencies for entry-level physical therapists as defined in the Physical Therapist Manual for the Assessment of Clinical Skills (PT MACS).

HPPT 8456 Clinical Experience 4 Clinical Experience 4 (4:0:40,F) Eight weeks of full-time clinical experience (approximately 320 hours) in a predetermined specific PT clinical setting. The student has the opportunity to integrate patient management and evaluation skills and to develop entry-level and advanced competencies for entry-level physical therapists as defined in the Physical Therapist Manual for the Assessment of Clinical Skills (PT MACS).

HPPT 8458 Clinical Experience 5 Clinical Experience 5 (4:0:40,F) Eight weeks of full-time clinical experience (approximately 320 hours) in a predetermined specific PT clinical setting. The student has the opportunity to integrate patient management and evaluation skills and to develop entry-level and advanced competencies for entry-level physical therapists as defined in the Physical Therapist Manual for the Assessment of Clinical Skills (PT MACS).

HPPT 8500 Gross Anatomy (5:6:10,F) An integrated study of gross human anatomy embodying gross morphology and coordinating with developmental and histological aspects of the body. Included is regional dissection with emphasis on the musculoskeletal, nervous, circulatory and respiratory systems.

HPPT 8521 Neuromuscular Physical Therapist Practice (5:4:3,F) This course examines the pathology, medical diagnosis process, and medical and surgical interventions of neuromuscular conditions in adults that are commonly seen by Physical Therapists. It focuses on Physical Therapy examination, evaluation, and intervention for adult clients with neurological disorders based on current research, evidence, and practice guidelines.

Doctor of Science in Physical Therapy (ScD)

Program Description

The mission of the Doctor of Science (ScD) Program in Physical Therapy is to provide an evidence-informed post-graduate terminal academic doctoral degree designed for the practicing physical therapist.

There is a knowledge revolution found in Physical Therapy literature, advancing the boundaries of clinical science, technology, and therapeutic insight. The ScD program provides clinicians a means to participate in this revolution by contributing to the growth and development of novel evidence-based practice as well as refinement of current concepts and ideas that together foster innovation and effective care.

The program admits clinicians with a professional degree in physical therapy into a hybrid learning experience that encourages clinicians to be clinicians as they learn. We thoughtfully combine foundational concepts with new paradigms to enhance patient care. Unguided educational and clinical experiences can actually limit the ability of patients to receive exceptional care. Clinicians design interventions that are biased by previous educational and clinical experiences. The biases are often left unchecked as clinicians are too busy or lack thoughtful effort to refine skills and knowledge. The ScD program will provide clinicians with the opportunity to acknowledge and refine these past experiences. To develop the advanced knowledge base, clinical skills, and professional competencies needed for accurate evaluation and ideal treatment of their patients. The advanced levels of information, skill, and critical thinking traits only come from a rigorous, formalized study and time that is not available in an entry-level program or post-graduate continuing education. If clinicians make better decisions, patients will have improved physical, emotional, and financial health.

The ScD program is a post-graduate terminal academic doctoral degree designed for licensed physical therapists interested in refining their critical thinking skills, or who are interested in becoming educators or clinical researchers. We work with clinicians from around the world, offering them opportunities to refine concepts and ideas that foster innovations in teaching, researching, and patient care. The program is offered via hybrid courses that are conducted through a weekend format with web-based enhancement. Faculty and students communicate with each other in person, via phone, teleconferences, or electronic mail. Students entering the program should have ready access to a computer and be familiar with word processing, spreadsheet, and internet applications.

ScD Curriculum

The following courses are offered at least once every two years. Sc.D. students with a Bachelor's degree are required to successfully complete a minimum of 70 hours from the following curriculum. Students with a Master's degree are required to successfully complete a minimum of 48 semester hours. Students with a DPT are required to successfully complete a minimum of 36-48 hours, depending on their previous DPT coursework. Each DPT applicant's transcript is considered on a case-by-case basis and final required hours are determined by the core ScD faculty who will evaluate if any DPT courses will substitute for an ScD course. Requirements within each course section for DPT, Master's, or Bachelor's graduates are provided below. Students will select either the Teaching or Research Track within two years of beginning the program. While each student's curriculum schedule is flexible, students are expected to finish the program within seven years.

Clinical Coursework

DPT & Master's graduates are required to successfully complete 6 courses. BSPT graduates are required to successfully complete 10 courses.

Each of these courses will include equal amounts of online work (including lecture, discussion, and problem-solving) on the ScD website and face-to-face lab coursework at the contact session (lecture, discussion, clinical laboratory, and practice) that will be conducted over an extended weekend. In addition to the outside reading that will be assigned to the students, they will participate in online inter-active work (forums) that complements the other course experiences. These sessions will provide discussions and interactions concerning related basic and applied science topics that are linked to the course material.

Extremity Topic Courses	Credit Hours

HPPT 6321	Advanced Musculoskeletal Management for the Shoulder Complex	3
HPPT 6324	Advanced Musculoskeletal Management for the Hip Complex	3
HPPT 6325	Advanced Musculoskeletal Management for the Knee Complex	3
HPPT 6326	Advanced Musculoskeletal Management for the Ankle and Foot	3
HPPT 6336	Advanced Musculoskeletal Management for the Elbow/Forearm, Wrist, and Thumb Complex	3

Spine Topic Courses		Credit Hours
HPPT 6333	Advanced Musculoskeletal Management for the Cervical Spine	3
HPPT 6334	Advanced Musculoskeletal Mgmt. for the Thoracic Spine, Ribs, & Thoracic Outlet Syndrome	3
HPPT 6335	Advanced Musculoskeletal Mgmt. for Lumbosacral Disorders	3

Advanced Soft Tissue Management Courses		Credit Hours
HPPT 6340	Advanced Soft Tissue Management: Fascial Diagnosis and Treatment	3
HPPT 6341	Advanced Soft Tissue Management: Instrument Assisted Soft Tissue Mobilization	3
HPPT 6342	Advanced Soft Tissue Management: Topics in Dry Needling	3

Functional Evaluation and Management Courses		Credit Hours
HPPT 6360	Functional Evaluation and Management of the Upper Quarter	3
HPPT 6361	Functional Evaluation and Management of the Lower Quarter	3
HPPT 6362	Functional Evaluation and Management of Persistent Pain	3
HPPT 6363	Advanced Therapeutic Exercise	3

Core Coursework

DPT, Master's graduates are required to complete 9 hours. BSPT graduates are required to successfully complete all.

The core coursework will include systems screening, imaging content, and motor control concepts that are necessary for advanced contemporary physical therapy practice. Class attendance will be accomplished in two different ways: (1) web-supported learning; (2) traditional classroom or laboratory setting over long weekends.

Courses		Credit Hours
HPPT 6304	Medical Screening for Rehabilitation Sciences	3
HPPT 6317	Diagnostic Imaging	3
HPPT 6314	Motor Control in Rehabilitation Sciences	3
HPPT 6110	Interprofessional Collaborative Practice (Required for Bachelors)	1

Elective Coursework

DPT & Master's graduates complete 3 courses and BSPT graduates complete 6 courses.

The total elective coursework (9 semester hours for the DPT and Master's graduate and 18 hours for the BSPT graduate) will include basic and applied sciences related to orthopedic medicine, clinical science, and physical therapy management. Class attendance will be accomplished in two different ways (1) web-supported learning; (2) traditional classroom or laboratory setting over long weekends.

Courses		Credit Hours
HPPT 6303	Basic & Applied Science in Orthopaedics	3
HPPT 6305	Updates in Orthopedic Surgical Management	3
HPPT 6310	Performance Enhancement and Resiliency	3
HPPT 6311	Clinical Studies in Anatomy	3
HPPT 6312	Neuroscience of Pain	3
HPPT 6313	Biomechanics in Orthopedic Physical Therapy	3
HPPT 6319	Contemporary Topics in Autonomous Practice	3

Student evaluation for each didactic course will depend on the course. For many of the long weekend courses, the students will be evaluated through course participation, article abstracts, examinations, and term papers. For the website courses, students will be evaluated with online examinations, term papers, and logged participation in forum discussions.

Teaching Track

This track emphasizes the theories, skills, and tools required for effective teaching in physical therapy. Students' clinical dissertations will emphasize the development, implementation, and evaluation of a course or course component with other health professionals, patients, or the general public.

TEACHING COURSES

DPT, Master's, and BSPT graduates are required to successfully complete all.

Course		Credit Hours
HPPT 7201	Introduction to Scholarship in Rehabilitation Sciences	2
HPPT 7304	Educational Evaluation in Health Professions	3
HPPT 7305	Curriculum Design and Teaching in Health Professions	3

CLINICAL DISSERTATION

DPT, Master's, and BSPT graduates are required to successfully complete all.

Course		Credit Hours
HPPT 7000-02	Clinical Dissertation Project 1-3	3
HPPT 7104	Clinical Dissertation Project Presentation	1

Research Track

This track emphasizes the theories, skills, and tools required for effective research in physical therapy. Students' clinical dissertations will emphasize the development, implementation, analysis, and discussion of a clinical research project in a practice setting.

RESEARCH COURSES

DPT, Master's, and BSPT graduates are required to successfully complete all.

Course		Credit Hours
HPPT 7201	Introduction to Scholarship in Rehabilitation Sciences	2
HPPT 7306	Advanced Statistics in Health Professions	3
HPPT 7301	Seminar in Clinical Research Design	3

CLINICAL DISSERTATION

DPT, Master's, and BSPT graduates are required to successfully complete all.

Course		Credit Hours
HPPT 7000-02	Clinical Dissertation Project 1-3	3
HPPT 7104	Clinical Dissertation Project Presentation	1

During post-professional studies, students are required to adhere to all program policies and academic and behavioral guidelines as stated in the TTUHSC Student Handbook: Code of Professional Academic Conduct. Expenses incurred during all weekend courses and clinical rotations are the responsibility of the student.

Doctor of Science in Physical Therapy (ScD) Course Descriptions

HPPT 1002 Foundations for Interprofessional Collaborative Practice (0:0:0,O) An introduction to broad concepts related to interprofessional core competencies for healthcare providers.

HPPT 6110 Interprofessional Collaborative Practice (1:1:0,O) Interprofessional Collaborative Practice (Required for Bachelor's) (1/0/0,O) This course is intended to provide a review of current interprofessional collaborative practice concepts. These concepts are foundational for practicing healthcare providers as they deliver services to diverse populations as well as interact with other healthcare providers. These same concepts are foundational to clinicians returning to the academic setting as they learn and study with individuals with diverse experiences. Selected special topics covering team communication skills, a review of institutional resources, and current healthcare challenges will serve as the cornerstone of the course. No textbook is required.

HPPT 6111 Teaching Assistantship 1 (1:0:3,H) Enrollment allowed only after instructor pre-approval. This course provides the platform for students to receive mentoring from ScD faculty in the delivery of clinical track courses with the ScD. Students will be mentored on a case-by-case basis. Student will participate with the ScD faculty clinical course coordinator in the design, delivery and administration of online doctoral coursework and threaded discussions, where their clinical expertise will benefit the ScD Faculty and Students. Case studies will be discussed and mock clinic sessions will be executed.

HPPT 6112 Teaching Assistantship 2 (1:0:3,H) Enrollment allowed only after instructor pre-approval. This course provides the platform for students to receive mentoring from ScD faculty in the delivery of clinical track courses with the ScD. Students will be mentored on a case-by-case basis. Student will participate with the ScD faculty clinical course coordinator in the design, delivery and administration of online doctoral coursework and threaded discussions, where their clinical expertise will benefit the ScD Faculty and Students. Case studies will be discussed and mock clinic sessions will be executed.

HPPT 6113 Teaching Assistantship 3 (1:0:3,H) Enrollment allowed only after instructor pre-approval. This course provides the platform for students to receive mentoring from ScD faculty in the delivery of clinical track courses with the ScD. Students will be mentored on a case-by-case basis. Student will participate with the ScD faculty clinical course coordinator in the design, delivery and administration of online doctoral coursework and threaded discussions, where their clinical expertise will benefit the ScD Faculty and Students. Case studies will be discussed and mock clinic sessions will be executed.

HPPT 6114 Teaching Assistantship 4 (1:0:3,H) Enrollment allowed only after instructor pre-approval. This course provides the platform for students to receive mentoring from ScD faculty in the delivery of clinical track courses with the ScD. Students will be mentored on a case-by-case basis. Student will participate with the ScD faculty clinical course coordinator in the design, delivery and administration of online doctoral coursework and threaded discussions, where their clinical expertise will benefit the ScD Faculty and Students. Case studies will be discussed and mock clinic sessions will be executed.

HPPT 6115 Teaching Assistantship 5 (1:0:3,H) Enrollment allowed only after instructor pre-approval. This course provides the platform for students to receive mentoring from ScD faculty in the delivery of clinical track courses with the ScD. Students will be mentored on a case-by-case basis. Student will participate with the ScD faculty clinical course coordinator in the design, delivery and administration of online doctoral coursework and threaded discussions, where their clinical expertise will benefit the ScD Faculty and Students. Case studies will be discussed and mock clinic sessions will be executed.

HPPT 6116 Teaching Assistantship 6 (1:0:3,H) Enrollment allowed only after instructor pre-approval. This course provides the platform for students to receive mentoring from ScD faculty in the delivery of clinical track courses with the ScD. Students will be mentored on a case-by-case basis. Student will participate with the ScD faculty clinical course coordinator in the design, delivery and administration of online doctoral coursework and threaded discussions, where their clinical expertise will benefit the ScD Faculty and Students. Case studies will be discussed and mock clinic sessions will be executed.

HPPT 6303 Basic and Applied Science in Orthopaedics (3:2:3,H) This course addresses select basic science processes associated within the musculoskeletal system. These include histology and physiology of bone, cartilage, tendons, and ligaments. Muscle physiology will also be discussed as it relates to orthopaedic dysfunction.

HPPT 6304 Medical Screening for Rehabilitation Sciences (3:2:3,H) This course will enhance physical therapists' knowledge and clinical skills designed to assist in the screening of patients for orthopedic conditions which require examination by a physician. The class experiences should strengthen professional communication between physical therapists and physicians facilitating patient referral to physician. Laboratory screening are presented as special topics to enhance the therapist's understanding of pathology and the clinical implications of patient presentation.

HPPT 6305 Updates in Orthopaedic Surgical Management (3:2:3,H) This course will evaluate recent developments from the literature in orthopaedic surgical management, in terms of indications, methodology, and rehabilitation. Emphasis will be placed on the implications of each procedure for rehabilitation. Specific rehabilitation measures will be discussed and related to techniques taught in other ScD courses within the curriculum.

HPPT 6310 Performance Enhancement and Resiliency (3:2:3,H) This evidence-based course is designed to enable students to safely implement

strategies for forming resilient, robust, and adaptable performing clients. It is aimed at encouraging the optimal performance and injury reduction in physically active individuals, including athletes. Lecture components will focus on contemporary approaches to enhancing strength, speed, power, mobility, coordination, agility, and endurance for performance-based activities. Clinical contact sessions will incorporate progressive performance examination techniques. Program design, implementation and progression will focus on specific measures to enhance performance and prevent injury.

HPPT 6311 Clinical Studies in Anatomy (3:3:3.5,H) This course will allow students to observe prosected human cadaveric specimens with emphasis on musculoskeletal structures. Each ½ day session will include a short lecture at the beginning for review of anatomical structures to be observed, as well as the relevance of each of those structures to examination and treatment of orthopaedic afflictions.

HPPT 6312 Neuroscience of Pain (3:2:3,H) This course addresses select neuroscience processes associated within the musculoskeletal system. These include the sensory function and integration; and dysfunction of the nervous system as it relates to orthopaedic afflictions, including pain production and control; neuroscience of motor planning, initiation and control in response to pain.

HPPT 6313 Biomechanics in Orthopaedic Physical Therapy (3:3:3.5,H) This course will emphasize the biomechanics of musculoskeletal structures, including bone, cartilage, ligament, tendon, and muscle tissue. Emphasis on joint and tissue mechanics will be related to musculoskeletal injury and orthopaedic affliction.

HPPT 6314 Motor Control in Orthopaedic Physical Therapy (3:2:3,H) This course will emphasize motor control strategies associated with musculoskeletal function and motor control dysfunction associated with orthopaedic pathologies. This course will integrate concepts from exercise science and experimental psychology for the explanation of relevant issues concerning motor learning and control for the orthopaedic patient. Additionally, patient management strategies derived from these principles will be discussed.

HPPT 6317 Diagnostic Imaging (3:2:3,H) Examines the technology and applications of imaging for understanding normal and pathological human anatomy. Plain-film imaging, MRI, CT, and diagnostic ultrasound will be appropriately applied to this discussion. A systematic approach to understanding various images across different joint systems will be provided. In addition, specific normal and pathological anatomy for the spine and extremities will be viewed on x-ray, MRI, and CT, along with special topics in diagnostic ultrasound. Emphasis will be placed on defining normal and pathological anatomy associated with various joints systems as it relates to musculoskeletal conditions. These topics will be related to evidence-based clinical practice of musculoskeletal disorders that is appropriate for the Physical Therapist. Evidence-based readings and web-supported tutorials will be utilized.

HPPT 6319 Contemporary Topics in Autonomous Practice (3:3:0,H) This course will address selected special topics in modern orthopaedic Physical Therapy practice. This course will emphasize special topics not covered in the other courses within the ScD curriculum. Selected special topics will serve as the cornerstone of the course, including modern soft tissue examination and management, while other topics will change in pace with changes in contemporary Physical Therapy clinical practice. Patient examination and management strategies derived from these principles will be discussed.

HPPT 6321 Advanced Clinical Practice for the Shoulder Complex (3:3:3.5,H) This course presents the examination and treatment of afflictions in the shoulder complex. The lecture components of this course include advancements in pathoanatomy, biomechanics, interpretation of clinical examination, pathology, and treatment approaches. Clinical contact sessions include surface anatomy, basic clinical examination and special tests, soft tissue treatments, and joint-specific treatment measures. This course includes management approaches to arthritis/arthrosis, impingement, instability, labral afflictions, and soft tissue lesions. Case studies will be discussed and mock clinic sessions will be conducted.

HPPT 6324 Advanced Clinical Practice for the Hip Complex (3:3:3.5,H) This course presents the examination and treatment of afflictions in the hip complex. The lecture components of this course include advancements in pathoanatomy, biomechanics, interpretation of clinical examination, pathology, and treatment approaches. Clinical contact sessions include surface anatomy, basic clinical examination and special tests, soft tissue treatments, and joint specific treatment measures. This course includes management approaches to arthritis/arthrosis, instability, peripheral nerve mobility limits and entrapment, and soft tissue afflictions (including tendinitis and bursitis). Case studies will be discussed and mock clinic sessions will be conducted.

HPPT 6325 Advanced Clinical Practice for the Knee Complex (3:3:3.5,H) This course presents the examination and treatment of afflictions in the knee complex. The lecture components of this course include advancements in pathoanatomy, biomechanics, interpretation of clinical examination, pathology, and treatment approaches. Clinical contact sessions include surface anatomy, basic clinical examination and special tests, soft tissue treatments, and joint-specific treatment measures. This course includes management approaches to arthritis/arthrosis, instability, meniscal afflictions, and soft tissue afflictions (including tendinitis and bursitis). Case studies will be discussed and mock clinic sessions will be conducted.

HPPT 6326 Advanced Clinical Practice for the Ankle & Foot (3:3:3.5,O) This course presents the examination and treatment of afflictions in the ankle/foot complex. The lecture components of this course include advancements in pathoanatomy, biomechanics, interpretation of clinical examination, pathology, and treatment approaches. Clinical contact sessions include surface anatomy, basic clinical examination and special tests, soft tissue treatments, and joint-specific treatment measures. This course includes management approaches to arthritis/arthrosis, instability, peripheral nerve mobility limits and entrapment (including Tarsal Tunnel Syndrome), and soft tissue afflictions (including tendinitis, tenosynovitis, fasciitis, and bursitis). Case studies will be discussed and mock clinic sessions will be conducted.

HPPT 6333 Advanced Musculoskeletal Management for the Cervical Spine (3:3:3.5,H) This course presents the examination and management of conditions in the cervical spine complex. The lecture components of this course include advancements in pathoanatomy, biomechanics, interpretation of clinical examination, pathology, and treatment approaches. Clinical contact sessions include surface anatomy, basic clinical examination and special tests, soft tissue and joint-specific approaches including manipulative techniques. This course includes management approaches to arthritis/arthrosis, degeneration, cervicogenic headache, vascular conditions, soft tissue conditions and recurrent conditions that include instability and stenosis/spondylosis. Case studies will be discussed and mock clinic sessions will be conducted. No textbook is required.

HPPT 6334 Advanced Musculoskeletal Management for the Thoracic Spine, Ribs, and Thoracic Outlet Syndrome (3:3:3.5,H) This course presents the examination and management of conditions in the thoracic spine, ribs and thoracic outlet syndrome. The lecture components of this course include advancements in pathoanatomy, biomechanics, interpretation of clinical examination, pathology, and treatment approaches. Clinical contact sessions include surface anatomy, basic clinical examination and special tests, soft tissue and joint-specific approaches including manipulative techniques. This course includes management approaches to acute, recurrent, and chronic thoracic spine conditions, instability, arthrosis/arthritis, soft tissue conditions, neurogenic and vascular dysfunctions. Case studies will be discussed and mock clinic sessions will be conducted. No textbook is required.

HPPT 6335 Advanced Musculoskeletal Management for Lumbosacral Complex (3:3:3.5,H) This course presents the examination and management of lumbar spine and sacroiliac joint conditions. The lecture components of this course include advancements in pathoanatomy, biomechanics, interpretation of clinical examination, pathology, and treatment approaches. Clinical contact sessions include surface anatomy, basic clinical examination and special tests, soft tissue and joint-specific approaches including manipulative techniques. This course includes management approaches to discogenic conditions, instability, stenosis/spondylosis, arthritis/arthrosis, soft tissue conditions and sacroiliac joint pain, hypomobilities and hypermobilities. Case studies will be discussed and mock clinic sessions will be conducted. No textbook is required.

HPPT 6336 Advanced Musculoskeletal Management for the Elbow/Forearm, Wrist and Thumb Complex (3:3:3.5,H) This course presents the examination and management of conditions in the elbow/forearm, wrist and thumb complex. The lecture components of this course include advancements in pathoanatomy, biomechanics, interpretation of clinical examinations, pathology, and treatment approaches. Clinical contact sessions include surface anatomy, basic clinical examinations and special tests, soft tissue and joint-specific approaches including manipulative techniques. This course includes management approaches to arthritis/arthrosis, instability, peripheral nerve mobility limits and entrapment, and soft tissue conditions (including tendinopathy and bursitis). Case studies will be discussed and mock clinic sessions will be conducted. No textbook is required.

HPPT 6340 Advanced Soft Tissue Management: Fascial Diagnosis and Treatment (3:3:3.5,H) This evidence-based course addresses the impact of

fascial dysfunctions on movement and movement-related disorders. The lecture components of this course include historical perspectives on soft tissue management. Fascial Structural and Pathoanatomical relationships will be discussed. Biomechanics of soft tissue injury will be considered. Clinical contact sessions will incorporate soft tissue evaluation and special testing, as well as indications, contraindications and precautions in management. Laboratory experiences will include an introduction to treatment implements. Intermediate instrumented and hand-on treatment techniques will be practiced, while treatment implements and complementary movement-based strategies will be introduced. No textbook is required.

HPPT 6341 Advanced Soft Tissue Management: Instrument Assisted Soft Tissue Mobilization (3:3:3.5,H) This evidence-based course addresses the impact of various soft tissue dysfunctions on movement and movement-related disorders. The lecture components of this course include impact of connective tissue, ligament, tendon, and peripheral nerve mechanical dysfunction on movement. Connective tissue structural and pathoanatomical relationships will be discussed. Biomechanics of soft tissue injury will be integrated into the content. Clinical contact sessions will incorporate advanced soft tissue evaluation and special testing. Advanced instrumented and hand-on treatment techniques will be practiced, while different contemporary treatment implements and complementary movement-based strategies will be incorporated. No textbook is required.

HPPT 6342 Advanced Soft Tissue Management: Topics in Dry Needling (3:3:3.5,H) This evidence-based course is designed to enable students to safely perform dry needling techniques to treat musculoskeletal pain and dysfunction. The lecture components of this course include a discussion of myofascial trigger point development and clinical presentation and examination techniques, as well as safety and regulatory issues that surround trigger point dry needling practice. Clinical contact sessions will include practical experience in dry needling applications for the upper and lower extremities as well as the lumbar and cervical spine. Textbook: Donelly JM, et al. Travell, Simons & Simons' Myofascial Pain and Dysfunction: The Trigger Point Manual. 3rd ed. 2018. ISBN-13: 978-0781755603

HPPT 6360 Functional Evaluation and Management of the Upper Quarter (3:3:3.5,H) This course is designed to enable clinicians to execute systematic, evidence-based examination and management of sensorimotor control at the Upper Quarter (cervicothoracic spine and upper extremities). It is aimed at functional recovery for patients suffering from upper quarter pain, dysfunction and performance deficits. Lecture components will focus on Upper Quarter sensorimotor control and dysfunction as they relate to musculoskeletal conditions. Clinical contact sessions will incorporate progressive manual detection and functional examination techniques. Program design, implementation and progression will focus on neuromotor and somatosensory fundamental reactivation, corrective strategies, functional advancement and performance training relevant to each patient's clinical presentation. Clinical case studies will be discussed and mock clinic sessions will be conducted. No textbook is required.

HPPT 6361 Functional Evaluation and Management of the Lower Quarter (3:3:3.5,H) This course is designed to enable clinicians to execute systematic, evidence-based examination and management of sensorimotor control at the Lower Quarter (lumbosacral spine and lower extremities). It is aimed at functional recovery for patients suffering from Lower Quarter pain, dysfunction and performance deficits. Lecture components will focus on Lower Quarter sensorimotor control and dysfunction as they relate to musculoskeletal conditions. Clinical contact sessions will incorporate progressive manual detection and functional examination techniques. Program design, implementation and progression will focus on neuromotor and somatosensory fundamental reactivation, corrective strategies, functional advancement and performance training relevant to each patient's clinical presentation. Clinical case studies will be discussed and mock clinic sessions will be conducted. No textbook is required.

HPPT 6362 Functional Evaluation and Management of Persistent Pain (3:3:3.5,H) This course is designed to enable clinicians to execute systematic, evidence-based examination and management of sensorimotor control for patients with persistent, recurrent and or chronic sensitized pain. It is aimed at functional recovery for these patients suffering from chronic pain and fear-related dysfunction and movement deficits. Lecture components will focus on the interaction between long-standing intolerable pain, biopsychosocial adaptations and sensorimotor control and dysfunction. Clinical contact sessions will incorporate progressive manual detection and functional examination techniques. Program design, implementation and progression will focus on fundamental reactivation and corrective strategies that are specific to this population. Clinical case studies will be discussed and mock clinic sessions will be conducted. No textbook is required.

HPPT 6363 Advanced Therapeutic Exercise (3:3:3.5,H) This course offers the exploration of current evidence-based principles of therapeutic exercise intervention across the continuum of physical therapy practice. Emphasis will be placed on the advanced reasoning and psychomotor skills necessary for the clinician to create and implement advanced intervention using the major therapeutic exercise domains explored throughout this course including flexibility training, resistance training, aerobic training, neuromotor training, and functional training.

HPPT 7000 Clinical Project (1-3:0:1-3,O) This is the student's independent clinical dissertation. Content and goals will be established through mutual consent of student and instructor.

HPPT 7001 Clinical Project 2 (1-3:0:1-3,O) Prerequisite: HPPT 7000. This is the continuation of a student's independent clinical dissertation. Content and goals will be established through mutual consent of student and instructor.

HPPT 7002 Clinical Project 3 (2-3:0:3,O) Prerequisite: HPPT 7000 & HPPT 7001. This is the continuation of a student's independent clinical dissertation. Content and goals will be established through mutual consent of student and instructor.

HPPT 7020 Audit (0:0:0,H) Audit

HPPT 7104 Clinical Project Presentation (1:0:3,O) For this credit, the student will present the development and findings from the clinical dissertation before the Sc.D. faculty, other students and clinicians from the community.

HPPT 7201 Introduction to Statistical Analysis (2:1:3,H) This course will familiarize the student with basic concepts of significance testing and introduce fundamental descriptive and inferential statistical analyses. Students will learn how to effectively read current scientific literature and prepare an academic manuscript.

HPPT 7301 Seminar in Clinical Research Design (3:3:3.5,H) This course will emphasize methods in clinical research. This will include processes of obtaining, processing, interpreting, and using clinical data.

HPPT 7304 Educational Evaluation in Health Professions (3:2:3,H) This course will discuss educational evaluation theory and tools, emphasizing methods of objective and performance-based evaluation. Students will learn to draft specific evaluation measures used in an educational setting. ISBN: 0132689669 Prerequisites: HPPT 7201 Introduction to Statistical Analysis

HPPT 7305 Curriculum Design and Teaching in Health Professions (3:3:3.5,H) This course discusses the theories and applications of curriculum design, emphasizing applications to entry-level and post-professional educational settings in Physical Therapy. Students are exposed to core theories, principles and applications that relate to teaching Physical Therapy students and professionals.

HPPT 7306 Advanced Statistics in Rehabilitation Sciences (3:2:3,H) This course will educate the student regarding intermediate-to-advanced statistical tools used in parametric and non-parametric statistical analyses. Descriptive statistical analyses will include measures of normality, homogeneity of variance, and sphericity. Parametric tools will include two- and three-way analysis of variance, correction factors, post-hoc comparisons, and ANCOVA. Non-parametric tools will include Friedman Two-Way ranked ANOVA, Chi-square, phi, and point biserial correlation coefficients. Students will be familiarized with selected multivariate designs, to include multiple regression, logistical regression, discriminate analysis, factor analysis, and MANOVA. The course will include single-subject design, sequential clinical trials, and survey methodology. Measures of clinical reliability and validity will be covered, to include diagnostic accuracy measures. Emphasis will be placed on research findings that evaluate specific clinical populations. ISBN: 0131716409 Prerequisite: HPPT 7201 Introduction to Statistical Analysis

Doctor of Science in Rehabilitation Sciences (ScD)

Program Description

The mission of the Doctor of Science (ScD) program in Rehabilitation Sciences is to provide an evidence-informed post-graduate terminal academic doctoral degree designed for practicing rehabilitation clinicians around the world.

There is a knowledge revolution found in rehabilitation literature, advancing the boundaries of clinical science, technology, and therapeutic insight. The ScD program provides clinicians a means to participate in this revolution by contributing to the growth and development of novel evidence-based practice as well as refinement of current concepts and ideas that together foster innovation and effective care.

The program admits clinicians with a professional degree in athletic training, occupational therapy, or physical therapy into a hybrid learning experience that encourages clinicians to be clinicians as they learn. We thoughtfully combine foundational concepts with new paradigms to enhance patient care. Unguided educational and clinical experiences can actually limit the ability of patients to receive exceptional care. Clinicians design interventions that are biased by previous educational and clinical experiences. The biases are often left unchecked as clinicians are too busy or lack thoughtful effort to refine skills and knowledge. The ScD program will provide clinicians with the opportunity to acknowledge and refine these past experiences. To develop the advanced knowledge base, clinical skills, and professional competencies needed for accurate evaluation and ideal treatment of their patients. The advanced levels of information, skill, and critical thinking traits only come from a rigorous, formalized study and time that are not available in an entry-level program or post-graduate continuing education. If clinicians make better decisions, patients will have improved physical, emotional, and financial health.

The ScD is a terminal academic doctoral degree designed for licensed athletic trainers, occupational therapists, and physical therapists interested in refining their critical thinking skills, or who are interested in becoming educators or clinical researchers. We work with clinicians from around the world, offering them opportunities to refine concepts and ideas that foster innovations in teaching, researching, and patient care. The program is offered via hybrid courses that are conducted through a weekend format with web-based enhancement. Faculty and students communicate with each other in person, via phone, teleconferences, or electronic mail. Students entering the program should have ready access to a computer and be familiar with word processing, spreadsheet, and internet applications.

Admission to the Program

Applications will be considered for Fall, Spring, or Summer enrollment. The deadline for the Fall semester is July 1st. The deadline for the Spring semester is December 1st. The deadline for the Summer semester is April 1st.

Application Process

The following requirements will be considered for admission into the program:

- A Bachelor's, Master's, or Doctoral professional degree in Athletic Training, Occupational Therapy, or Physical Therapy
- At least one year of post-graduate clinical experience
- Current engagement in practice as an athletic trainer, occupational therapist, or physical therapist
- All official college/university transcripts
- Acceptable grade point average
- Two supporting letters of reference: one from an employer or former university educator and one from a colleague in the health professions
- Applicants must complete and submit the online application

ScD Curriculum

The following courses are offered at least once every two years. Sc.D. students with a Bachelor's degree are required to successfully complete a minimum of 70 hours from the following curriculum. Students with a Master's degree are required to successfully complete a minimum of 48 semester hours. Students with a doctorate degree are required to successfully complete a minimum of 36-48 hours, depending on their previous coursework. Each doctoral-level applicant's transcript is considered on a case-by-case basis and final required hours are determined by the admissions committee who will evaluate if any previous courses will substitute for an ScD course. Requirements within each course section for Doctoral, Master's, or Bachelor's graduates are provided below. Students will select either the Education or Research Track within two years of beginning the program. While each student's curriculum schedule is flexible, students are expected to finish the program within seven years.

Clinical Coursework

Masters and Doctoral graduates complete 6 (18 hours); Bachelors graduates complete 10 (30 hours).

Each of these courses will include equal amounts of online work (including lecture, discussion, and problem-solving) on the ScD website and face-to-face lab coursework at the contact session (lecture, discussion, clinical laboratory, and practice) that will be conducted over an extended weekend. In addition to the outside reading that will be assigned to the students, they will participate in online inter-active work (forums) that complements the other course experiences. These sessions will provide discussions and interactions concerning topics that are linked to the course material.

Extremity Topic Courses		Credit Hours
HPDS 6321	Advanced Clinical Practice for the Shoulder Complex	3
HPDS 6324	Advanced Clinical Practice for the Hip Complex	3
HPDS 6325	Advanced Clinical Practice for the Knee Complex	3
HPDS 6326	Advanced Clinical Practice for the Ankle and Foot	3
HPDS 6336	Advanced Clinical Practice for the Elbow/Forearm, Wrist, and Thumb Complex	3

Spine Topic Courses		Credit Hours
HPDS 6333	Advanced Clinical Practice for the Cervical Spine	3
HPDS 6334	Advanced Clinical Practice for the Thoracic Spine, Ribs, & Thoracic Outlet Syndrome	3
HPDS 6335	Advanced Clinical Practice for Lumbosacral Disorders	3

Soft Tissue Management Courses		Credit Hours
HPDS 6340	Advanced Soft Tissue Management: Fascial Diagnosis and Treatment	3
HPDS 6341	Advanced Soft Tissue Management: Instrument Assisted Soft Tissue Mobilization	3
HPDS 6342	Advanced Soft Tissue Management: Topics in Dry Needling	3

Functional Topics Courses		Credit Hours
HPDS 6360	Functional Evaluation and Management of the Upper Quarter	3
HPDS 6361	Functional Evaluation and Management of the Lower Quarter	3
HPDS 6362	Functional Evaluation and Management of Persistent Pain	3
HPDS 6363	Advanced Therapeutic Exercise	3

HPDS 6364	Neurological Injury in Sports and Occupation	3

Core Coursework

Masters and Doctoral graduates complete 9 hours. Bachelors graduates complete all.

The core coursework will include systems screening, neuroscience of pain, and sensorimotor control concepts that are necessary for advanced contemporary practice. Class attendance will be accomplished in two different ways: (1) web-supported learning; (2) traditional classroom or laboratory setting over long weekends.

Courses		Credit Hours
HPDS 6304	Medical Screening for Rehabilitation Sciences	3
HPDS 6312	Neuroscience of Pain	3
HPDS 6314	Sensorimotor Control in Science and Practice	3
HPDS 6110	Interprofessional Collaborative Practice (Required for Bachelors)	1

Elective Coursework

Masters and Doctoral graduates complete 3 (9 hours); Bachelors graduates complete 6 (18 hours)

The total elective coursework will include basic and applied sciences related to orthopedic medicine, clinical science, and rehabilitation management. Class attendance will be accomplished in two different ways (1) web-supported learning; (2) traditional classroom or laboratory setting over long weekends.

Courses		Credit Hours
HPDS 6303	Basic & Applied Science in Orthopaedics	3
HPDS 6305	Updates in Orthopedic Surgical Management - Spine and Lower Extremity	3
HPDS 6306	Updates in Orthopedic Surgical Management - Upper Extremity and Pain Management before and after surgery	3
HPDS 6310	Performance Enhancement and Resiliency	3
HPDS 6311	Clinical Studies in Anatomy; a Lab Course	3
HPDS 6313	Biomechanics in Orthopedics	3
HPDS 6317	Diagnostic Imaging	3
HPDS 6318	Cultural Determinants of Health/Health Disparities	3
HPDS 6319	Psychological-Behavioral Aspects of Health	3

Student evaluation for each didactic course will depend on the course. For many of the long weekend courses, the students will be evaluated through course participation, article abstracts, examinations, and term papers. For the website courses, students will be evaluated with online examinations, term papers, and logged participation in forum discussions.

Education Track

This track emphasizes the theories, skills, and tools required for effective teaching in rehabilitation sciences. Students' clinical dissertations will emphasize the development, implementation, and evaluation of a course or course component with other health professionals, patients, or the general public.

EDUCATION COURSES

Bachelors, Masters, and Doctoral graduates are required to successfully complete all.

Course		Credit Hours
HPDS 7201	Introduction to Scholarship in Rehabilitation Sciences	2
HPDS 7304	Educational Evaluation in Health Professions	3
HPDS 7305	Curriculum Design and Teaching in Health Professions	3

CLINICAL DISSERTATION

Bachelors, Masters, and Doctoral graduates are required to successfully complete all.

Course		Credit Hours
HPDS 7000-02	Clinical Dissertation	3
HPDS 7104	Clinical Dissertation Presentation	1

Research Track

This track emphasizes the theories, skills, and tools required for effective research in rehabilitation settings. Students' clinical dissertations will emphasize the development, implementation, analysis, and discussion of a clinical research project in a practice setting.

STATISTICS COURSES

Bachelors, Masters, and Doctoral graduates are required to successfully complete all.

Course		Credit Hours
HPDS 7201	Introduction to Scholarship in Rehabilitation Sciences	2
HPDS 7306	Advanced Statistics in Health Professions	3
HPDS 7301	Seminar in Clinical Research Design	3

CLINICAL DISSERTATION

Bachelors, Masters, and Doctoral graduates are required to successfully complete all.

Course		Credit Hours
HPDS 7000-02	Clinical Dissertation	3
HPDS 7104	Clinical Dissertation Presentation	1

During post-professional studies, students are required to adhere to all program policies and academic and behavioral guidelines as stated in the TTUHSC Student Handbook: Code of Professional Academic Conduct. Expenses incurred during all weekend courses and clinical rotations are the responsibility of the student.

Doctor of Science in Rehabilitation Sciences (ScD) Course Descriptions

HPDS 1002 Foundations of Interprofessional Collaborative Practice with TeamSTEPPS Essentials (0:0:0,O) An introduction to broad concepts related to interprofessional core competencies for healthcare providers.

HPDS 6110 Interprofessional Collaborative Practice (1:1:3,O) This course is intended to provide a review of current interprofessional collaborative practice concepts. These concepts are foundational for practicing healthcare providers as they deliver services to diverse populations as well as interact with other healthcare providers. These same concepts are foundational to clinicians returning to the academic setting as they learn and study with individuals with diverse experiences. Selected special topics covering team communication skills, a review of institutional resources, and current healthcare challenges will serve as the cornerstone of the course.

HPDS 6111 Independent Study 1 (1:1:0,O) Enrollment allowed only after instructor pre-approval. This course provides the platform for students to receive

mentoring from ScD faculty on topics such as clinical reasoning, discussion of patient cases and clinical topics presentations. Case studies and other forms of active learning may be used. Students will be mentored on a case-by-case basis.

HPDS 6112 Independent Study 2 (1:1:0,O) Enrollment allowed only after instructor pre-approval. This course provides the platform for students to receive mentoring from ScD faculty on topics such as clinical reasoning, discussion of patient cases and clinical topics presentations. Case studies and other forms of active learning may be used. Students will be mentored on a case-by-case basis.

HPDS 6113 Independent Study 3 (1:1:0,O) Enrollment allowed only after instructor pre-approval. This course provides the platform for students to receive mentoring from ScD faculty on topics such as clinical reasoning, discussion of patient cases and clinical topics presentations. Case studies and other forms of active learning may be used. Students will be mentored on a case-by-case basis.

HPDS 6114 Independent Study 4 (1:1:0,O) Enrollment allowed only after instructor pre-approval. This course provides the platform for students to receive mentoring from ScD faculty on topics such as clinical reasoning, discussion of patient cases and clinical topics presentations. Case studies and other forms of active learning may be used. Students will be mentored on a case-by-case basis.

HPDS 6115 Independent Study 5 (1:1:0,O) Enrollment allowed only after instructor pre-approval. This course provides the platform for students to receive mentoring from ScD faculty on topics such as clinical reasoning, discussion of patient cases and clinical topics presentations. Case studies and other forms of active learning may be used. Students will be mentored on a case-by-case basis.

HPDS 6116 Independent Study 6 (1:1:0,O) Enrollment allowed only after instructor pre-approval. This course provides the platform for students to receive mentoring from ScD faculty on topics such as clinical reasoning, discussion of patient cases and clinical topics presentations. Case studies and other forms of active learning may be used. Students will be mentored on a case-by-case basis.

HPDS 6303 Basic & Applied Science in Orthopaedics (3:2:3,H) This course addresses select basic science processes associated within the musculoskeletal system. These include histology and physiology of bone, cartilage, tendons, and ligaments. Muscle physiology will also be discussed as it relates to orthopedic dysfunction.

HPDS 6304 Medical Screening for Rehabilitation Sciences (3:2:3,H) This course will enhance clinicians' knowledge and clinical skills designed to assist in the screening of patients for orthopedic and neurological conditions which require examination by a physician. The class experiences should strengthen professional communication between clinicians and physicians facilitating ideal patient referral decisions. Laboratory screening, emergency medicine and acute injury management are presented as special topics to enhance understanding of pathology and the clinical implications of patient presentation.

HPDS 6305 Updates in Orthopaedic Surgical Management-Spine and Lower Extremity (3:2:3,H) This course will evaluate recent developments from the literature in lower extremity orthopaedic surgical management, in terms of indications, methodology, and rehabilitation. Will include topics ranging from pain management, to arthroplasty, to soft and osseous tissue repair. Emphasis will be placed on the implications of each procedure for rehabilitation. Specific rehabilitation measures will be discussed and related to techniques taught in other ScD courses within the curriculum.

HPDS 6306 Updates in Orthopaedic Surgical Management-Upper Extremity & Pain Management before & after surgery (3:2:3,H) This course will evaluate recent developments from the literature in upper extremity orthopaedic surgical management, in terms of indications, methodology, and rehabilitation and pain management before and after surgery. Will include topics ranging from the glenohumeral joint and its surrounding tissues, tendon repairs in the hand, and hand and wrist instabilities. Emphasis will be placed on the implications of each procedure for rehabilitation. Specific rehabilitation measures will be discussed and related to techniques taught in other ScD courses within the curriculum.

HPDS 6310 Performance Enhancement & Resiliency (3:2.5:4,H) This evidence-based course is designed to enable students to safely implement strategies for forming resilient, robust, and adaptable performing clients. It is aimed at encouraging the optimal performance and injury reduction in physically active individuals, including athletes. Lecture components will focus on contemporary approaches to enhancing strength, speed, power, mobility, coordination, agility, and endurance for performance-based activities. Clinical contact sessions will incorporate progressive performance examination techniques. Program design, implementation and progression will focus on specific measures to enhance performance and prevent injury.

HPDS 6311 Clinical Studies in Anatomy (3:2.5:4,H) This course will allow students to observe prosected human cadaveric specimens with emphasis on musculoskeletal structures. Each ½ day session will include a short lecture at the beginning for review of anatomical structures to be observed, as well as the relevance of each of those structures to examination and treatment of orthopaedic afflictions.

HPDS 6312 Neuroscience of Pain (3:2:3,H) This course addresses select neuroscience processes associated within the musculoskeletal system. These include the sensory function and integration; and dysfunction of the nervous system as it relates to orthopaedic afflictions, including pain production and control; neuroscience of motor planning, initiation and control in response to pain.

HPDS 6313 Biomechanics in Orthopaedics (3:2.5:4,H) This course will emphasize the biomechanics of musculoskeletal structures, including bone, cartilage, ligament, tendon, and muscle tissue. Emphasis on joint and tissue mechanics will be related to musculoskeletal injury and orthopaedic affliction.

HPDS 6314 Sensorimotor Control Science and Practice (3:2:3,H) This course will emphasize motor control strategies associated with musculoskeletal function and motor control dysfunction associated with orthopedic pathologies. This course will integrate concepts from exercise science and experimental psychology for the explanation of relevant issues concerning motor learning and control for the orthopedic patient. Additionally, patient management strategies derived from these principles will be discussed.

HPDS 6317 Diagnostic Imaging (3:2:3,H) Examines the technology and applications of imaging for understanding normal and pathological human anatomy. Plain-film imaging, MRI, CT, and diagnostic ultrasound will be appropriately applied to this discussion. A systematic approach to understanding various images across different joint systems will be provided. In addition, specific normal and pathological anatomy for the spine and extremities will be viewed on xray, MRI, and CT, along with special topics in diagnostic ultrasound. Emphasis will be placed on defining normal and pathological anatomy associated with various joints systems as it relates to musculoskeletal conditions. These topics will be related to evidence-based clinical practice of musculoskeletal disorders. Evidence-based readings and web-supported tutorials will be utilized.

HPDS 6318 Cultural Determinants of Health/Health Disparities (3:2:3,H) This course will provide perspective on existing healthcare disparities, and furthermore will explore solutions and strategies to address the disparities. Key concepts will include: recognizing the impact of personal values while learning to respect and align treatment to patient values and the importance of authentic informed consent.

HPDS 6319 Psychological-Behavioral Aspects of Health (3:2:3,H) This course will provide an overview of the interprofessional field of behavioral medicine, emphasizing integration of social and behavioral sciences in the service of understanding physical health and illness related to occupation.

HPDS 6321 Advanced Clinical Practice for the Shoulder Complex (3:2.5:4,O) This course presents the examination and management of conditions in the shoulder complex conditions, including glenohumeral, acromio- and sterno-clavicular joints and scapulothoracic dysfunctions. Course components include advancements in pathoanatomy, biomechanics, interpretation of clinical examination, pathology, and treatment approaches. This course includes management approaches to arthritis/arthrosis, impingement, instability, labral conditions, and soft tissue lesions. Case studies will be discussed and mock clinic sessions will be conducted.

HPDS 6324 Advanced Clinical Practice for the Hip Complex (3:2.5:4,O) This course presents the examination and management of conditions in the hip complex and pubic symphysis. Course components include advancements in pathoanatomy, biomechanics, interpretation of clinical examination, pathology, and treatment approaches. This course includes management approaches to arthritis/arthrosis, instability, peripheral nerve mobility limits and entrapment, and soft tissue conditions (including tendinopathy and bursitis). Case studies will be discussed and mock clinic sessions will be conducted.

HPDS 6325 Advanced Clinical Practice for the Knee Complex (3:2.5:4,O) This course presents the examination and management of conditions in the knee complex. Course components include advancements in pathoanatomy, biomechanics, interpretation of clinical examination, pathology, and treatment approaches. This course includes management approaches to arthritis/arthrosis, instability, meniscal conditions, and soft tissue conditions (including tendinitis and bursitis). Case studies will be discussed and mock clinic sessions will be conducted.

HPDS 6326 Advanced Clinical Practice for the Ankle & Foot (3:2.5:4,O) This course presents the examination and management of conditions in the ankle/foot complex. Course components include advancements in pathoanatomy, biomechanics, interpretation of clinical examination, pathology, and treatment approaches. This course includes management approaches to arthritis/arthrosis, instability, peripheral nerve mobility limits and entrapment (including Tarsal Tunnel Syndrome), and soft tissue conditions (including tendinitis, tenosynovitis, fasciitis, and bursitis). Case studies will be discussed and mock clinic sessions will be conducted.

HPDS 6333 Advanced Clinical Practice for the Cervical Spine (3:2.5:4,O) This course presents the examination and management of conditions in the cervical spine complex. Course components include advancements in pathoanatomy, biomechanics, interpretation of clinical examination, pathology, and treatment approaches. This course includes management approaches to arthritis/arthrosis, degeneration, cervicogenic headache, vascular conditions, soft tissue conditions and recurrent conditions that include instability and stenosis/spondylosis. Case studies will be discussed and mock clinic sessions will be conducted.

HPDS 6334 Advanced Clinical Practice for Thoracic Spine, Ribs, and TOS (3:2.5:4,O) This course presents the examination and management of conditions in the thoracic spine, ribs and thoracic outlet syndrome. Course components include advancements in pathoanatomy, biomechanics, interpretation of clinical examination, pathology, and treatment approaches. This course includes management approaches to acute, recurrent, and chronic thoracic spine conditions, instability, arthrosis/arthritis, soft tissue conditions, neurogenic and vascular dysfunctions. Case studies will be discussed and mock clinic sessions will be conducted.

HPDS 6335 Advanced Clinical Practice for Lumbosacral Disorders (3:2.5:4,O) This course presents the examination and management of lumbar spine and sacroiliac joint conditions. Course components include advancements in pathoanatomy, biomechanics, interpretation of clinical examination, pathology, and treatment approaches. This course includes management approaches to discogenic conditions, instability, stenosis/spondylosis, arthritis/arthrosis, soft tissue conditions and sacroiliac joint pain, hypomobilities and hypermobilities. Case studies will be discussed and mock clinic sessions will be conducted.

HPDS 6336 Advanced Clinical Practice for the Elbow/Forearm, Wrist, and Thumb Complex (3:2.5:4,O) This course presents the examination and management of conditions in the elbow/forearm, wrist and thumb complex. Course components include advancements in pathoanatomy, biomechanics, interpretation of clinical examinations, pathology, and treatment approaches. This course includes management approaches to arthritis/arthrosis, instability, peripheral nerve mobility limits and entrapment, and soft tissue conditions (including tendinopathy and bursitis). Case studies will be discussed and mock clinic sessions will be conducted.

HPDS 6340 Advanced Soft Tissue Management: Fascial Diagnosis and Treatment (3:2:3,H) This evidence-based course addresses the impact of fascial dysfunctions on movement and movement-related disorders. The lecture components of this course include historical perspectives on soft tissue management. Fascial Structural and Pathoanatomical relationships will be discussed. Biomechanics of soft tissue injury will be considered. Clinical contact sessions will incorporate soft tissue evaluation and special testing, as well as indications, contraindications and precautions in management. Laboratory experiences will include an introduction to treatment implements. Intermediate instrumented and hand-on treatment techniques will be practiced, while treatment implements and complementary movement-based strategies will be introduced.

HPDS 6341 Advanced Soft Tissue Management: Instrument Assisted STM (3:2.5:4,H) This evidence-based course addresses the impact of various soft tissue dysfunctions on movement and movement-related disorders. The lecture components of this course include impact of connective tissue, ligament, tendon, and peripheral nerve mechanical dysfunction on movement. Connective tissue structural and pathoanatomical relationships will be discussed. Biomechanics of soft tissue injury will be integrated into the content. Clinical contact sessions will incorporate advanced soft tissue evaluation and special testing. Advanced instrumented and hand-on treatment techniques will be practiced, while different contemporary treatment implements and complementary movement-based strategies will be incorporated.

HPDS 6342 Advanced Soft Tissue Management: Topics in Dry Needling (3:2:3,H) This evidence-based course is designed to enable students to safely perform dry needling techniques to treat musculoskeletal pain and dysfunction. The lecture components of this course include a discussion of myofascial trigger point development and clinical presentation and examination techniques, as well as safety and regulatory issues that surround trigger point dry needling practice. Clinical contact sessions will include practical experience in dry needling applications for the upper and lower extremities as well as the lumbar and cervical spine.

HPDS 6360 Functional Evaluation and Management of the Upper Quarter (3:2.5:4,O) This course is designed to enable clinicians to execute systematic, evidence-based examination and management of sensorimotor control at the Upper Quarter (cervicothoracic spine and upper extremities). It is aimed at functional recovery for patients suffering from upper quarter pain, dysfunction and performance deficits. Lecture components will focus on Upper Quarter sensorimotor control and dysfunction as they relate to musculoskeletal conditions. Clinical contact sessions will incorporate progressive manual detection and functional examination techniques. Program design, implementation and progression will focus on neuromotor and somatosensory fundamental reactivation, corrective strategies, functional advancement and performance training relevant to each patient's clinical presentation. Clinical case studies will be discussed and mock clinic sessions will be conducted.

HPDS 6361 Functional Eval and Management of the Lower Quarter (3:2.5:4,O) This course is designed to enable clinicians to execute systematic, evidence-based examination and management of sensorimotor control at the Lower Quarter (lumbosacral spine and lower extremities). It is aimed at functional recovery for patients suffering from Lower Quarter pain, dysfunction and performance deficits. Lecture components will focus on Lower Quarter sensorimotor control and dysfunction as they relate to musculoskeletal conditions. Clinical contact sessions will incorporate progressive manual detection and functional examination techniques. Program design, implementation and progression will focus on neuromotor and somatosensory fundamental reactivation, corrective strategies, functional advancement and performance training relevant to each patient's clinical presentation. Clinical case studies will be discussed and mock clinic sessions will be conducted.

HPDS 6362 Functional Evaluation and Management of Persistent Pain (3:2.5:4,O) This course is designed to enable clinicians to execute systematic, evidence-based examination and management of sensorimotor control for patients with persistent, recurrent and or chronic sensitized pain. It is aimed at functional recovery for these patients suffering from chronic pain and fear-related dysfunction and movement deficits. Lecture components will focus on the interaction between long-standing intolerable pain, biopsychosocial adaptations and sensorimotor control and dysfunction. Clinical contact sessions will incorporate progressive manual detection and functional examination techniques. Program design, implementation and progression will focus on fundamental reactivation and corrective strategies that are specific to this population. Clinical case studies will be discussed and mock clinic sessions will be conducted.

HPDS 6363 Advanced Therapeutic Exercise (3:2:3,H) This course offers the exploration of current evidence-based principles of therapeutic exercise intervention across the continuum of rehabilitation sciences practice. Emphasis will be placed on the advanced reasoning and psychomotor skills necessary for the clinician to create and implement advanced intervention using the major therapeutic exercise domains explored throughout this course including flexibility training, resistance training, aerobic training, neuromotor training, and functional training.

HPDS 6364 Neurological Injury in Sports and Occupation (3:2.5:4,H) A clinical course that will address diagnosis and management of central and peripheral nerve pathologies and injuries encountered in sports and occupation. Topics will include: concussion, traumatic brain injuries, spinal cord injuries, thoracic outlet syndrome, and peripheral neuropathies.

HPDS 7000 Clinical Dissertation 1 (3:0:4,O) This is the student's independent clinical dissertation. Content and goals will be established through mutual consent of student and instructor.

HPDS 7001 Clinical Dissertation 2 (3:0:4,O) This is the continuation of the student's independent clinical dissertation. Content and goals will be established through mutual consent of student and instructor.

HPDS 7002 Clinical Dissertation 3 (2:0:3,O) This is the continuation of the student's independent clinical dissertation. Content and goals will be established through mutual consent of student and instructor.

HPDS 7020 Audit (0:0:0,O) Audit

HPDS 7104 Clinical Dissertation Presentation (1:0:3,H) For this credit, the student will present the development and findings from the clinical dissertation before the ScD committee and faculty, other students and individuals from the community.

HPDS 7201 Introduction to Scholarship in Rehabilitation Sciences (2:1:3,O) This course will familiarize the student with basic concepts of significance testing and introduce fundamental descriptive and inferential statistical analyses. Students will learn how to effectively read current scientific literature and prepare an academic manuscript.

HPDS 7301 Seminar in Clinical Research Design (3:2.5:4,H) This course will emphasize methods in clinical research. This will include processes of obtaining, processing, interpreting, and using clinical data.

HPDS 7304 Educational Evaluation in Health Professions (3:2:3,H) This course will discuss educational evaluation theory and tools, emphasizing methods of objective and performance-based evaluation. Students will learn to draft specific evaluation measures used in an educational setting.

HPDS 7305 Curriculum Design and Teaching in Health Professions (3:2.5:4,H) This course discusses the theories and applications of curriculum design, emphasizing applications to entry-level and post-professional educational settings in Rehabilitation Sciences. Students are exposed to core theories, principles and applications that relate to teaching students and professionals.

HPDS 7306 Advanced Statistics in Health Professions (3:2:3,H) This course will educate the student regarding intermediate-to-advanced statistical tools used in parametric and nonparametric statistical analyses. Descriptive statistical analyses will include measures of normality, homogeneity of variance, and sphericity. Parametric tools will include two- and three-way analysis of variance, correction factors, post-hoc comparisons, and ANCOVA. Nonparametric tools will include Friedman Two-Way ranked ANOVA, Chi-square, phi, and point biserial correlation coefficients. Students will be familiarized with selected multivariate designs, to include multiple regression, logistical regression, discriminate analysis, factor analysis, and MANOVA. The course will include single-subject design, sequential clinical trials, and survey methodology. Measures of clinical reliability and validity will be covered, to include diagnostic accuracy measures. Emphasis will be placed on research findings that evaluate specific clinical populations.

HPDS 8363 Screening and Differential Diagnosis (3:3:0,O) This course provides education in screening and differential diagnosis of conditions that may require referral to or examination by a physician. This course will educate the student about proper screening for medical disease to make an informed physical therapy diagnosis. Students will be required to draw upon their 8363 comprehensive knowledge of all body systems to distinguish musculoskeletal and neuromuscular pathology from systemic conditions involving medical pathology which would require a referral to a different healthcare practitioner.

Master of Athletic Training (MAT)

This program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE).

2001 K Street NW
3rd Floor North
Washington, DC 20006
512-733-9700

support@caate.net
https://caate.net/

The AT Profession

In 1990 the American Medical Association recognized athletic training as an allied health profession. Athletic trainers (ATs) are highly qualified multi-skilled health care professionals who render service or treatment, under the direction of or in collaboration with a physician, in accordance with their education, training, and the state's statutes, rules, and regulations as defined by the Athletic Training Strategic Alliance. Career opportunities exist in settings such as college/university athletic departments, secondary school systems, professional sports, sports medicine clinics, corporate/industrial settings, physicians' offices, and other healthcare environments.

After graduating from an accredited professional education program, athletic trainers must pass the Board of Certification, Inc. (BOC) exam and/or meet the requirements of individual states to practice athletic training. Additional credentialing requirements for athletic training vary from state to state according to athletic training practice acts and state regulations that govern athletic training. A felony or misdemeanor conviction may affect a graduate's ability to sit for the BOC examination or attain state licensure.

Program Description

The TTUHSC Master of Athletic Training Program was initially established in 2000 to prepare and equip certified and licensed athletic trainers to serve West Texas and beyond. Over the years, our program has changed and developed but one thing has remained at our core: the desire to prepare well-rounded and highly competent medical professionals who possess not only the knowledge, skills, and abilities to be their best but also the personal touch, care, and compassion to make them truly exceptional and highly coveted in the job market.

Our program has enjoyed considerable success, with cohorts of 20+ attaining first-time BOC pass rates between 88-100% over the last decade, including a six-year streak of 100% first-time passage. The program was granted a 10-year reaccreditation by the Commission on Accreditation in Athletic Training Education (CAATE) in 2019 and has since worked to develop a core framework to lead, guide, and direct our path for the future. We believe our program is unique and innovative in its multi-factor pathway approach to equipping each student to become the latest in a long and proud legacy of alumni who are impacting their communities, the region, the country, and the world.

Our graduates have gone on to find success in every area of modern athletic training practice. Their high levels of satisfaction as evidenced through alumni surveys and their employers' satisfaction with their knowledge, skills, and abilities as demonstrated via employer surveys provide evidence of program effectiveness. However, it is the consistent participation and "extra mile" mentality as evidenced through participation in voluntary experiences like mentoring programs, guest lectures, and mock interviews that provide ample evidence to the program's effectiveness in producing health care professionals who are not just an asset to the workplace but also to their communities.

Mission

Our mission is to enrich the lives of others by educating and empowering athletic training students to become confident, competent, and collaborative health care professionals who positively impact the patients and the communities they serve.

Vision

Transform athletic training and sports medicine through excellence, professionalism, agility, resilience, and servant leadership.

Technical Standards

The Athletic Training Program at Texas Tech University Health Sciences Center is a rigorous and intense program that places specific professional, intellectual, physical, and social requirements and demands on the students enrolled in the program. An objective of this program is to prepare graduates to enter a variety of employment settings and to render care to a wide spectrum of individuals engaged in physical activity. The technical standards set forth by the Athletic Training Program establish the essential qualities considered necessary for students admitted to this program to achieve the knowledge, skills, and competencies of an entry-level athletic trainer, as well as meet the expectations of the program's accrediting agency (Commission on Accreditation of Athletic Training Education [CAATE]). The following abilities and expectations must be met by all students admitted to the Athletic Training Program. In the event a student is unable to fulfill these technical standards with or without reasonable accommodation, the student will not be admitted into the program.

Compliance with the program's technical standards does not guarantee a student's eligibility for the Board of Certification, Inc. (BOC) certification exam (see www.bocatc.org for exam eligibility).

Students in the TTUHSC Master of Athletic Training Program must demonstrate:

1. The mental capacity to assimilate, analyze, synthesize, integrate concepts, and problem solve to formulate assessment and therapeutic judgments and to be able to distinguish deviations from the norm.
2. Sufficient postural and neuromuscular control, sensory function, and coordination to perform appropriate physical examinations using accepted techniques; and accurately, safely, and efficiently use equipment and materials during the assessment and treatment of patients.
3. The ability to communicate effectively and sensitively with patients and colleagues, including individuals from different cultural and social backgrounds. This includes, but is not limited to, the ability to establish rapport with patients and communicate judgments and treatment information effectively. Students must be able to understand and speak the English language at a level consistent with competent professional practice.
4. The ability to record physical examination results and a treatment plan clearly and accurately.
5. The capacity to maintain composure and continue to function well during periods of high stress.
6. The perseverance, diligence, and commitment to complete the athletic training program as outlined and sequenced.
7. Flexibility and the ability to adjust to changing situations and uncertainty in clinical situations.
8. Affective skills and appropriate demeanor and rapport that relate to professional education and quality patient care.
9. The ability, at all times, to conduct themselves in a professional manner with a wide variety of individuals, including but not limited to, faculty, clinical instructors, colleagues, coaches, patients, and students.
10. Professional attitudes and behaviors: perform in an ethical manner in dealings with others in adherence to TTHUSC and athletic training profession guidelines, and personal integrity and hygiene consistent with the athletic training profession.

To ensure patient safety for laboratory classes and the clinical experience portion of the MAT program, students must display the following:

1. **Mobility:** have the physical stamina to stand and walk for 12+ hours in a clinical or field setting; be able to stand, move about freely and maneuver in small spaces and across uneven terrain; be able to tolerate being exposed to extremes in the environment including variable aspects of weather, hazardous fumes, and noise.
2. **Flexibility:** be able to bend the body downward, forward, and to the side by bending at the spine and waist; be able to flex and extend all joints freely.
3. **Strength:** be able to raise objects (25+ lbs) from a lower to a higher position or move objects horizontally from position to position frequently and greater weights occasionally; possess mobility, coordination and strength to push, pull, or transfer heavy

objects weighing 150 lbs. frequently and greater weights occasionally.

4. **Motor Skills** (These skills require coordination of both gross and fine muscular moment and equilibrium)**:** possess manual dexterity, mobility, and stamina to perform CPR for extended periods of time; be able to seize, hold, grasp, turn, apply pressure, and otherwise work with their hands; be able to make skillful, controlled manipulations of small objects in order to use medical equipment; be able to differentiate between normal and abnormal findings in human physical conditions by using visual, auditory, olfactory, and tactile observations; be able to elicit information from the patient examination, using palpation, muscle strength assessment, joint range of motion measurement, and other evaluative maneuvers; be the first responder in a potentially catastrophic injury (e.g., in-line stabilization of the cervical spine, rescue breathing, obstructed airway management, and cardio pulmonary resuscitation); be able to execute movements required to provide therapeutic care, such as performing mobilization and wound care techniques.

5. **Observation** (Observation requires the functional use of vision, hearing, and somatic sensations)**:** be able to participate in laboratory demonstrations; be able to observe and palpate a patient accurately to determine variations from normal and observe output readings to determine a patient's condition and the status of a treatment.

6. **Auditory Ability & Visual Acuity:** possess sufficient hearing to assess a patient's needs, make fine discriminations in sound, follow instructions and communicate with other health care workers; possess the visual acuity to read, write, and assess the patient and the environment.

7. **Communication:** possess verbal/nonverbal and written communication skills adequate to exchange ideas, detailed information, and instructions accurately; be able to read, comprehend, write legibly, and communicate effectively (both orally and in writing); be able to communicate effectively and sensitively with patients to elicit information regarding mood, activities, and health complaints, as well as perceive nonverbal communications; be able to communicate effectively and efficiently with other members of the health care and athletic community to convey information essential for safe and effective care; be able to read, communicate in writing, and demonstrate computer literacy to complete assignments; be able to communicate with accuracy, clarity, efficiency, and sensitivity.

8. **Interpersonal Skills:** be able to interact purposefully and effectively with others; be able to convey sensitivity, respect, tact, and a mentally healthy attitude; be oriented to time, person, place and not mentally impaired to make decisions that would immediately impact the health of others by prescription or nonprescription mind-altering substances; possess sufficient emotional stability to be able to perform duties in life or death situations and in potentially dangerous social situations, including caring for injured individuals in hostile environments; be able to handle stress and work well as part of a team.

9. **Intellectual Abilities:** be able to comprehend three-dimensional relationships and understand spatial relationships of structures; be able to measure, calculate, reason, analyze, integrate, and synthesize information in a timely fashion; be able to synthesize knowledge and integrate the relevant aspects of a patient's history and examination findings to develop an effective treatment program.

10. **Behavioral & Social Attributes:** possess the psychological ability required to exercise good judgment; possess the psychological ability required to promptly complete all responsibilities inherent to the assessment and care of patients; possess the psychological ability required to develop mature, sensitive, and effective relationships with patients; be able to tolerate physically and mentally taxing workloads; be able to adapt and display flexibility (e.g. changing environment, practice schedule, travel); be able to function in the face of uncertainties inherent in the clinical problems of patients; be able to demonstrate ethical behavior, both in laboratory classes and during their clinical experience; be able to respond with precise, quick and appropriate action in emergency situations including, but not limited to Cardiopulmonary Resuscitation (CPR); possess the ability to function safely, effectively, and make and execute quick, appropriate and accurate decisions under stress.

Adapted from the: NATA Education Council Guidelines (https://www.nata.org/career-education/education/resources-tools). Accepted applicants to the MAT program are required to verify that they understand and meet these essential functions, or that they believe that with certain accommodations they can meet the standards.

Any student with a disability who is accepted to the MAT program must contact Student Disability Services (SDS) in the TTUHSC Office of Student Affairs as soon as possible. SDS staff will determine whether the stated condition qualifies as a disability under applicable laws and work with the program faculty to determine reasonable accommodations, taking into account whether accommodations would jeopardize clinician/patient safety or the educational process of the student or the institution, including all course work, clinical educational experiences, and internships deemed essential to graduation. Students are required to read and sign the MAT program technical standards form and to update their responses on this form if their health status changes. Students who require accommodation to meet the technical standards must obtain verification by the authorized institutional office (see above) as defined by the sponsoring institution policy that proper accommodation has been provided for the student to meet the standard.

Transfer Policy

Students who wish to transfer to one of the Texas Tech University Health Sciences Center (TTUHSC) School of Health Professions

(SHP) programs from an equivalent degree program must meet the specific program's admissions criteria and be subjected to the same admissions process as a traditional applicant. Transfer students may be eligible for a waiver from classes taken at their previous institution. The student must provide supporting documents specified by the program for courses to be waived. The decision to allow the student to waive the course will be made by the program director on a case-by-case basis. Meeting minimum requirements does not guarantee admissions.

Admission to the Program

The athletic training program begins the Tuesday after Memorial Day each year. Class size is limited and the admissions process is competitive.

The following is required for an individual to be considered for the MAT program:

- Completion of the TTUHSC Master of Athletic Training application
- Two letters of recommendation
- A complete essay
- Official transcripts from all colleges/universities attended
- A minimum cumulative and prerequisite GPA of 2.7 on a 4.0 scale.
- A "C" or better in all prerequisite courses
- Verification of completed athletic training observation hours post-high school (minimum of 50 hours completed with credentialed athletic trainer)

Additionally, the following information must be provided prior to a student's matriculation in the MAT program:

- Completed Technical Standards form
- Verification of all required immunizations

All applications to the MAT are submitted through the TTUHSC Master of Athletic Training Program application. Go to: www.ttuhsc.edu/health-professions/admissions/application.aspx. The deadline for the receipt of the application, supporting documentation, and application fee is March 15th. Applicants will need to plan accordingly. It is in the best interest of the applicant to apply as early as possible (typically, applicants who apply by December 1st get full consideration for available scholarships). It is the applicant's responsibility to ensure all application materials have been received by the SHP Office of Admissions prior to the application deadline.

Qualified candidates selected by the Athletic Training Admissions Committee will be contacted for an interview. Fulfillment of the basic admissions requirements does not guarantee admission. Acceptance into the MAT program is based on a holistic scoring system including grade point average (cumulative and prerequisite courses), completion of all prerequisite courses, athletic training observation/experience, essay, letters of recommendation, and interview scores.

Prerequisite Courses

Applicants must have earned a Bachelor's degree from an accredited college or university, complete the application process (outlined above), and have completed or plan to complete all prerequisite courses with a 2.7 G.P.A. on a 4.0 scale and a "C" or better prior to enrollment.

To qualify for admission, applicants must have completed or planned to complete all prerequisite courses from a regionally accredited two-year college or college/university in the United States prior to enrollment. International students, please visit *https://www.ttuhsc.edu/health-professions/admissions/international_applicants.aspx* .

Prerequisite Course	Semester Hours
Human Anatomy (or A&P I)	3-4
Human Physiology (or A&P II)	3-4

Exercise Physiology	3
Biomechanics/Kinesiology	3
Nutrition	3
Statistics *(1 course to include descriptive statistics, correlation, & introduction to inferential statistics or research design)*	3
Biology with lab *(2 semester sequence with lab is recommended)*	3-4
Chemistry with lab *(2 semester sequence with lab is recommended)*	3-4
Physics with lab *(2 semester sequence with lab is recommended)*	3-4
General Psychology	3-4
	Total Hours = 30-36

***Recommended Course: Technical Writing**

***If prerequisite courses have not been completed in the last seven years, program director approval for acceptance of courses may be required.**

MAT Curriculum (Class of 2024)

The following courses are offered once each year in the semester listed and must be taken in sequence unless granted permission by the course instructor and the MAT Program Director:

FIRST-YEAR

Full Summer Semester Courses		**Credit Hours**
HPAT 5207	Acute and Emergency Care	2
HPAT 5500	Human Anatomy	5
HPAT 5203	Functional Anatomy	2
		Total Hours = 9

Fall Semester Courses		**Credit Hours**
HPAT 5211	Evidence-Based Practice	2
HPAT 5209	Clinical Practice I	2
HPAT 5325	Lower Quarter Assessment and Manual Therapy	3
HPAT 5327	Therapeutic Interventions	3
HPAT 5222	Clinical Practice and Professional Behavior	2
HPAT 5305	Biomechanics	3
		Total Hours = 15

Spring Semester Courses		**Credit Hours**
HPAT 5212	Clinical Practice II	2
HPAT 5326	Upper Quarter Assessment and Manual Therapy	3
HPAT 5306	Advanced Therapeutic Interventions	3

HPAT 5106	Clinical Reasoning I	1
HPAT 5330	Primary Care and Clinical Pathology	3
		Total Hours = 12

SECOND-YEAR

Summer I Semester Courses		Credit Hours
HPAT 5216	Clinical Reasoning II	2
HPAT 5208	Nutrition and Enhanced Sports Performance	2
HPAT 5123	Special Populations in Health Care	1
HPAT 5098 Practicum or HPAT 5099 Independent Study (optional)		Variable 1-6
		Total Hours = 5

Fall Semester Courses		Credit Hours
HPAT 5307	Clinical Practice III	3
HPAT 5227	Current Medical Diagnosis and Treatment	2
HPAT 5213	Behavioral Medicine	2
HPAT 5310	Health Care and Business Management	3
		Total Hours = 10

Spring Semester Courses		Credit Hours
HPAT 5130	Athletic Training Review	1
HPAT 5801	Clinical Practice IV	8
		Total Hours = 9
		Total = 60

MAT Curriculum (Class of 2025 and beyond)

FIRST-YEAR

Full Summer Semester Courses		Credit Hours
HPAT 5100	Professional Development	1
HPAT 5311	Acute and Emergency Care	3
HPAT 5500	Human Anatomy	5
		Total Hours = 9

Fall Semester Courses		Credit Hours
HPAT 5209	Clinical Practice I	2
HPAT 5211	Evidence-Based Practice Clinical Reasoning	2
HPAT 5305	Biomechanics	3

HPAT 5314	Therapeutic Exercise and Strength Training	3
HPAT 5425	Lower Quarter Assessment and Manual Therapy	4
		Total Hours = 14

Spring Semester Courses		Credit Hours
HPAT 5212	Clinical Practice II	2
HPAT 5218	Physical Agents and Modalities	2
HPAT 5235	Pharmacology	2
HPAT 5306	Advanced Therapeutic Interventions	3
HPAT 5426	Upper Quarter Assessment and Manual Therapy	4
		Total Hours = 13

SECOND-YEAR

Summer I Semester Courses		Credit Hours
HPAT 5208	Nutrition and Enhanced Sports Performance	2
HPAT 5227	CMDT	2
HPAT 5098 Practicum or HPAT 5099 Independent Study (optional)		Variable 1-6
		Total Hours = 4-9

Fall Semester Courses		Credit Hours
HPAT 5220	Health Care and Business Management	2
HPAT 5307	Clinical Practice III	3
HPAT 5313	Behavioral Medicine	3
HPAT 5330	Primary Care and Clinical Pathology	3
		Total Hours = 11

Spring Semester Courses		Credit Hours
HPAT 5224	Special Populations in Health Care	2
HPAT 5230	Athletic Training Review	2
HPAT 5249	Health Informatics and Sports Science	2
HPAT 5328	Clinical Practice IV	3
		Total Hours = 9
		Total = 60

During professional studies, students are required to adhere to all university, school, department, the TTUHSC Student Affairs Handbook Code and Academic Conduct, and program policies, including academic and behavioral guidelines as stated in this catalog and the Department of Rehabilitation Sciences Student Handbook. Expenses (i.e., travel, bags, clothing, criminal background check,

immunizations, etc.) associated with clinical experiences and the program are the responsibility of the student. Information regarding expenses may be found on the MAT program website.

Master of Athletic Training (MAT) Course Descriptions

HPAT 1002 Foundations for Interprofessional Collaborative Practice (0:0:0,O) An introduction to broad concepts related to interprofessional core competencies for healthcare providers.

HPAT 5098 Practicum in Athletic Training (1-6:0:1-6,F) (V:1-6) A hands-on athletic training related experience designed to meet the individual needs of the student.

HPAT 5099 Independent Study in Athletic Training (1-6:0:1-6,F) This course involves an independent project designed to meet the individual student's needs and/or interests. This may include, but is not limited to, a research project, course/skill review, or laboratory teaching assistants (anatomy or other courses).

HPAT 5100 Professional Development (1:1:0,F) This course introduces future clinicians to the concepts of professionalism, professional associations, and leadership as they relate to the practice of athletic training. Additional emphasis will be on the core documents which guide the profession of athletic training, principles which govern ethical decisions, and ethical issues related to health care providers.

HPAT 5106 Clinical Reasoning I (1:1:2.5,F) Exploration of the nature of clinical reasoning and involving self-reflection and informed decision making in managing patient care. Knowledge and skills from the curriculum taught to this point will be incorporated through the use of case studies and simulations within the students' educational exposure.

HPAT 5123 Special Populations in Health Care (1:2.5:0,O) Survey of the strategies to mitigate the risk for long-term health conditions across the lifespan including adrenal diseases, cardiovascular disease, diabetes, neurocognitive disease, obesity, and osteoarthritis. Includes overview of the unique concerns of the preadolescent/adolescent, geriatric, disabled, male, and female patient.

HPAT 5130 Athletic Training Review (1:1.5:0,F) Graduate seminar focusing on current issues in athletic training and preparation for athletic training credentialing exam(s).

HPAT 5203 Functional Anatomy (2:2:4,F) This course examines anatomical structure within the context of normal function. Emphasis is placed on joint orientation and description of normal osteokinematic and arthokinematic components of movement of the upper extremity, lower extremity, and spine. Laboratory experiences are designed to promote accurate surface anatomy palpation, visualization of kinematic motion, and recognition of abnormal position.

HPAT 5207 Acute and Emergency Care (2:1.5:3,F) A classroom and practical study in emergency and acute care situations. Emphasis is placed on evaluation and management of patients with acute conditions and implementing triage strategies for life threatening and/or emergent conditions.

HPAT 5208 Nutrition and Enhanced Sports Performance (2:2:0,F) Survey of the concepts of sports nutrition germane to the patient/client and the role of dietary supplements and performance enhancing substances in the recovery and return to participation process.

HPAT 5209 Clinical Practice I (2:1:17-27,F) A directed and supervised clinical education opportunity consisting of simulation, observation, and an athletic training clinical experience (including a one-week immersive experience). Contact hours may vary based on the clinical placement.

HPAT 5211 Evidence-Based Clinical Reasoning (2:2.5:0,F) This course prepares students to critically appraise peer-reviewed scientific literature, develop the knowledge and skills needed for evidence-based practice, and apply evidence to athletic training practice. The goal of the course is for students to become confident practitioners who are able to effectively ground clinical practice in established and emerging evidence.

HPAT 5212 Clinical Practice II (2:1:17-27,F) A directed and supervised athletic training clinical experience including a one week immersive experience and mini-rotations in orthopedic and non-orthopedic medicine. *An immersive clinical experience is a practice-intensive experience allowing students the opportunity to engage in the totality of care provided by athletic trainers. Contact hours may vary based on the clinical placement.

HPAT 5213 Behavioral Medicine (2:3:0,F) Exploration of the development and integration of behavioral, psychosocial, and biomedical science knowledge and techniques relevant to the understanding of health and illness. Content will include the application of this knowledge and these techniques to prevention, diagnosis, treatment and rehabilitation as it relates to the athletic trainer.

HPAT 5216 Clinical Reasoning II (2:3:9,F) Application and integration of clinical reasoning in managing patient care. Knowledge and skills from the curriculum taught to this point will be incorporated through the use of case studies and simulations within the students' educational exposure. This course will also explore advanced techniques in managing sports related conditions. Topics may include, but are not limited to: movement screening, Graston Technique Therapy®, dry needling, and biopsychosocial pain patterns.

HPAT 5218 Physical Agents and Modalities (2:1.5:3,F) This course presents material that allows development of clinical skills fundamental to patient management for the athletic trainer. This course emphasizes instruction in physical agents and modalities available to the practicing athletic trainer, including electrophysiology, thermal agents, laser, traction, electromyographic (EMG) biofeedback, compression, alternative and palliative care, soft tissue modalities, and the practical usage of each agent or modality.

HPAT 5220 Health Care and Business Administration (2:2.5:0,F) Business principles and concepts associated with health care are examined in relation to the practicing athletic trainer. Topics include business processes common to all business entities with an emphasis on the unique aspects of healthcare delivery, compliance, payment and daily operational tasks.

HPAT 5222 Clinical Practice and Professional Behavior (2:2.5:0,F) A classroom and practical course introducing students to the profession of athletic training and the basic skills for clinical practice. Specific emphasis is placed on behavioral practices of healthcare professionals and clinical skills in patient management (Topics may include, but are not limited to: safety, documentation, preparticipation assessment, taping, bracing, casting, and protective equipment).

HPAT 5224 Special Populations in Health Care (2:3:0,F) Survey of the health conditions across the lifespan including pre-adolescent, adolescent, and geriatric populations. Includes discussion of social determinants of health; diversity, equity, and inclusion; and other aspects of patient identity. Additional emphasis on specific patient health concerns including adrenal diseases, cardiovascular disease, diabetes, neurocognitive diseases, obesity, osteoarthritis, and mental and physical disabilities.

HPAT 5227 Current Medical Diagnosis and Treatment (2:3:0,F) This course is a basic introduction to radiology and orthopedic imaging interpretations, as well as emerging practice techniques. Course content includes medical and surgical management of common musculoskeletal issue. Conditions are presented as they relate to athletic training intervention.

HPAT 5230 Athletic Training Review (2:2:0,F) Graduate seminar focusing on current issues in athletic training and preparation for athletic training credentialing exam(s).

HPAT 5235 Pharmacology (2:2:0,F) This course provides a survey of pharmacology and covers key concepts related to the cellular actions, therapeutic uses, and side effects of major drug classes used in humans and relevant to the practicing athletic trainer. Basic principles of pharmacology are addressed with focus on the mechanisms of action of classes of drugs and effects of specific drugs on the nervous, musculoskeletal, cardiorespiratory, immune, endocrine, gastrointestinal, and other body systems.

HPAT 5249 Health Informatics and Sports Science (2:2:2,F) An introduction to health informatics and sports science, including information management, hardware components, software applications, laboratory and field-based tools and instrumentation, electronic health record systems, and related concepts.

HPAT 5305 Biomechanics (3:3:0,F) Biomechanics of the musculoskeletal system and integrated human movement with clinically relevant applications.

HPAT 5306 Advanced Therapeutic Interventions (3:2.5:3,F) Advanced application of musculoskeletal injury prevention and management techniques and strategies. Includes the use and application of advanced therapeutic and corrective exercise, functional and activity specific exercise, performance enhancement strategies, movement training, soft tissue techniques, and contemporary interventions.

HPAT 5307 Clinical Practice III (3:1:24-40,F) A directed and supervised athletic training clinical experience including both traditional and immersive experiences which closely align with the student's professional goals. The student is afforded the opportunity to engage in the totality of care provided by athletic trainers. Contact hours may vary based on the clinical placement.

HPAT 5310 Health Care and Business Administration (3:4.5:0,F) Business principles and concepts associated with health care are examined in relation to the practicing athletic trainer. Topics include business processes common to all business entities with an emphasis on the unique aspects of healthcare delivery, compliance, payment, and daily operational tasks.

HPAT 5311 Acute and Emergency Care (3:2:3,F) A classroom and practical study in emergency and acute care situations. Emphasis is placed on evaluation and management of patients with acute conditions and implementation of triage strategies for life-threatening and/or emergent conditions. .

HPAT 5313 Behavioral Medicine (3:3:0,F) Exploration of the development and integration of behavioral, psychosocial, and biomedical science knowledge and techniques relevant to the understanding of health and illness. Content includes behavioral medicine-related condition prevention, diagnosis, treatment, and rehabilitation.

HPAT 5314 Therapeutic Exercise and Strength Training (3:2.5:3,F) This course includes study of the fundamental principles of therapeutic exercise and contemporary strength training and conditioning. Includes analysis of the conceptual, theoretical, and technical considerations of assessing, designing, and implementing rehabilitation, strength training, and conditioning program.

HPAT 5325 Lower Quarter Assessment and Manual Therapy (3:2.5:3,F) This course focuses on patient evaluation, assessment, and manual intervention of musculoskeletal conditions in the lower quarter as it relates to functional limitation and movement dysfunction.

HPAT 5326 Upper Quarter Assessment and Manual Therapy (3:2.5:3,F) This course focuses on patient evaluation, assessment and manual intervention of musculoskeletal conditions in the upper quarter as it relates to functional limitation and movement dysfunction.

HPAT 5327 Therapeutic Interventions (3:2.5:3,F) An introduction into integrated management and prevention of musculoskeletal injuries. Includes the use and application of basic therapeutic and corrective exercise techniques, motor control & proprioceptive skills, and therapeutic modalities.

HPAT 5328 Clinical Practice IV (3:1:40,F) A directed and supervised athletic training clinical experience including both traditional and clinical capstone immersion experiences which closely align with the student's professional goals. The student is afforded the opportunity to engage in the totality of care provided by athletic trainers. Contact hours may vary based on clinical placement.

HPAT 5330 Primary Care and Clinical Pathology (3:1.5:3,F) A classroom and practical study of the athletic trainer’s role in the primary care of patients. Emphasis is placed on the study of clinical pathology to understand the cause/effects of disease/illness, management and intervention strategies for disease/illness, including evaluation and analysis of diagnostic assessments, pharmacological therapies, and return to participation criteria.

HPAT 5425 Lower Quarter Assessment and Manual Therapy (4:3:4,F) This course focuses on patient evaluation, assessment and manual intervention of musculoskeletal conditions in the lower quarter as it relates to functional limitation and movement dysfunction.

HPAT 5426 Upper Quarter Assessment and Manual Therapy (4:3:4,F) This course focuses on patient evaluation, assessment and manual intervention of musculoskeletal conditions in the upper quarter as it relates to functional limitation and movement dysfunction.

HPAT 5500 Human Anatomy (5:6:10,F) Integrated study of gross human anatomy embodying gross morphology and coordinating with development and histological aspects of the body. Included is regional dissection with emphasis on integumentary, musculoskeletal, nervous, circulatory and respiratory systems.

HPAT 5800 Clinical Practice III (8:0:40,F) A directed and supervised semester long athletic training immersive clinical experience which closely aligns with the student’s professional goals. *An immersive clinical experience is a practice-intensive experience allowing students the opportunity to engage in the totality of care provided by athletic trainers. Contact hours may vary based on the clinical placement.

HPAT 5801 Clinical Practice IV (8:0:40-50,F) A directed and supervised athletic training clinical experience including both traditional and immersive experiences which closely align with the student's professional goals. The student is afforded the opportunity to engage in the totality of care provided by athletic trainers. Contact hours may vary based on clinical placement.

Doctor of Occupational Therapy (OTD)

The entry-level Doctor of Occupational Therapy (OTD) degree program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA) located at:

6116 Executive Boulevard, Suite 200
North Bethesda, MD 20852-4929
(301) 652-AOTA
www.acoteonline.org

Program Description

The entry-level OTD program is a lockstep, full-time program that takes three years to complete. It is a 100-credit-hour program designed to be completed in nine consecutive semesters. Students complete the didactic and laboratory portion of the curriculum during the first two years of the program on the Lubbock TTUHSC campus. These courses prepare students with the critical reasoning, professionalism, and practice skills necessary for an evidence-based practice that is grounded in occupational therapy theory. Students will also begin preliminary courses related to their doctoral capstone during the second year of the curriculum.

During the third year of the program, students will complete 24 weeks of level II fieldwork education, their doctoral capstone project, and a 14-week doctoral capstone experience. With admission criteria, the total time to earn the OTD degree equals a minimum of six full-time equivalent academic years (i.e., the three-year OTD curriculum and the admission criteria of an earned bachelor's degree).

Students are required to adhere to all program, departmental, and school policies as outlined in the student catalog, student handbook, course syllabi, fieldwork manual, and doctoral capstone manual.

Successful completion of the program leads to a Doctor of Occupational Therapy (OTD) degree. Graduates of the program will be eligible to sit for the National Certification Examination for the Occupational Therapist administered by the NBCOT. After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). In addition, all states require occupational therapists to have state licensure in order to practice. Licensure requirements vary by state according to the practice act and state regulations that govern the practice of occupational therapy; however, state licensure is usually based on the results of the NBCOT certification exam. A criminal conviction (e.g., felony or misdemeanor) may affect a graduate's eligibility to take the NBCOT Certification Examination or attain state licensure.

OTD Vision

To earn recognition for elevating the practice of occupational therapy by promoting our distinct value as clinicians and professionals.

OTD Mission

To provide students with a strong foundation in professionalism, critical reasoning, and practice skills to become competent occupational therapists who use meaningful occupations to help people improve their health and well-being.

Philosophy Statement

The value of a profession lies within its professional identity and its distinct contribution to society. A deep understanding of the profession's core subject is critical for the development of a strong professional identity and articulation of the profession's distinct values. The core subject of the occupational therapy profession is the dynamics of occupation. Dynamics of occupation is a construct that characterizes how engagement in meaningful, necessary, and familiar activities (i.e., occupation) affects a person's health and well-being. Dynamics are forces that influence growth, development, or change within a system or process. The dynamics of occupation can be understood as the forces related to occupational engagement that impact health and well-being.

Occupational therapists believe that being occupied in meaningful, necessary, and familiar activities is a source of health and well-being

for human beings. These activities, or occupations, encompass areas that include: self-care, learning, work, play, leisure, social participation, and sleep/rest. Each person has a unique configuration of meaningful occupations that relate to their roles, habits, routines, contexts, and environments. Various life circumstances and health conditions can disrupt a person's ability to engage in valued occupations.

Occupational therapists use their understanding of the dynamics of occupation to provide occupational therapy interventions that help people do the day-to-day activities that are important and meaningful to them. Occupational therapists work collaboratively with individuals, families, caregivers, and other groups whose life patterns and abilities to engage in valued occupations have been altered for various reasons (e.g., cognitive or developmental problems, injury or illness, social or emotional deficits, aging process). Occupational therapists apply critical reasoning and practice skills as they evaluate, plan, facilitate, and reflect on client care. The distinct value of occupational therapy is to improve health and well-being through facilitating participation and engagement in occupations at home, school, workplace, community, and various other settings.

Occupational therapy education must provide opportunities for students to integrate a wide range of topics learned to the core subject —dynamics of occupation—so that students profoundly understand and clearly articulate the distinct value of occupational therapy. Developing a deep understanding of the dynamics of occupations requires that students:

- Learn what constitutes an occupation and how to analyze activity demands
- Learn how to assess a person's unique occupational profile
- Learn how to analyze occupational performance
- Learn how occupations can be disrupted, impoverished, or changed over time
- Learn how underlying neurological and physiological mechanisms that positively and negatively affect occupational engagement, performance, and participation
- Learn therapeutic strategies, techniques, and activities to help people engage, perform, and participate in meaningful occupations
- Learn methods to evaluate changes in occupational participation, health, and well-being

Curriculum Design of the OTD Program

The curriculum design has four major content areas (i.e., curriculum threads) that are apparent throughout the curriculum. These are the dynamics of occupation, professionalism, critical reasoning, and practice skills.

Dynamics of Occupation

The core subject of the occupational therapy profession is the dynamics of occupation. Dynamics of occupation is a construct that characterizes how occupation—engagement in meaningful, necessary, and familiar activities—affects a person's health and well-being. Dynamics are forces that influence growth, development, or change within a system or process. The dynamics of occupation can be understood as the forces related to (or facilitating) occupational engagement that impacts health and well-being.

Professionalism

Students learn key concepts related to being a professional who is prepared to be a self-directed lifelong learner; to uphold ethical standards, values, and attitudes of the profession; to effectively communicate and work interprofessionally with others; and to demonstrate active involvement in professional development, leadership, and advocacy.

Critical Reasoning

Students learn key concepts related to being a critical thinker who demonstrates the ability to synthesize information necessary for the development and implementation of theory-driven, evidence-based occupational therapy interventions.

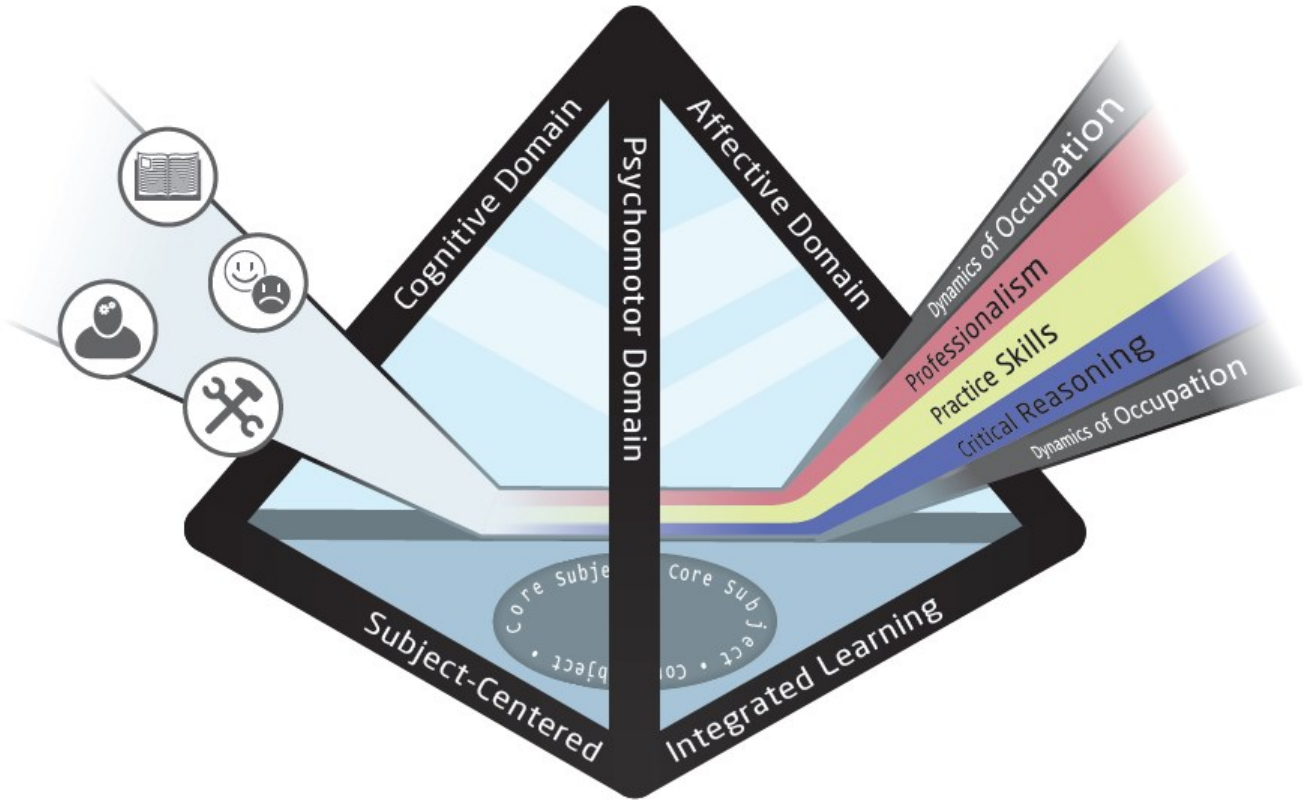
Practice Skills

Students learn key concepts related to being a competent practitioner who can apply evidence-based evaluations and interventions to address physical, cognitive, psychosocial, and sensory aspects of performance in a variety of contexts and environments to support occupational engagement and participation.

Curriculum and Instructional Design

The figure below presents a model of the program's curriculum design. The pyramid illustrates how the curriculum design provides a framework to facilitate the transformation of the student's knowledge, skills, behaviors, and attitudes throughout the program. The base of the pyramid illustrates the SCIL-OT framework and how the core subject (i.e., Dynamics of Occupation) is foundational to the curriculum and instructional design. The three sides of the pyramid illustrate Bloom's Revised Taxonomy framework and how the three domains of learning (i.e., cognitive, psychomotor, affective) are included in instructional design. The beam of light represents the transformation of student learning throughout the curriculum with the recognition that students enter the program with knowledge, skills, behaviors, and attitudes as represented by the icons on the left side of the pyramid. The beam of light traveling through the pyramid represents the development of students' professionalism, practice skills, critical reasoning, and understanding of the profession's core subject (i.e., dynamics of occupation). These four concepts form the curriculum threads that are introduced and integrated throughout the curriculum to guide student learning and development. The curriculum threads structure the scope of the curriculum content and how the core subject (i.e., dynamics of occupation) is integral to each of the other curriculum threads. The transformation yields achievement of student learning outcomes in the areas of critical reasoning, professionalism, practice skills, and dynamics of occupation as depicted by the beam exiting the pyramid on the right.

Appendix 5.5.3: Updated Curriculum and Instructional Design of OTD Program with Updated Figure



Fieldwork

Fieldwork education is an integral aspect of our program. Students will be involved in Level I Fieldwork experiences during the first and second years in the program. Students complete 24 weeks of full-time Level II Fieldwork during the third year of the program. Students must complete all Level II Fieldwork within 12 months following the completion of the didactic portion of the curriculum. Level II Fieldwork courses are typically full-time and will often require the student to relocate outside the immediate geographic area. In rare situations, a Level II Fieldwork experience may be completed on a part-time basis to meet a student's accommodation requirements or extenuating circumstances.

Fieldwork education consists of the following experiences designed to prepare and expose the student to a variety of applied settings in occupational therapy:

- Level I experiences in pediatrics occur in association with HPOT 6240 Intervention: Developmental and Learning Models II in the Summer 2 semester. The student will actively participate in faculty-led learning experiences within the community to develop professional and therapeutic skills with the pediatric population.
- Level I experiences in mental health occur in association with HPOT 6240 Intervention: Cognitive and Behavioral Health Models in the Summer 2 semester. The student will actively participate in faculty-led learning experiences within the community to develop professional and therapeutic skills addressing behavioral, psychological, and social factors influencing engagement in occupation.
- Level I experiences in adult physical dysfunction occur in association with several courses over the first and second year. Integrated within these select courses, students apply knowledge to practice through participation in progressive comprehensive competency experiences relevant to practice in adult settings and understanding the needs of clients. Specific therapeutic competency experiences include the progressive use of simulated environments and standardized patients.
- **Fieldwork II 1:** This full-time fieldwork experience typically begins in May of the third year and lasts 12 weeks. The student engages in an in-depth experience delivering occupational therapy services to clients, focusing on the application of purposeful and meaningful occupation, administration, and management of occupational therapy services.
- **Fieldwork II 2:** This full-time fieldwork experience typically begins in August of the third year and lasts 12 weeks. The student engages in an in-depth experience delivering occupational therapy services to clients, focusing on the application of purposeful and meaningful occupation, administration, and management of occupational therapy services. At least one of the two Fieldwork II experiences must be in an adult physical dysfunction setting. The other Fieldwork II experience may be in a different adult setting, a pediatric setting, mental health setting, or other specialist settings (e.g., hand therapy; neuro specialty).

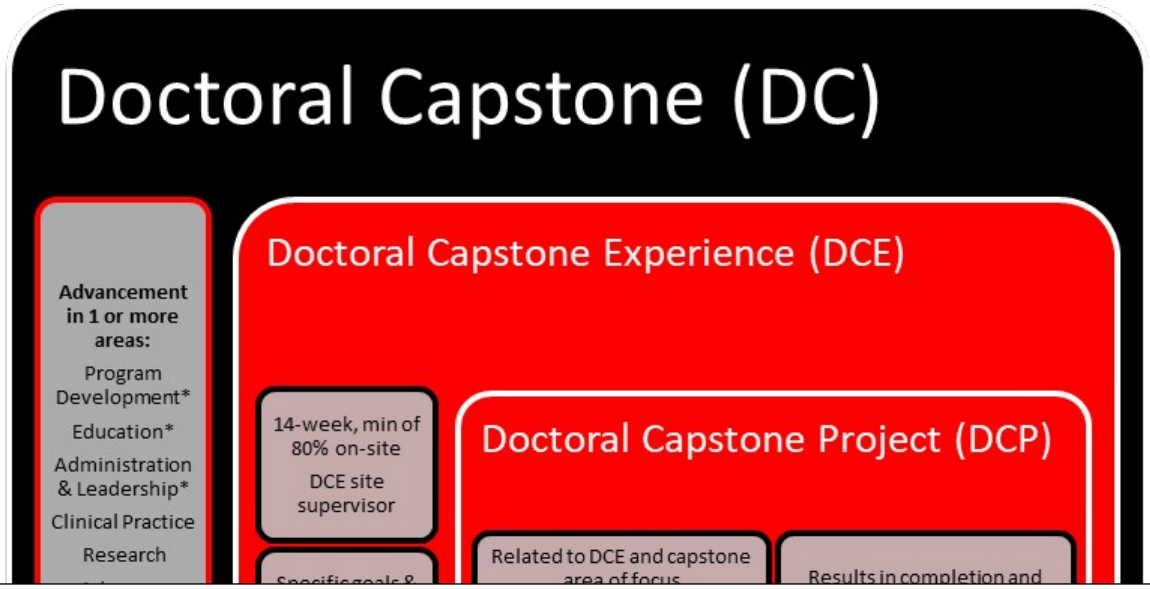
Facilities that have occupational therapy clinical education agreements with TTUHSC may be used for Fieldwork sites. The Academic Fieldwork Coordinator provides detailed information for selection procedures. The student may provide preferences for certain setting types and for the location of Fieldwork II placements. The program has opportunities locally, across the state, and in other states across the US.

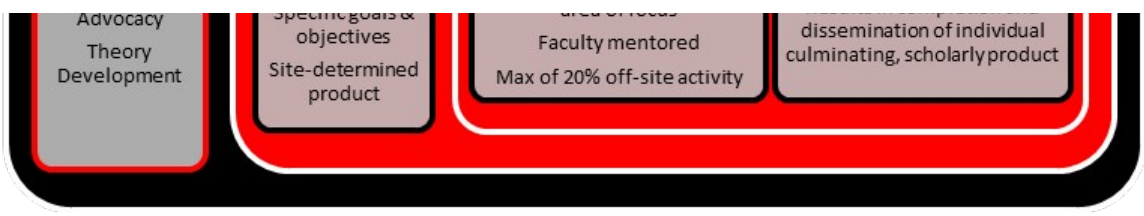
Doctoral Capstone

An integral part of the program curriculum, the Doctoral Capstone (DC) provides in-depth exposure to one or more of the following areas:

- administration and leadership,
- program development,
- education,
- clinical practice skills,
- research skills,
- advocacy,
- and theory development.

It consists of two parts: (1) the capstone experience and (2) the capstone project.





*Areas of program emphasis/specialty.

Doctoral Capstone Experience (DCE)

The DCE develops occupational therapists in one or more of the DC areas. The DCE occurs at a mentored practice setting known as the DCE site. The Doctoral Capstone Coordinator (DCC) will collaborate with the student to establish the DCE site and the required written memorandum of understanding. During the DCE, the student is mentored by an individual with expertise consistent with the student's DC area of focus. This mentor, known as the DCE site supervisor, does not have to be an occupational therapist. More than one student may be present and working collaboratively at the DCE site at the same time; however, each student has individual capstone objectives and focus.

The 14-week (560 hours) DCE, beginning in January of the third year, must be completed after completion of all coursework, Level II fieldworks, and required preparatory activities (i.e., literature review, needs assessment, goals/objectives, and evaluation plan). Students must complete the final doctoral capstone course within 6 months following the completion of Level II fieldwork. No more than 20% of the 560 hours can be completed off-site from the DCE site. The DCE is NOT a third Level II fieldwork. As such, the student will identify goals and objectives, requiring approval in advance of the DCE, to achieve the identified in-depth experience. The objectives for the DCE will overlap with the capstone project objectives; however, additional objectives and tasks specific to opportunities within the DCE site will also be developed. All DCE sites are located in the Lubbock area.

Doctoral Capstone Project (DCP)

The DCP develops occupational therapy students' capacities to engage in scholarly activities. The student completes an individual culminating product to demonstrate synthesis and application of knowledge gained in one or more of the DC areas. The DCP is a highly student-driven process; however, the student works in collaboration with a faculty capstone mentor and possibly a DCE site supervisor to develop an individual plan to achieve individualized learning objectives and produce evidence of scholarship.

The student engages in preparatory activities for the DCP during coursework and prior to the DCE that includes a literature review, needs assessment, goals/objectives, and an evaluation plan. The student must have an approved DC proposal prior to beginning the DCE. The student then engages in scholarship that supports the DCP during the DCE. Following the DCE, the student finalizes and disseminates their DCP. Examples of products that may document this scholarship include a written manuscript, presentation, case report, treatment manual, curriculum, grant proposal, quality improvement project report, program proposal, policy/procedure manual, video, series of marketing or educational materials, or portfolio/photolog/scrapbook. Capstones requiring IRB processes will only be granted on joint projects with academic/professional research teams. The student presents their DCP at the TTUHSC OTD Scholarship Symposium prior to graduation.

Technical Standards

The Occupational Therapy program at Texas Tech University Health Sciences Center (TTUHSC) is a rigorous and intense program that places specific professional, intellectual, physical, and social requirements and demands on the students enrolled in the program. An objective of this program is to prepare graduates to enter a variety of employment settings and to render care to a wide spectrum of individuals with physical and psychosocial impairments. The technical standards set forth by the occupational therapy program establish the essential qualities considered necessary for students admitted to this program to achieve the knowledge, skill, and behavioral competencies for entry-level practice. These standards are subject to amendment based on changes in health care and the scope of occupational therapy practice.

The ability to meet these technical standards is required for admission to the Occupational Therapy program and must be maintained throughout the time a student is enrolled in the program. Applicants to (or accepted applicants for) the Occupational Therapy program will be required to verify that they understand and meet these technical standards, or that they believe that with reasonable

accommodations they can meet the technical standards.

In keeping with applicable federal and state law regarding disabilities, we are committed to making reasonable accommodations for students with disabilities to enable them to perform successfully in our program. Any student with a disability who is accepted to the Occupational Therapy program must contact Student Disability Services (SDS) in the TTUHSC Office of Student Affairs as soon as possible. SDS Staff will determine whether the stated condition qualifies as a disability under applicable laws and work with the program faculty to determine reasonable accommodations.

There are two separate and distinct components in the curriculum for the Occupational Therapy program: 1) an academic didactic component, and 2) a clinical/fieldwork component. Accommodations in place for the didactic component may not be the same accommodations available for the clinical component in the curriculum. The technical standards listed below are necessary functions and skills for the development of the knowledge, skills, and behaviors to provide safe and effective occupational therapy services.

1. **Cognition:**

   a. Applicants and students must be able to skillfully conceptualize, apply, analyze, synthesize, and evaluate information from a broad range of sources. The use of these learning domains must produce effective critical thinking skills to be used during observations of patient behavior, task performance, and the environment. To produce the required didactic and clinical learning, students must have:

   - Sufficient perception and attention (sustained, shifting, and divided) to perform components, such as discernment and discrimination of relevant information (e.g., attention to safety concerns during laboratory and clinical/fieldwork experiences; sustained attention for actively learning during lectures and taking tests lasting up to 4 hours); accurate perception and interpretation of spatial relationships (e.g., surface anatomy; analysis of movement); and acquisition and use of knowledge within rigorous time constraints (e.g., assignment due dates, semester schedules, allotted treatment time).
   - Sufficient memory skills (immediate, short term/working, and long term) to perform components such as the transfer of immediate memories (from sensations) to short term memories, which are then developed into long term memories through various learning strategies. All forms of memory should be accessible/retrievable for use in working memory as evidenced by effective didactic and safe and effective clinical experiences (e.g., assignment completion; examination preparation; occupational therapy evaluation; treatment planning; reassessment; outcomes review).
   - Sufficient higher-level cognitive skills to perform components, such as concept formation (e.g. development of theoretical concepts in occupational therapy); cognitive flexibility (e.g. understanding of various contexts and patient situations); problem-solving and decision making (e.g., searching and evaluating published literature; selection of appropriate assessments and treatment strategies); and accurate self-assessment of clinical/fieldwork skills, professionalism, and academic performance (e.g. monitor one's own actions; learn from peer, instructor, client, and environmental feedback).

2. **Communication:**

   a. Applicants and students must be able to effectively communicate with a broad range of individuals, such as peers, faculty, patients, caregivers, family members, other professionals, supervisors, and payers. Such communication requires that students can effectively engage in receptive and expressive forms of communication (e.g., written, spoken, non-verbal). Students must have:

   - Sufficient proficiency with the English language to perform components, such as the acquisition of information and knowledge through written and spoken language (e.g., classroom instruction, textbooks, journal articles, websites, videos); production of written assignments with accurate spelling, grammar, and writing mechanics (e.g., essays, documentation); completion of examinations that require reading and comprehension; and professional presentation of information (e.g., class presentations; interdisciplinary team discussions; patient status reports).
   - Sufficient proficiency with the use of technology to perform components, such as the utilization of computer resources for didactic, laboratory, and clinical/fieldwork courses (e.g., internet, email, electronic health records, and computer software for word processing, spreadsheet, and presentation); accessing content using a variety of electronic media (e.g., videos, pdf, forums, electronic library databases); and utilization of technology resources used for standardized testing (e.g., electronic modalities).

3. **Motor Skills:**

   a. Applicants and students must be physically capable to perform a range of motor skills. Such motor skills require functional movement to effectively perform various physical components of patient assessment and intervention. Students must have:

   - Sufficient muscular and cardiovascular endurance to perform components such as positioning and stabilization of patient; and sustaining physical activity levels necessary to meet academic and clinical/fieldwork productivity (e.g., classroom and clinical/fieldwork activities)
   - Sufficient fine motor coordination, range of motion, and strength to safely perform components, such as grasp and

manipulation of therapy supplies, tools, and equipment (e.g., cut and form materials to fabricate splints and assistive devices; positioning of supplies or equipment in accordance with standardized testing procedures); demonstration of dexterous movements for various activities of daily living (e.g., write, button, open containers); and application and calibration of pressure to soft tissue (e.g., massage, facilitation, inhibition, and handling techniques).

- Sufficient gross motor coordination, range of motion, and strength to safely perform components, such as stabilization, positioning, and moving of patient (or patient's body parts); maneuvering patient in a wheelchair; application of physical resistance to assess muscle strength and tone; and accommodation and/or demonstration of the desired positioning or movement patterns for the patient (e.g., crouch, kneel, squat, bend, reach, sit).

4. **Observation:**

a. Applicants and students must be able to effectively observe behavior, task performance, and the environment. Such observation requires the functional use of their senses. Students must have:

- Sufficient vision acuity and perception to perform components such as visual observation of educators and/or peers demonstrating techniques, procedures, and equipment use; seeing and reading text and images(e.g., equipment gauges/dials, medical records); observation of patient behaviors, skills, and impairments; visual inspection of signs of distress, trauma, or impairment; visual monitoring of tools and equipment for safe, effective operation; and identification of environmental barriers and supports.
- Sufficient auditory function to perform components, such as hearing patient's verbalizations and utterances; monitoring of tools and equipment for safe, effective operation; and accurately hearing sounds from the pulmonary, cardiovascular, gastrointestinal, and musculoskeletal systems.
- Sufficient tactile sensation to perform components, such as accurate discernment, palpation, and mobilization of muscles, bones, joints, and other subcutaneous structures; monitoring of temperature or tension through touch; and manipulation of supplies, tools, and equipment.

5. **Social Behavioral Skills:**

a. Applicants and students must be able to establish and regulate behaviors to meet the performance demands of occupational therapy practice. Such social behavioral skills require motivation, self-awareness, emotional regulation, and interpersonal skills. Students must have:

- Sufficient motivation to achieve academic or clinical/fieldwork performance expectations that include components, such as self-direction and autonomy (e.g., utilize organization and time management skills; utilize resources for self-directed learning; access transportation to attend academic courses and clinical/fieldwork placements); compliance with academic and professional standards of conduct (adhere to safety guidelines and procedures; conduct oneself in an ethical and legal manner); and portrayal of honesty, integrity, and professionalism in all circumstances.
- Sufficient interpersonal skills to perform components, such as respect for individual, social and cultural diversity; building and maintaining healthy relationships with a broad range of individuals (e.g., peers, faculty, patients, caregivers, family members, other professionals, and supervisors); facilitation of therapeutic interaction (e.g., attending, clarifying, coaching, facilitating, and touching as part of the therapeutic process); professional interactions (e.g., provide constructive feedback; timely and appropriate response to feedback);
- Sufficient awareness of emotional and behavioral states to perform components, such as self-reflection, self-appraisal, and adjustment of actions when necessary (e.g., align behaviors to meet performance expectations; self-identify areas for improvement); and regulation of emotional and behavioral responses (e.g., manage uncertainty in academic and clinical/fieldwork situations; adapt thinking and behavior to changing situations).

6. **Participation:**

a. Applicants and students must be able to participate in various experiential learning opportunities to develop the knowledge, skills, and behaviors for occupational therapy practice. Such experiential learning occurs in the classroom, laboratories, and clinical/fieldwork experiences. Students must be able to:

- Complete the interprofessional core curriculum that involves completion of online modules as well as face-to-face interactions that involve teaching, learning, and collaborating with students from various professions.
- Complete a gross anatomy course, which includes extensive hands-on dissection of human cadavers.
- Participate in classroom and laboratory activities in a co-educational environment where students are required to practice observation and intervention skills on individuals of all body types and genders. Students are often required to dress in shorts and t-shirts/sports bras to allow appropriate visualization or palpation when engaged in the simulation of patient assessment and intervention.
- Participate in small group activities and projects that require students to coordinate schedules and work collaboratively to meet assignment expectations and deadlines.

Admission to the Program

The entry-level OTD program begins in late May each year. The application for the admissions cycle opens in July. A bachelor's degree is required prior to beginning the program. The GRE is not required for admission into the program.

The Application Process

Applicants must complete both an application through the Occupational Therapy Centralized Application Service (OTCAS) and a supplemental application. The OTCAS application and the supplemental application can be accessed through the following link: http://www.ttuhsc.edu/health-professions/admissions/application.aspx.

Applications are considered on a rolling basis for acceptance into the OTD program. The deadline for the receipt of the applications, supporting documentation, and application fee is November 15th. The application must be verified by OTCAS and the TTUHSC SHP supplemental application must be completed by the application deadline. Individual applications are only reviewed after the OTCAS verification process is completed, and the TTUHSC SHP supplemental application is submitted; therefore, it is in the applicant's best interest to complete the application process, including submission of required documentation, as early as possible. Documentation that is required to be submitted includes transcripts, verification of observation/experience hours in occupational therapy settings, three recommendation letters, verification of required immunizations, verification of CPR certification, and personal essays. Please note: There is a time lag in submitting your application to OTCAS and the application being verified. Applicants will need to plan accordingly. It is the applicant's responsibility to ensure all application materials have been received by OTCAS and the SHP Office of Admissions prior to the application deadline.

The selection process for the TTUHSC OTD Program is highly competitive; therefore, it is in the applicant's best interest to complete the entire application process as early as possible. Applicants must meet the admission criteria and complete the application process prior to the deadline to be considered an eligible applicant. Many factors are considered in admissions decisions, and acceptance is offered to candidates that appear to be most highly qualified to meet the mission and goals of the OTD program. Invitations to interview with the program faculty in Lubbock, Texas are extended to the most competitive applicants. Completion of prerequisite coursework, the strength of the academic record, essays, letters of recommendation, and interviews are all strongly considered in the admissions process.

GPA Requirements

A minimum cumulative GPA of 3.0 on a 4.0 scale and a minimum Science GPA of 3.0 on a 4.0 scale are required. A competitive overall GPA and science prerequisite GPA are considerations for admissions.

Transcripts and Coursework

Applicants must submit transcripts of all institutions attended. At the time of application, the student must demonstrate the ability to complete all pre-professional coursework prior to enrollment in the first semester of the professional curriculum.

Experience

Applicants are expected to have some knowledge of the occupational therapy profession. This can be acquired in several ways: volunteer work, paid work, and/or observation in occupational therapy settings/services. It is in the best interest of the applicant to complete a substantial number of experiential hours (a minimum of 40 hours, preferably in a variety of different settings) prior to the application deadline for the program. Verification of observation/experience hours in occupational therapy practice must be submitted as a part of the application. Applicants are also encouraged to become familiar with the occupational therapy profession through exploring the professional literature and online resources.

Letters of Recommendation

Three letters of recommendation are required. One letter must be completed by an occupational therapist. Letters should be completed by professional personnel who have: (a) observed the applicant during any related volunteer, observation, or paid work, (b) been previous or present instructors and/or counselors, or (c) been previous or present employers.

Immunizations and CPR

Verification of required immunizations and CPR for the Healthcare Provider certification must be submitted prior to enrollment in the

professional curriculum, or preferably by the application deadline. The program recommends CPR certification provided through the American Heart Association, as it is a common requirement for fieldwork sites. CPR certification must be maintained throughout the professional program. Immunizations will be maintained by a national database which requires an annual fee to be paid by the student.

Personal Essay

The personal essays should be submitted with the application.

Personal Interview

Competitive candidates are invited for an on-site interview during the Fall or Spring semesters. Submitting an application does not guarantee an interview.

Prerequisite Courses

The completion of the Pre-Professional Curriculum is required prior to starting the program. Courses may be completed in any regionally accredited community college, or university. All prerequisite courses must be completed prior to matriculation. It is recommended that prerequisite courses be taken within the last seven years. For the file to be reviewed, no more than 9 prerequisite hours can be in progress, and at least two science prerequisites must be completed. AP and CLEP credit will not be accepted for any science prerequisite course. There is no advanced placement, transfer of credit, or experiential learning credit within the TTUHSC OTD Program.

Below is the list of the courses that comprise the Pre-Professional Curriculum.

Required Course	Credit Hours
Anatomy & Physiology (with lab)	6-8
Physics, and/or Biomechanics, and/or Kinesiology	3
Abnormal Psychology	3
Developmental Psychology	3
Statistics	3

OTD Curriculum

The curriculum prepares the student to enter the field of occupational therapy with a deep understanding of how engagement in occupation impacts health and well-being as well as a strong foundation in professionalism, critical reasoning, and practice skills.

The curriculum is a total of 100 semester credit hours across nine consecutive semesters during a three-year period. Students complete 71 semester credit hours that include classroom and lab instruction as well as a range of Level I Fieldwork experiences throughout the first two years of the program.

During the third year of the program, students complete: 24 weeks of full-time Level II Fieldwork; complete a doctoral capstone experience and project, and complete a final professional seminar course. No part of Fieldwork Level I may be substituted for any part of Fieldwork Level II. Students must complete all Level II Fieldwork as well as an individual 14-week capstone experience within 18 months following completion of the didactic portion of the program. The doctoral capstone experience must be started after completion of all coursework and Level II fieldwork as well as completion of preparatory activities defined in accreditation standards.

The majority of courses within the OTD curriculum use a face-to-face course delivery method. The distance education course delivery method is used for four classes. The list below designates the type of distance education course delivery method (i.e., hybrid, online) for each of these courses. A description of the types of course delivery methods can be located in the Academic General Policies and Procedures section of this catalog.

FIRST-YEAR

Summer Semester Courses

HPOT 6210 Introduction to Occupational Therapy

HPOT 6510 Human Anatomy

Total Hours: 7

Fall Semester Courses

HPOT 6220 Biomechanical Foundations

HPOT 6321 Occupation-Based Theories

HPOT 6322 Occupational Therapy Process

HPOT 6420 Evaluation: Developmental and Learning Models (with non-credit lab)

Total Hours: 12

Spring Semester Courses

HPOT 6231 Professional Seminar I (Hybrid)

HPOT 6330 Neurological Foundations

HPOT 6332 Research I

HPOT 6430 Intervention: Developmental and Learning Models I (with non-credit lab)

HPOT 6431 Evaluation: Cognitive and Behavioral Health Models (with non-credit lab)

Total Hours: 16

SECOND-YEAR

Summer Semester Courses

HPOT 6240 Intervention: Developmental and Learning Models II (with non-credit lab)

HPOT 6241 Evaluation: Biomechanical and Rehabilitative Models (with non-credit lab)

HPOT 6341 Intervention: Cognitive and Behavioral Health Models (with non-credit lab)

Total Hours: 7

Fall Semester Courses

HPOT 6151 Professional Seminar II (Hybrid)

HPOT 6250 Capstone 1: Project Development

HPOT 6350 Research II

HPOT 6450 Intervention: Biomechanical and Rehabilitative Models I (with non-credit lab)

HPOT 6451 Evaluation: Motor Control and Motor Learning Models (with non-credit lab)

Total Hours: 14

Spring Semester Courses

HPOT 6260 Capstone 2: Project Proposal

HPOT 6261 Professional Seminar III (Hybrid)

HPOT 6361 Healthcare Management

HPOT 6460 Intervention: Biomechanical and Rehabilitative Models II (with non-credit lab)

HPOT 6461 Intervention: Motor Control and Motor Learning Models (with non-credit lab)

Total Hours: 15

THIRD-YEAR

Summer Semester Courses

HPOT 6970 Fieldwork II: 1

Total Hours: 9

Fall Semester Courses

HPOT 6180 Capstone 3: Project Coordination (Online)

HPOT 6980 Fieldwork II: 2

Total Hours: 10

Spring Semester Courses

HPOT 6190 Professional Seminar IV

HPOT 6990 Capstone 4: Project Implementation & Evaluation

Total Hours: 10

Total = 100 hours

Doctor of Occupational Therapy (OTD) Course Descriptions

HPOT 1002 Foundations for Interprofessional Collaborative Practice (0:0:0,O) An introduction to broad concepts related to interprofessional core competencies for healthcare providers.

HPOT 6151 Professional Seminar II (1:1:0,H) Expands prior knowledge of professional roles and responsibilities. Focuses on promotion of the distinct value of occupational therapy through effective communication, collaboration, and leadership. Includes topics such as advocacy, interprofessional collaboration, and education.

HPOT 6180 Capstone 3: Project Coordination (1:1:0,O) Builds on previous capstone courses to finalize doctoral capstone objectives and evaluation plan. Focus is confirmation of the completion of all preparatory activities including coordination with capstone mentor.

HPOT 6190 Professional Seminar IV (1:1:0,F) Expands prior knowledge of professional roles and responsibilities. Focus is preparation for the national certification examination. Includes topics such as examination procedures, licensure process, and ongoing professional development.

HPOT 6210 Introduction to Occupational Therapy (2:3:0,F) Provides an overview of the history of the profession of occupational therapy and introduces students to key resources of the profession (e.g., Occupational Therapy Practice Framework, Occupational Therapy Code of Ethics, professional organizations). Focuses on occupational therapy's role in influencing health and well-being through engagement in occupation. Includes topics such as philosophical base, factors impacting ongoing development of the profession, domain of occupational therapy, and personal professional development.

HPOT 6220 Biomechanical Foundations (2:1:3,F) Provides an overview of the organization and function of the musculoskeletal system. Focuses on the analysis of normal human movement and the influence of motion on occupational performance. Includes topics such as range of motion, goniometry, and manual muscle testing.

HPOT 6231 Professional Seminar I (2:2:0,H) Examines the roles and interactions of various stakeholders (e.g., consumers, policymakers, insurers, practitioners) with regards to the profession of occupational therapy. Focuses on the influence of sociocultural, socioeconomic, and sociopolitical factors on the profession and practice of occupational therapy. Includes topics such as legislation and regulatory bodies; advocacy; professional ethics; professional organizations; and strategies for ongoing professional development.

HPOT 6240 Intervention: Developmental and Learning Models II (2:1:0-20,F) Expands prior knowledge of theories, models of practice, and frames of reference whose primary domain on concern relate to human development and learning. Focuses on the use of theoretical approaches to guide and inform the intervention process for persons, groups, and/or populations that includes a faculty supervised field experience. Includes topics such as evidenced-based interventions, practice skills, intervention process, and outcomes.

HPOT 6241 Evaluation: Biomechanical and Rehabilitative Models (2:2:4,F) Examines theories, models of practice, and frames of reference whose primary domain of concern relate to restoration and compensation of movement and function in context. Focuses on the use of theoretical approaches to guide the evaluation process for persons, groups, and/or populations. Includes topics such as functional impairments associated with various conditions (e.g. orthopedic, soft tissue, degenerative, spinal cord and nerve injuries) administration of assessments, and interpretation of assessment findings.

HPOT 6250 Capstone 1: Project Development (2:2:0,F) Examines the purpose and responsibilities of the doctoral capstone process. Focuses on a description of concentration areas, capstone project expectations, and capstone experiences responsibilities. Includes topics such as selection of area of interest, literature review, needs assessment, and project design.

HPOT 6260 Capstone 2: Project Proposal (2:2:1,F) Builds on previous capstone course to refine the development of the capstone project and experience. Focuses on the completion of a capstone proposal that includes a literature review, needs assessment, goals with objectives, and an evaluation plan. Includes

topics such as scholarly projects, program development, and grant proposals.

HPOT 6261 Professional Seminar III (2:2:0,H) Expands prior knowledge of professional roles and responsibilities. Focuses on promotion of the distinct value of occupational therapy through effective communication, collaboration, and leadership. Includes topics such as supervision, education, licensure, and certification.

HPOT 6321 Occupation-Based Theories (3:3:0,F) Examines the philosophical, theoretical, and professional concepts that are foundational to occupational therapy. Focuses on evaluation and application of occupation-based theories utilized in occupational therapy practice. Includes topics such as theory-development; theory-driven practice; role of occupation in health; and domain of occupational therapy.

HPOT 6322 Occupational Therapy Process (3:3:0,F) Examines the occupational therapy process (i.e., evaluation, intervention, targeting in outcomes). Focuses on the domain and process of occupational therapy with regard to a current and emerging service delivery models (e.g., direct service, case management, telehealth). Includes topics such as documentation, interprofessional collaboration, and population health programs.

HPOT 6330 Neurological Foundations (3:3:0,F) Provides an overview of the organization, functions, and pathologies of the central nervous system. Emphasis is on "system-level neuroanatomy (e.g., motor and sensory pathways) and regional neuroanatomy (e.g., organization of spinal cord, brainstem, cerebral cortex). Additional topics include: information processing by neurons (e.g., axon physiology, synaptic neurotransmission, and plasticity) and description of a number of neurological disorders that have clinical relevance to occupational therapists.

HPOT 6332 Research I (3:3:0,F) Examines the research process from the perspectives of a consumer of an contributor to research. Focuses on resources and skills for evidence based practice. Includes topics such as levels of evidence; literature review and critique; research questions, design and methodology; quantitative and qualitative data analysis; results and implications.

HPOT 6341 Intervention: Cognitive and Behavioral Models (3:2:3,F) Expands prior knowledge of theories, models of practice, and frames of reference whose primary domain of concern relate to cognition, psychosocial function, and/or behavioral health. Focuses on the use of theoretical approaches to guide and inform the intervention process for persons, groups, and/or populations that includes a faculty supervised field experience. Includes topics such as evidenced-based interventions, practice skills, intervention process, and outcomes.

HPOT 6350 Research II (3:3:0,F) Expands prior knowledge of the research process with an emphasis on outcomes research. Focuses on production and use of evidence for practice. Includes topics such as critically appraised papers and topics; quantitative and qualitative research; operationalization of intervention methods; and dissemination of research.

HPOT 6361 Healthcare Management (3:3:0,F) Provides a comprehensive review of factors that influence design, structure, and operation of contemporary healthcare organizations. Focuses on the internal and external dynamics of healthcare organizations. Includes topics such as management and organizational theory; reimbursement; supervision; career planning.

HPOT 6420 Evaluation: Developmental and Learning Models (4:3:3,F) Examines theories, models of practice, and frames of reference whose primary domains of concern relate to human development and learning. Focuses on the use of theoretical approaches to guide the evaluation process for persons, groups, and/or populations. Includes topics such as functional impairments associated with various conditions (e.g., sensory processing disorder, developmental coordination disorder, developmental disabilities, learning disabilities), administration of assessments, and interpretation of assessment findings.

HPOT 6430 Intervention: Developmental and Learning Models I (4:3:3,F) Expands prior knowledge of theories, models of practice, and frames of reference whose primary domain of concern relate to human development and learning. Focuses on the use of theoretical approaches to guide and inform the intervention process for persons, groups, and/or populations. Includes topics such as evidenced-based interventions, practice skills, intervention process, and outcomes.

HPOT 6431 Evaluation: Cognitive and Behavioral Models (4:3:3,F) Examines theories, models of practice, and frames of reference whose primary domain of concern relate to cognition, psychosocial function, and/or behavioral health. Focuses on the use of theoretical approaches to guide the evaluation process for persons, groups, and/or populations. Includes topics such as include functional impairments associated with various conditions (e.g., psychiatric illness, behavioral disorders, dementia, brain injury), administration of assessments, and interpretation of assessment findings.

HPOT 6450 Intervention: Biomechanical and Rehabilitative Models I (4:3:3,F) Expands on prior knowledge of theories, models of practice, and frames of related to restoration and compensation of movement and function in context. Focuses on the use of theoretical approaches to guide and inform the intervention process for persons, groups, and/or populations. Includes topics such as evidenced-based interventions, practice skills, intervention process, and outcomes.

HPOT 6451 Evaluation: Motor Control and Motor Learning Models (4:3:3,F) Examines theories, models of practice, and frames of reference related to facilitation of movement and function in context. Focuses on the use of theoretical approaches to guide the evaluation process for persons, groups, and/or populations affected by neuropathology. Includes topics such as functional impairments associated with various conditions (e.g. neurodegenerative disorders, sequelae post-acute and chronic neurological lesions, congenital and developmental disabilities) administration of assessments, and interpretation of assessment findings.

HPOT 6460 Intervention: Biomechanical & Rehabilitative Models II (4:3:3,F) Expands prior knowledge of theories, models of practice, and frames of reference related to restoration and compensation of movement and function in context. Focuses on the use of theoretical approaches to guide and inform the intervention process for persons, groups, and/or populations with an emphasis on hand and upper extremity. Includes topics such as evidenced-based interventions, practice skills, intervention process, and outcomes.

HPOT 6461 Intervention: Motor Control and Motor Learning Models (4:3:3,F) Expands prior knowledge of theories, models of practice, and frames of reference related to rehabilitation of clients with neuropathology across the lifespan. Focuses on use of theoretical approaches to guide and inform the intervention process for persons, groups, and/or populations. Includes topics such as evidenced-based interventions, practice skills, intervention process, and outcomes.

HPOT 6510 Human Anatomy (5:6:10,F) Provides an integrated study of gross human anatomy that includes morphology as well as developmental and histological aspects of the body. Primary lab activity is regional dissection of human cadaver with emphasis on the musculoskeletal, nervous, circulatory and respiratory systems.

HPOT 6970 Fieldwork II:1 (9:0:40,F) A full-time, supervised clinical experience for 12 weeks (480 hours). Focus is entry-level practice skills including: use of occupational therapy process and clinical reasoning skills; working with individuals and groups; clinical administration; management of services; and application of purposeful and meaningful occupation and research.

HPOT 6980 Fieldwork II:2 (9:0:40,F) A full-time, supervised clinical experience for 12 weeks (480 hours). Focus is entry-level practice skills including: use of occupational therapy process and clinical reasoning skills; working with individuals and groups; clinical administration; management of services; and application of purposeful and meaningful occupation and research.

HPOT 6990 Capstone 4: Project Implementation (9:0:40,F) A full-time, mentored doctoral capstone experience for 14 weeks (560 hours). Focuses on completion and dissemination of doctoral capstone (i.e., project and experience) that demonstrates synthesis of in-depth knowledge in a focused area of study.

HPOT 7010 Capstone Pre-Proposal (0:0:1,O) This course will begin the process of Capstone topic selection and match students with their faculty mentor for

the Capstone 1 and Capstone 2 courses. This course must be taken before enrolling in Capstone 1.

HPOT 7110 Capstone Pre-Proposal (1:1:0,O) This course will begin the process of Capstone topic selection and match students with their faculty mentor for the Capstone 1 and Capstone 2 courses. This course must be taken before enrolling in Capstone 1.

HPOT 7290 Capstone 1: Project Proposal (2:2:0,O) Provides a description of concentration areas and doctoral capstone expectations. Focuses on the completion of a capstone proposal that includes a problem statement, literature review, theoretical basis, goals with objectives, and an evaluation plan.

Post Professional Doctor of Occupational Therapy (OTDP)

The Accreditation Council for Occupational Therapy Education (ACOTE) does not offer accreditation for post-professional programs in occupational therapy, such as the post-professional Doctor of Occupational Therapy (OTDP).

Program Description

The post-professional Doctor of Occupational Therapy (OTDP) program is designed for licensed occupational therapists who possess a bachelor's or master's degree in occupational therapy. The OTDP provides these licensed occupational therapists an opportunity to elevate their professional degree to the doctoral level. The OTDP is designed for licensed occupational therapists who would like to keep up with trends in the profession, as well as, enhance their skills and career opportunities by earning a doctoral degree.

Admission to the Program

Applications are accepted for admission for the Fall, Spring, and Summer semesters. Application deadlines are July 1 for Fall, November 1 for Spring, and April 1 for Summer. Applicants must complete and submit the application for admission online at http://www.ttuhsc.edu/health-professions.

Application Process

The following requirements must be met to be eligible for admission to the OTDP program:

- License to practice occupational therapy within the U.S. with documentation to be submitted with the application
- Applicants must have a minimum of one year of clinical practice in the United States as a licensed occupational therapist
- Either a bachelor's or master's degree in occupational therapy
- All official college transcripts, including undergraduate, occupational therapy program, graduate, and any other university coursework
- A minimum 3.0 GPA on a 4.0 scale
- At least one supporting letter of recommendation from a current or former employer or a professional colleague in the field of occupational therapy
- Resume listing professional experience
- Essay about personal professional goals in 500 words or less
- TOEFL or IELTS scores (internationally trained applicants from non-English speaking countries only). Writing skill scores are strongly preferred to be at or above 24.
- Applicants may be offered the opportunity to interview, if they so choose, in order to demonstrate appropriateness for admission to the OTDP program.

OTDP Curriculum

Students with a master's degree in occupational therapy are required to complete 27 semester credit hours. Students with a bachelor's degree in occupational therapy are required to complete 33 semester credit hours. All students are required to take the 2 non-credit, no-fee courses (Interprofessional Collaborative Practice in OT and Capstone Pre-proposal) and 7 core courses. Students with a master's degree in occupational therapy choose 2 electives and students with a bachelor's degree in occupational therapy choose 4 electives. All courses are taught online. Most courses will be taught at least once per year. Students are required to successfully complete at least two courses within each academic year. While each student's curriculum is flexible, it is expected that coursework requirements for the OTDP degree be completed within five years. Each student will design a degree plan on admission to the program in conjunction with

the Program Director.

Non-Credit, No Fee Courses (required for graduation):

Interprofessional Collaborative Practice

Capstone Pre-proposal

Required Courses:

Professional Seminar

Current Issues in Occupational Therapy Practice

Practice-Based Scholarship

Evidence for Practice

Outcomes Measurement

Capstone Pre-Proposal

Capstone 1: Project Proposal

Capstone 2: Project Implementation and Evaluation

Elective Courses:

Principles of Management and Leadership in Healthcare

Health Insurance and Reimbursement

Curriculum Design and Teaching in Health Professions

Educational Evaluation in Health Professions

Health and Wellness Promotion

Independent Study

Capstone Description

The capstone courses provide the student with the opportunity to develop advanced skills through in-depth exposure in one of the following areas of concentration: clinical practice skills, research skills, leadership, program and policy development, advocacy, and education. The doctoral capstone is a 3-course learning experience that includes the planning, implementation, and systematic evaluation demonstrating the synthesis of knowledge gained in the specific concentration area.

Students will identify an area of concentration and faculty capstone supervisor prior to enrollment in the Capstone Pre-proposal course. During the first capstone course, the student will work with his or her capstone faculty supervisor to develop a capstone project proposal that includes individual objectives, evaluation methods, the timeline for completion, and a plan for dissemination of findings. Approval of the capstone project proposal is required for the successful completion of the first capstone course. Following faculty supervisor approval, the program director will be responsible for the ultimate review and approval of all capstone proposals.

During the second capstone course, the faculty supervisor provides supervision as the student implements the capstone project and disseminates findings. The implementation, evaluation, and dissemination of the project is required for the successful completion of the second capstone course.

Post Professional Doctor of Occupational Therapy (OTDP) Course Descriptions

HPOT 1002 Foundations for Interprofessional Collaborative Practice (0:0:0,O) An introduction to broad concepts related to interprofessional core competencies for healthcare providers.

HPOT 7110 Capstone Pre-Proposal (1:1:0,O) This course will begin the process of Capstone topic selection and match students with their faculty mentor for the Capstone 1 and Capstone 2 courses. This course must be taken before enrolling in Capstone 1.

HPOT 7290 Capstone 1: Project Proposal (2:2:0,O) Provides a description of concentration areas and doctoral capstone expectations. Focuses on the completion of a capstone proposal that includes a problem statement, literature review, theoretical basis, goals with objectives, and an evaluation plan.

HPOT 7301 Principles of Management and Leadership in Healthcare (3:3:0,O) The emphasis of this course is on understanding the principles of management and leadership theory and application in health organizations. Topics include personality assessments, leadership competencies and skills, leadership models, outcomes measurement, and ethics in health leadership. Key concepts of management, including planning, organizing, decision making, motivation, and communication will be addressed.

HPOT 7302 Health Insurance and Reimbursement (3:3:0,O) This course provides an overview of health insurance, including public and private payers, self-funded insurance, managed care, health insurance markets, and policy changes that impact these areas. In addition, the course will cover healthcare payment systems and reimbursement methods of various payers in the health services marketplace.

HPOT 7303 Curriculum Design and Teaching in Health Professions (3:3:3.5,O) This course discusses the theories and applications of curriculum design, emphasizing applications to entry-level and post-professional educational settings in Physical Therapy. Students are exposed to core theories, principles and applications that relate to teaching occupational therapy students and professionals.

HPOT 7304 Educational Evaluation in Health Professions (3:2:3,H) This course will discuss educational evaluation theory and tools, emphasizing methods of objective and performance-based evaluation. Students will learn to draft specific evaluation measures used in an educational setting.

HPOT 7305 Health and Wellness Promotion (3:3:0,O) This course focuses on the theories and practice of health promotion and wellness and is designed to assist students in acquiring the knowledge, skills, an tools they need to successfully integrate health promotion and wellness into physical therapy practice. Students will complete health promotion and wellness modules on topics such as: health promotion in physical therapy practice; individual and societal determinants of health and wellness; theories of behavior change; techniques for patient education and counseling in the areas of lifestyle change, physical activity, nutrition, and weight management. A major focus is on learning to use behavior modification techniques to help motivate and support lifestyle changes, improve health, and prevent disease. As part of this course, students will research and develop a health promotion intervention that can be delivered in their physical therapy practice setting.

HPOT 7350 Professional Seminar (3:3:0,O) Explores the growth of the profession of occupational therapy and implications for professional development. Focuses on the investigation of current and future career pursuits. Includes topics such as strengths assessment, leadership, scholarship, education, and professional organizations.

HPOT 7351 Current Issues in Occupational Therapy Practice (3:3:0,O) Examines issues that impact the delivery of occupational therapy services in health and other systems. Focuses on the confluence of sociocultural, socioeconomic, and sociopolitical factors impacting the profession and practice of occupational therapy. Includes topics such as federal and state legislation and regulation; ethics; advocacy; interprofessional collaboration; and promotion of distinct value of occupational therapy.

HPOT 7352 Practice-Based Scholarship (3:3:0,O) Learn methods to support the systematic examination of everyday practice. Focuses on the investigation of a problem relevant to current practice. Includes topics such as identification of a practice question, systematic measurement of specified aspects of practice, data collection and analysis methods, and the dissemination of findings.

HPOT 7353 Evidence for Practice (3:3:0,O) Learn strategies to identify, analyze, and utilize evidence. Focuses on the utilization of resources to identify peer-reviewed evidence and development of strategies to interpret and evaluate findings. Includes topics such as levels of evidence; theoretical basis; quantitative and qualitative research design, and basic statistics.

HPOT 7354 Outcomes Measurement (3:3:0,O) Learn methods to measure the effectiveness of interventions. Focuses on the utility and value of functional assessment. Includes topics such as occupation-based tools; reliability and validity; and reimbursement.

HPOT 7370 Independent Study (3:3:0,O) This independent study course is designed to meet the student's needs and/or interest. Instructor approval required prior to enrollment. Note: Required elective if doctoral project is a research project.

HPOT 7391 Capstone 2: Project Implementation and Evaluation (3:3:0,O) Focuses on completion and dissemination of a mentored, doctoral capstone project that demonstrates synthesis of in-depth knowledge in a focused area of study. NOTE: Requires completion of all core coursework.

Doctor of Philosophy in Rehabilitation Science (PhD RS)

Program Description

Rehabilitation science is a broad and growing field that improves the treatment, care, and lives of people with potentially disabling health conditions. It includes researchers, educators, and professionals who advance, teach and apply knowledge to care for people with health needs.

The Ph.D. in Rehabilitation Science program educates students to be innovative educators, researchers, and leaders. Our graduates become scholars in higher education and other settings who advance and distribute knowledge to enrich the lives of people with communication and movement disorders. Our program emphasizes the athletic training, audiology, occupational therapy, physical therapy, and speech-language pathology rehabilitation domains. We foster interprofessional and interdisciplinary collaboration to advance treatment and enablement theories that will improve rehabilitation practice. We welcome qualified students from related clinical and non-clinical backgrounds who are passionate about rehabilitation science, learning, teaching, and research.

The Ph.D. RS program offers Communication Sciences and Disorders (CSD) and Movement Sciences and Disorders (MSD) concentrations. The program's face-to-face curriculum includes several online course options. Twenty-one faculty members across seven programs and two departments educate Ph.D. students in rehabilitation science foundations, professional development, teaching methods and practices, research design and statistics, technical writing, and research. Students develop an individualized concentration plan, including seminars, research methods, and discipline-specific courses. They take electives from other programs, departments, and schools at TTUHSC and TTU. Students choose academic and research emphases based on their interests and career goals. All students complete a research project, comprehensive qualifying examination, and doctoral dissertation. Graduation requires 86 semester credit hours over typically four years, with up to 24 graduate-level transfer hours possible. Ph.D. students may enroll full or part-time, and teaching and research assistantships are available.

Program Admission

Applications for admission are due by February 1 for the Summer semester, March 15 for the Fall semester, and October 15 for the Spring semester.

Ph.D. RS program admission is competitive and based on the applicant's academic record, professional experiences, goals, interests, GRE scores, and potential to contribute substantively to rehabilitation science. The admission requirements are

- graduate degree in rehabilitation science or a related area
- official transcripts reflecting all coursework, an earned graduate degree, and a minimum GPA of 3.0 out of 4.0 in the last 60 semester credit hours
- competitive GRE scores (official copy with verbal, quantitative, and writing scores)
- three letters of recommendation
- application essay describing the applicant's research interests, career goals, and relevant experiences
- sample of research writing
- résumé or curriculum vitae

The admissions committee will interview qualified applicants before making an admission decision.

Ph.D. RS Curriculum

The Ph.D. RS program requires 86 semester credit hours, including up to 24 hours from graduate-level transfer courses. All students take a 44-hour core curriculum and 42-hour concentration in ***Communication Sciences & Disorders or Movement Sciences & Disorders.***

Note: The Ph.D. RS is a face-to-face program, but students may take several online courses and receive degree credit for up to 49% of the hours taken in the program.

REHABILITATION SCIENCE CORE (44 hours)

All students take the following core courses or approved substitutes, as applicable.

FOUNDATIONS (3 hours)

HPPH 7101 Rehabilitation Science Foundations

HPPH 7102 Professional Development (repeat for 2 hours)

TEACHING (8 hours)

HPDS 7304 Educational Evaluation in Health Professions

HPDS 7305 Curriculum Design & Teaching in Health Professions

or another approved education course, and

HPPH 7115 Teaching Practicum (repeat for 2 hours)

RESEARCH DESIGN & STATISTICS (9 hours)

HPPH 7321 Research Design & Statistics

HPPH 7322 Intermediate Statistics

HPPH 7323 Selected Topics in Statistics

or another approved statistics course

TECHNICAL WRITING (6 hours)

HPPH 7331 Writing for Publication

HPPH 7332 Writing for Grants

or another approved technical writing course

RESEARCH (6 hours)

HPPH 7099 Research

DOCTORAL DISSERTATION (12 hours)

HPPH 8000 & 8001 Doctoral Dissertation

CONCENTRATION (42 hours)

Students choose a concentration in ***Communication Sciences & Disorders (CSD)*** or ***Movement Sciences and Disorders (MSD)***, completing graduate-level required, selected, and elective coursework.

Communication Sciences and Disorders (CSD) Concentration

REQUIRED CSD COURSES (12 hours)

HPPH 7171, 7272, or 7377 CSD Seminar (select and repeat courses for 9 hours)

HPPH 7350 CSD Research Methods (3 hours)

SELECTED CSD COURSES (18 hours from the following)

HPPH 7171, 7272, or 7377 CSD Seminar (may be repeated for credit; 6 hours maximum)

HPPH 7350 CSD Research Methods (may be repeated for credit; 6 hours maximum)

HPPH 7010 Independent Student (may be repeated for credit; 6 hours maximum)

HPPH 7020 Special Topics (may be repeated for credit; 6 hours maximum)

HPPH 7386 Computer Research Applications

Courses from

- the MSD concentration
- other Department of Speech, Language, and Hearing Sciences programs (e.g., AuD, SLP)
- other SHP programs (6 hours maximum)
- other TTUHSC departments (6 hours maximum)
- TTU (6 hours maximum)

ELECTIVE CSD COURSES (12 hours)

Students take approved elective courses to complete the CSD concentration.

Movement Sciences and Disorders (MSD) Concentration

REQUIRED MSD COURSES (12 hours)

HPPH 7181, 7282, or 7387 MSD Seminar (select and repeat courses for 9 hours)

HPPH 7360 MSD Research Methods (3 hours)

SELECTED MSD COURSES (18 hours from the following)

HPPH 7181, 7282, or 7387 MSD Seminar (may be repeated for credit; 6 hours maximum)

HPPH 7360 MSD Research Methods (may be repeated for credit; 6 hours maximum)

HPPH 7010 Independent Study (may be repeated for credit; 6 hours maximum)

HPPH 7020 Special Topics (may be repeated for credit; 6 hours maximum)

HPPH 7386 Computer Research Applications

Courses from

- the CSD concentration
- other Department of Rehabilitation Sciences programs (e.g., DPT, OTD, MAT, or ScD RS)
- other SHP programs (6 hours maximum)
- other TTUHSC departments (6 hours maximum)
- TTU (6 hours maximum)

ELECTIVE MSD COURSES (12 hours)

Students take approved elective courses to complete the MSD concentration.

- Completion of a supervised research project concurrent with HPPH 7099 Research
- Completion of a comprehensive qualifying examination for advancement to candidacy
- Completion of a doctoral dissertation

Doctor of Philosophy in Rehabilitation Science (PhD RS) Course Descriptions

HPPH 7010 Independent Study (1-9:0:1-9,F) This course involves an independent project designed to meet the student's needs. Possible experiences include a library research project or paper, course/laboratory review, teaching materials preparation, administration or teaching participation, laboratory manual development, or an administration, teaching, clinical or research activity. This course is offered face to face and online.

HPPH 7020 Special Topics (1-3:1-3:0,F) Selected topics of interest in rehabilitation science.This course is offered face to face and online.

HPPH 7099 Research (1-9:0:1-9,F) Students will participate in rehabilitation science research while under faculty supervision.

HPPH 7101 Rehabilitation Science Foundations (1:1:0,F) This course introduces students to rehabilitation science as an academic discipline, including historical perspectives, philosophical approaches, and current research needs. This course is offered face to face and online.

HPPH 7102 Professional Development (1:1:0,F) This course introduces students to professional development topics necessary for success in an academic career. Students may repeat it for credit.This course is offered face to face and online.

HPPH 7113 Teaching Apprenticeship I (1:0:1,F) Students will participate in the teaching of a course in rehabilitation science while under faculty supervision.

HPPH 7114 Teaching Apprenticeship II (1:0:1,F) Students will participate in the teaching of a course in rehabilitation science while under faculty supervision.

HPPH 7115 Teaching Practicum (1:0:1,F) Students engage in the teaching of a rehabilitation science course while under faculty supervision. Students may repeat it for credit. This course is offered face to face and online.

HPPH 7171 CSD Seminar (1:1:0,F) This seminar course explores selected communication sciences and disorders topics through reading and discussion. Students may repeat it for credit. This course is offered face to face and online.

HPPH 7181 MSD Seminar (1:1:0,F) This seminar course explores selected movement sciences and disorders topics through reading and discussion. Students may repeat it for credit. This course is offered face to face and online.

HPPH 7191 Seminar in Clinical Anatomy Research (1:1:0,F) Selected topics in clinical anatomy research explored through reading and discussion.

HPPH 7192 Seminar in Clinical Behavior Research (1:1:0,F) Selected topics in clinical behavior research explored through reading and discussion.

HPPH 7193 Seminar in Clinical Biomechanics Research (1:1:0,F) Selected topics in clinical biomechanics research explored through reading and discussion.

HPPH 7194 Seminar in Clinical Postural Control Research (1:1:0,F) Selected topics in clinical postural control research explored through reading and discussion.

HPPH 7195 Seminar in Clinical Musculoskeletal Rehabilitation Research (1:1:0,F) Selected topics in musculoskeletal rehabilitation research explored through reading and discussion.

HPPH 7272 CSD Seminar (2:2:0,F) This seminar course explores selected communication sciences and disorders topics through reading and discussion. Students may repeat it for credit. This course is offered face to face and online.

HPPH 7282 MSD Seminar (2:2:0,F) This seminar course explores selected movement sciences and disorders topics through reading and discussion. Students may repeat it for credit. This course is offered face to face and online.

HPPH 7301 Foundations of Rehabilitation Science (3:3:0,F) This course introduces students to rehabilitation science as an academic discipline including historical perspectives, philosophical approaches, and contemporary research needs. Additional topics may include teaching, research, and administration issues that are relevant to the professional development of an academic scholar in rehabilitation science.

HPPH 7311 Curriculum Design and Teaching (3:3:3.5,H) This course discusses the theories and applications of curriculum design, emphasizing applications to entry-level and post-professional rehabilitation science educational settings. Students are exposed to core theories, principles and applications that relate to teaching rehabilitation science students and professionals.

HPPH 7312 Educational Evaluation (3:2:3,H) This course will discuss educational evaluation theory and tools, emphasizing methods of objective and performance-based evaluation. Students will learn to draft specific evaluation measures used in an educational setting.

HPPH 7321 Research Design & Statistics (3:3:0,F) Introductory concepts of research design and statistics for rehabilitation scientists. This course is offered face to face and online.

HPPH 7322 Intermediate Statistics (3:3:0,F) Intermediate concepts of statistics for rehabilitation scientists. Prerequisite: HPPH 7321 or approval. This course is offered face to face and online.

HPPH 7323 Selected Topics in Statistics (3:3:0,F) Selected topics in statistics for rehabilitation scientists. Prerequisite: HPPH 7322 or approval. This course is offered face to face and online.

HPPH 7331 Writing for Publication (3:3:0,F) This course will increase understanding of scientific manuscript preparation suitable for publication in rehabilitation science journals. This course is offered face to face and online.

HPPH 7332 Writing for Grants (3:3:0,F) This course is designed to increase understanding of internal/external funding mechanisms and to provide training

to Ph.D. students in grant preparation and funding opportunities. Topics include discussion about various types of external and internal funding opportunities, focusing on NIH and NSF funding, components of grant proposals, currently available grant writing resources, ethical issues related to grant writing, and budgeting and planning skills. This course is offered face to face and online.

HPPH 7341 Methods in Hearing Sciences and Audiology Research I (3:0:3,F) Methods and laboratory techniques in the area of hearing science and/or audiology research.

HPPH 7342 Methods in Hearing Sciences and Audiology Research II (3:0:3,F) Methods and laboratory techniques in the area of hearing science and/or audiology research.

HPPH 7343 Methods in Speech Sci and Speech-Language Pathology Research I (3:0:3,F) Methods and laboratory techniques in the area of speech science and/or speech-language pathology research.

HPPH 7344 Methods in Speech Sci and Speech-Language Pathology Research I (3:0:3,F) Methods and laboratory techniques in the area of speech science and/or speech-language pathology research.

HPPH 7345 Methods in Clinical Anatomy Research (3:0:3,F) Methods and laboratory techniques in clinical anatomy research.

HPPH 7346 Methods in Clinical Behavior Research (3:0:3,F) Methods and laboratory techniques in clinical behavior in rehabilitation research.

HPPH 7347 Methods in Clinical Biomechanics Research (3:0:3,F) Methods and laboratory techniques in clinical biomechanics research.

HPPH 7348 Methods in Clinical Musculoskeletal Rehabilitation Research (3:0:3,F) Methods and laboratory techniques in clinical musculoskeletal research.

HPPH 7349 Methods in Clinical Postural Control Research (3:0:3,F) Methods and laboratory techniques in clinical postural control research.

HPPH 7350 CSD Research Methods (3:0:3,F) This individual study course explores research methods and laboratory techniques in communication sciences and disorders. Students may repeat it for credit.

HPPH 7360 MSD Research Methods (3:0:3,F) This individual study course explores research methods and laboratory techniques in movement sciences and disorders. Students may repeat it for credit.

HPPH 7361 Evidence-Based Practice in Communication Disorders (3:3:0,F) This course is designed to prepare students for understanding and conducting research in speech, language, and hearing sciences. Topics may include how to conduct and write a literature review, how to critically evaluate research, how to present research findings at professional meetings, and how to apply research findings in evidence-based practice.

HPPH 7362 Advanced Auditory Research (3:3:0,F) Seminar devoted to the understanding of frontier knowledge in the area of auditory research and to applying the knowledge in developing and performing research projects. May be repeated as topic varies.

HPPH 7363 Seminar in Language and Culture (3:3:0,F) Selected topics on language and culture will be explored through reading of current research in the field. Topics include psycholinguistics, sociolinguistics, dialects, language variations, bilingualism, multicultural and multilingual communication, speech perception and production, and language development. May be repeated as topic varies.

HPPH 7364 Seminar in Speech Perception (3:3:0,F) Seminar devoted to the area of understanding speech. Topics will include research and clinical application of speech perception studies. May be repeated as topic varies.

HPPH 7365 Advanced Auditory Research II (3:3:0,F) Seminar devoted to the understanding of frontier knowledge in the area of auditory research and to applying the knowledge in developing and performing research projects. May be repeated as topic varies.

HPPH 7366 Seminar in Pediatric Audiology (3:3:0,F) Selected studies in infant, child, and adolescent audiology. Studies can include areas such as diagnostic audiology, aural rehabilitation in children, and educational audiology. May be repeated as topic varies.

HPPH 7367 Seminar in Neural Bases of Adult Communication Disorders (3:3:0,F) Seminar devoted to the study of the impact of neurological impairments on the speech, language, cognition, and swallowing abilities of adults. Topics will include the neural basis of dysarthria, apraxia of speech, aphasia, dementia, and dysphagia in adults. Links will be made between neural basis and clinical behavior, as well as evidence based practice interventions.

HPPH 7368 Seminar in Cross-disciplinary Communication Sciences Research (3:3:0,F) Selected studies in communication sciences, offering the opportunity to cross-disciplinary interaction between faculty and students. Studies can include speech-language pathology, audiology, speech science, hearing science, or related fields.

HPPH 7369 Seminar in Treatment for Adult Neurogenic Disorders (3:3:0,F) Seminar devoted to discussing and critically evaluating strategies for people with neurogenic communication disorders. Emphasis will be placed on evaluating efficacy of contemporary intervention techniques with individuals who have adult neurogenic communication disorders.

HPPH 7370 Seminar in Advanced Vestibular Issues (3:3:0,F) Seminar devoted to the area of understanding vestibular and balance issues. Topics include discussions about the physiological basis of the vestibular/balance system, pathophysiology of disorders, methods and evaluation of vestibular rehabilitation, and research in these areas.

HPPH 7371 Seminar in Brain and Language (3:3:0,F) The focus of this seminar is to learn about central issues in brain and language research. Emphasis will be placed on what is known about neurological basis of aphasia. Students will focus on the relationship between brain and language in terms of their scientific and methodological aspects.

HPPH 7372 Seminar in Speech Analysis (3:3:0,F) Seminar focused on analysis of speech from the perspective of production and/or perception. Analysis methods may include acoustic, physiological, linguistic, or perceptual approaches to the speech signals of normal speakers or clinical populations (children or adults), depending upon the interests of the students.

HPPH 7373 Analysis and Processing of Speech Signals (3:3:0,F) Computational analysis and synthesis of speech signals will be covered. Topics may include digital signal processing with MATLAB; analysis of frequency and temporal properties of phones, words and sentences; coding for speech recognition; speech quality analysis; and building speech-based stimuli for experiments.

HPPH 7374 Seminar in Dysphagia (3:3:0,F) Seminar focused on discussing and critically evaluating strategies for individuals with dysphagia. Evaluation strategies will be examined for validity, and intervention strategies will be evaluated for efficacy.

HPPH 7377 CSD Seminar (3:3:0,F) This seminar course explores selected communication sciences and disorders topics through reading and discussion. Students may repeat it for credit. This course is offered face to face and online.

HPPH 7383 Biomechanics (3:3:0,F) Biomechanics of the musculoskeletal system and integrated human movement with clinically relevant applications.

HPPH 7384 Neuroscience (3:3:0,F) Functions and pathologies of the central nervous system (CNS) as a basic science course in the neurorehabilitation curriculum. The emphasis will be on "systems-level neuroanatomy, "i.e., functional neuroanatomy (e.g., motor and sensory pathways) and regional neuroanatomy (e.g., organization of spinal cord, brainstem, cerebral cortex, etc.). In addition, information processing by neurons will be addressed by coverage of axon physiology, synaptic neurotransmission and plasticity. The course will first survey the anatomical organization of the CNS, then sensory and motor functions of the CNS, and finish with a description of a number of neurological disorders that have clinical relevance to rehabilitation clinicians.

HPPH 7385 Motor Control in Orthopaedics (3:2:3,H) This course will address theory and application of motor control and learning principles to orthopaedic clinical practice. This course will emphasize motor control strategies associated with musculoskeletal function, and motor control dysfunction associated with orthopaedic pathologies. This course will integrate concepts from exercise science and experimental psychology for the explanation of relevant issues concerning motor learning and control for the orthopaedic patient. Additionally, patient management strategies derived from these priniciples will be discussed.

HPPH 7386 Computer Research Applications (3:3:0,F) This course provides an introduction to problem solving and custom program development in MATLAB for rehabilitation science research. This course is offered face to face and online.

HPPH 7387 MSD Seminar (3:3:0,F) This seminar course explores selected movement sciences and disorders topics through reading and discussion. Students may repeat it for credit. This course is offered face to face and online.

HPPH 7482 Pathophysiology (4:4:0,F) This course provides a survey of clinical pathophysiology and covers key concepts related to the function and biological control of cells, tissues, organs, and body systems as well as structural and functional changes in cells, tissues and organs that underlie human disease. Basic principles of pathophysiology are addressed with focus on the cause, development, progress, and consequences of diseases related to the nervous, musculoskeletal, cardiorespiratory, immune, endocrine, gastrointestinal, and other body systems.

HPPH 7581 Gross Anatomy (5:6:10,F) An integrated study of gross human anatomy embodying gross morphology and coordinating with developmental and histological aspects of the body. Included is regional dissection with emphasis on the musculoskeletal, nervous, circulatory and respiratory systems.

HPPH 8000 Doctoral Dissertation (1-9:0:1-9,F) Research for an advanced degree. The Doctor of Philosophy degree in Rehabilitation Science is a research degree and is conferred only after recognition of high achievement in independent scientific research and scholarship.

HPPH 8001 Doctoral Dissertation (1-9:0:1-9,F) Research for an advanced degree. The Doctor of Philosophy degree in Rehabilitation Science is a research degree and is conferred only after recognition of high achievement in independent scientific research and scholarship. Graduation semester only.

Bachelor of Science in Speech, Language, and Hearing Sciences (SLHS)

Program Description

The Bachelor of Science in Speech, Language, and Hearing Sciences Program provides students with an academic and clinical foundation to understand and improve the communication skills of people with developmental or acquired communication disorders. After completing this 2-year, upper-division undergraduate program, graduates can obtain a job in a variety of fields (e.g., speech-language pathology assistant, hearing aid dispenser, early intervention specialist, child care provider, activities director, caseworker). Graduates can also pursue advanced education in fields such as speech-language pathology, audiology, education, or healthcare administration.

Technical Standards

To successfully complete the undergraduate program in the Department of Speech, Language, and Hearing Sciences, an individual must meet the following technical standards:

1. **Observation:** Observe patients' activity and behavior accurately during assessment and treatment procedures. Accurately monitor, through both visual and auditory modalities, materials and equipment used for assessment and treatment of patients.

2. **Communication:** Communicate professionally (orally and in writing) as required for course work and clinical practicum to ensure patient safety. Use technology to meet requirements of courses and clinical practicum (e.g., computer skills including but not limited to internet access, word processing, and spreadsheet programs, learning management systems, and electronic health records).

3. **Cognition:** Comprehend, integrate, and synthesize a large body of information in a short period of time. Read, comprehend, record, and interpret information accurately from diagnostic tests, equipment, and patient records to ensure patient safety. Accurately self-assess clinical skills and academic performance.

4. **Social Behavioral Skills:** Demonstrate respect for individual, social, and cultural differences in fellow students, faculty, staff, patients, and patients' families during clinical and academic interactions. Demonstrate flexibility and the ability to adjust to changing situations and uncertainty in academic and clinical situations. Conduct oneself in an ethical and legal manner, demonstrating honesty, integrity, and professionalism in all interactions and situations.

5. **Motor Skills:** Sustain the necessary physical activity level required for classroom and clinical activities during the defined workday. Efficiently manipulate testing and treatment environment, materials, and equipment. Access transportation to attend academic courses.

Admission to the SLHS Program

The SLHS programs begin in the fall semester each year. Please visit **https://www.ttuhsc.edu/health-professions/admissions/application.aspx** SHP Application for deadline information. An application must be verified and all other requirements must be received by the deadline. Priority in application review and admission into the program will be given to those applicants who have verified and completed applications by April 1st. Applications completed between April 1st and July 1st will be reviewed in order of completion and only considered for admission if there is still availability in the cohort. Class enrollment is limited. Students are required to adhere to all policies as outlined by the Department of Speech, Language, and Hearing Sciences, the School of Health Professions, and Texas Tech University Health Sciences Center. Students also have specific rights as outlined in the student handbook.

Application Process

http://www.ttuhsc.edu/health-professions/admissions/application.aspx

Minimum admission requirements include:

- Completion of the online application
- A minimum cumulative GPA of 2.50 on a 4.0 scale

- Minimum 2.50 prerequisite GPA
- Proof of appropriate immunizations against infectious diseases

Prerequisite Course Requirements

Admission to the program requires completion of a minimum of 63 semester hours from an accredited college and/or university. Prerequisite courses for the undergraduate program include the following, or their approved equivalents. These courses may be completed at any accredited college or university. The department reserves the right to change course requirements without notice.

1. Texas Core Curriculum Requirements (42 minimum hours)

Information on the Texas Common Core curriculum can be found at **https://www.ttuhsc.edu/health-professions/admissions/texas-common-core.aspx**.

The following courses are required by the American Speech-Language-Hearing Association (ASHA) and may be fulfilled as part of the Texas Core Curriculum requirements

Required Course	Semester Hours
Physical Science (physics or chemistry)	3-4
Biological/Life Science (biology of animals, human genetics, or human anatomy & physiology)	3-4
Social & Behavioral Science	3
Statistics	3

2. Any general elective courses (>21 semester hours)

SLHS Curriculum

The following are the departmental course requirements. Academic policies regarding minimum grade performance are cited in the Student Handbook.

Sample Undergraduate Program

FIRST-YEAR

Fall Semester		Credit Hours
HPSH 3219	Introduction to Audiology	2
HPSH 3220	Introduction to Speech-Language Pathology	2
HPSH 3323	Language Development	3
HPSH 3422	Anatomy & Physiology	4
HPSH 3427	Phonetics	4
IPHP 1001	Foundations for Interprofessional Collaborative Practice	NC
		Total Hours = 15

Spring Semester		Credit Hours
HPSH 3321	Speech Science	3
HPSH 3322	Hearing Science	3

HPSH 3324	Language Disorders	3
HPSH 3326	Phonetics/Articulation & Phonological Disorders	3
HPSH 3126	Phonetics/Articulation & Phonological Disorders (Lab)	1
HPSH 3442	Clinical Audiology	4
		Total Hours = 17

SECOND-YEAR

Fall Semester		Credit Hours
HPSH 3221	Clinical Methods	2
HPSH 4280/90	Clinical Observation: SLP/Audiology	2
HPSH 4320	Interpersonal Communication for Healthcare Professionals	3
HPSH 4426	Neural Bases of Communication, Hearing, and Swallowing	4
HPSH 4310	Special Topics (pre-SLP)	3
or		
HPSH 4346	Diagnostic Audiology (pre-AuD)	3
HPSH 4146	Diagnostic Audiology Lab (pre-AuD)	1
		Total Hours = 14-15

Spring Semester		Credit Hours
HPSH 4215	Seminar in Health and Education Professions	2
HPSH 4344	Diversity, Equity, and Inclusion in Communication Sciences and Disorders	3
HPSH 4410	Introduction to Aural Habilitation and Rehabilitation	4
HPSH 4427	Assessment Procedures in Speech-Language Pathology	4
		Total Hours = 13

SLHS CURRICULUM Total Hours = ≥ 59

Bachelor of Science in Speech, Language, and Hearing Sciences (SLHS) Course Descriptions

HPSH 1001 Foundations of Inprofessional Collaborative Practice (0:0:0,O) An introduction to broad concepts related to interprofessional core competencies for healthcare providers.

HPSH 3126 Phonetics/Articulation and Phonological Disorders Lab (1:0:1,F) Lab for practice of advanced clinical transcription skills.

HPSH 3219 Introduction to Audiology (2:2:0,O) A supervised observation of various audiometric procedures and patient types. Discussion of clinical protocols, assessment, and management for individuals with hearing disorders.

HPSH 3220 Introduction to Speech-Language Pathology (2:2:0,O) A supervised observation of clinical assessment and management of individuals with speech and language disorders.

HPSH 3221 Clinical Methods (2:2:0,F) A review of clinical methodologies used in speech-language pathology and audiology, including specific clinical activities, report writing, and professional development.

HPSH 3321 Speech Science (3:3:0,F) An introduction to the production, perception, and processing of speech, including acoustic phonetics.

HPSH 3322 Hearing Science (3:3:0,F) An introduction to the physics of sound, acoustics, and psychoacoustics.

HPSH 3323 Language Development (3:3:0,F) An introduction to current theories of language and language development, including methods of obtaining and analyzing language samples.

HPSH 3324 Language Disorders (3:3:0,F) An emphasis on language disorders across the lifespan. Topics include the nature and etiologies of language disorders, with an overview of the principles of treatment

HPSH 3326 Phonetics/Articulation and Phonological Disorders (3:3:0,F) The basic principles of assessment and treatment for children and adults with phonological and articulatory disorders.

HPSH 3422 Anatomy & Physiology (4:3:1,F) A study of the anatomical and physiological aspects of speech and hearing in both normal and clinical populations.

HPSH 3427 Phonetics (4:3:1,F) An introduction to production and classification of speech sounds; principles and theories of phonetics; emphasis on development of clinical transcription skills.

HPSH 3442 Clinical Audiology (4:3:1,F) An introduction to hearing assessment techniques and auditory disorders, with adaptation of testing for special populations such as infants, geriatrics, and different language backgrounds. The student will gain proficiency with pure-tone, speech, and impedance testing techniques.

HPSH 4010 Independent Study (1-4:0:1-6,F) A variable credit course used for individualized plans created by the program director. No textbook is required.

HPSH 4017 Undergraduate Research Experience (1-4:0:1-4,F) An opportunity to obtain first-hand experience with research in speech, language, and/or hearing sciences. May be repeated for credit.

HPSH 4146 Diagnostic Audiology Lab (1:0:1,F) This lab will introduce students to audiological equipment and demonstrate techniques for performing diagnostic audiological procedures. The lab will also address proper report-writing related to case history, description and interpretation of test results, and recommendations.

HPSH 4215 Seminar in Health and Education Professions (2:2:0,F) An insight into the roles and responsibilities of a variety of healthcare and education disciplines for possible future careers and preparation for pursuits and/or collaborations with these professions.

HPSH 4280 Clinical Observation: Speech Language Pathology (2:1:1-30,F) A supervised clinical assisting experience. May be repeated for credit.

HPSH 4290 Clinical Observation: Audiology (2:1:1-3,F) A supervised clinical assisting experience. May be repeated for credit.

HPSH 4300 Senior Research Project (3:0:3-6,F) An individual study of a specific problem in one of the areas of speech, language or hearing disorders. Students are required, in advance of registration, to consult with the instructor and secure approval of the specific project to be pursued.

HPSH 4310 Special Topics in Speech-Language Pathology (3:3:0,F) A discussion of current issues affecting the practice of speech-language pathology in varied work settings.

HPSH 4320 Interpersonal Communication for Health Care Professionals (3:3:0,F) Applies communication theory to real-life encounters with patients and their families during interviewing and counseling, assessment and treatment, and other day-to-day interactions with education and healthcare professionals.

HPSH 4344 Diversity, Equity, and Inclusion in Communication Sciences amd Disorders (3:3:0,F) Assessment and management of communication disorders in culturally and linguistically diverse populations. Topics include typical and disordered communication, and perspectives on clinical, theoretical, and research implications.

HPSH 4346 Diagnostic Audiology (3:3:0,F) This course will present advanced diagnostic techniques for children and adults including those from diverse populations or with special needs.

HPSH 4380 Clinical Experience: Speech Language Pathology (3:2:1-30,F) This course is a supervised clinical assisting experience. It is designed to bridge the gap between theory and practice through hands-on experience.

HPSH 4410 Introduction to Aural Habilitation and Rehabilitation (4:4:0,F) An introduction to theory and techniques related to aural habilitation and rehabilitation. Issues related to Deaf culture and the use of signs in a variety of settings (healthcare and education) will also be discussed.

HPSH 4426 Neural Bases of Communication, Hearing, and Swallowing (4:4:0,F) An exposure to neuroanatomy and neurophysiology through individualized and interactive learning. This course provides strong foundations for future graduate courses in neural aspects of communication and swallowing including neuroanatomy, neurophysiology, and neuropathologies of speech, language, hearing, and swallowing.

HPSH 4427 Assessment Procedures in Speech-Language Pathology (4:3:1,F) The development of competencies in the selection, use, and interpretation of a wide range of speech and language assessment procedures for children and adults from diverse etiologic, cultural, and ethnic groups.

Second Degree Bachelor of Science in Speech, Language, and Hearing Sciences

Program Description

The Second Degree Bachelor of Science in Speech, Language, and Hearing Sciences is a post-baccalaureate program for students who have previously completed a 4-year Bachelor's degree from an accredited university. The program provides students with an academic and clinical foundation to understand and improve the communication skills of people with developmental or acquired communication disorders. Students will enroll in full-time coursework at the TTUHSC Lubbock campus and will physically attend class and participate in clinic. After successfully completing this three-semester program, graduates will be equipped to obtain employment in a variety of fields (e.g., hearing aid dispenser, early intervention specialist, child care provider, activities director, case worker) or to work as a licensed Speech-Language Pathology Assistant (SLP-A) in the state of Texas. Graduates can also pursue advanced education in fields such as speech-language pathology, audiology, education, or healthcare administration.

Technical Standards

To successfully complete the post-baccalaureate undergraduate program in the Department of Speech, Language, and Hearing Sciences, an individual must meet the following technical standards:

1. **Observation:** Observe patients' activity and behavior accurately during assessment and treatment procedures. Accurately monitor, through both visual and auditory modalities, materials and equipment used for assessment and treatment of patients.

2. **Communication:** Communicate professionally (orally and in writing) as required for course work and clinical practicum to ensure patient safety. Use technology to meet requirements of courses and clinical practicum (e.g., computer skills including but not limited to internet access, word processing and spreadsheet programs, learning management systems, and electronic health records).

3. **Cognition:** Comprehend, integrate, and synthesize a large body of information in a short period of time. Read, comprehend, record, and interpret information accurately from diagnostic tests, equipment, and patient records to ensure patient safety. Accurately self-assess clinical skills and academic performance.

4. **Social Behavioral Skills:** Demonstrate respect for individual, social, and cultural differences in fellow students, faculty, staff, patients, and patients' families during clinical and academic interactions. Demonstrate flexibility and the ability to adjust to changing situations and uncertainty in academic and clinical situations. Conduct oneself in an ethical and legal manner, demonstrating honesty, integrity, and professionalism in all interactions and situations.

5. **Motor Skills:** Sustain necessary physical activity level required for classroom and clinical activities during the defined workday. Efficiently manipulate testing and treatment environment, materials, and equipment. Access transportation to attend academic courses.

Admission to the Second Degree SLHS Program

The Second Degree BS SLHS program begins in August of each year and consists of three semesters (fall, spring & summer). The SLHS programs begin in the fall semester each year. Please visit https://www.ttuhsc.edu/health-professions/admissions/application.aspx SHP Application for deadline information. An application must be verified and all other requirements must be received by the deadline. Priority in application review and admission into the program will be given to those applicants who have verified and completed applications by April 1st. Applications completed between April 1st and July 1st will be reviewed in order of completion and only considered for admission if there is still availability in the cohort. Students are required to adhere to all policies as outlined by the Department of Speech, Language, and Hearing Sciences, the School of Health Professions, and Texas Tech University Health Sciences Center. Students also have specific rights as outlined in the student handbook.

Application Process

http://www.ttuhsc.edu/health-professions/admissions/application.aspx

Minimum admission requirements include:

- Completion of the online application
- A minimum cumulative GPA of 3.0 on a 4.0 scale
- Proof of appropriate immunizations against infectious diseases

Prerequisite Course Requirements

The following courses are required by the American Speech-Language-Hearing Association (ASHA) and may be fulfilled as part of the Texas Core Curriculum requirements. Information on the Texas Core Curriculum can be found at https://www.ttuhsc.edu/health-professions/admissions/texas-common-core.aspx.

Required Course	Semester Hours
Physical Science (physics or chemistry)	3-4
Biological/Life Science (biology of animals, human genetics, or human anatomy & physiology)	3-4
Social & Behavioral Science	3
Statistics	3
	Total = 12-14 hours

Graduates not from Texas Public Universities

A second bachelor's degree sought by a student who did not graduate from a public Texas university must include the required Texas Core Curriculum. Information on the Texas Core Curriculum can be found at https://www.ttuhsc.edu/health-professions/admissions/texas-common-core.aspx.

Program Requirements	Hours
Earned Bachelor's Degree	>120 hours
*Texas Common Core Requirement	42 hours
*American Speech-Language-Hearing Association Requirements	12-14 hours
SLHS Second Degree Program	35 hours

These hours may be included as part of initial bachelor's degree OR may be additional courses.

Second Degree Bachelor of Science in SLHS Curriculum

Fall Semester		Credit Hours
HPSH 3219	Introduction to Audiology	2
or		
HPSH 3220	Introduction to Speech-Language Pathology	2
HPSH 3323	Language Development	3
HPSH 3422	Anatomy & Physiology	4
HPSH 3427	Phonetics	4
HPSH 4426	Neural Bases of Communication, Hearing, and Swallowing	4
IPHP 1001	Foundations for Interprofessional Collaborative Practice	NC
		Total Hours = 17

Spring Semester		Credit Hours
HPSH 3321	Speech Science	3
or		
HPSH 3322	Hearing Science	3
HPSH 3324	Language Disorders	3
HPSH 3326	Phonetics/Articulation & Phonological Disorders	3
HPSH 3126	Phonetics/Articulation & Phonological Disorders (Lab)	1
HPSH 3442	Clinical Audiology	4
HPSH 4215/90	Seminar in Health and Education Professions	2
		Total Hours = 16

Summer Semester		Credit Hours
HPSH 4380	Clinical Experience: Speech-Language	3
		Total Hours = 3

Second Degree SLHS CURRICULUM	Total Hours = 35

Second Degree Bachelor of Science in Speech, Language, and Hearing Sciences Course Descriptions

HPSH 1001 Foundations of Inprofessional Collaborative Practice (0:0:0,O) An introduction to broad concepts related to interprofessional core competencies for healthcare providers.

HPSH 3126 Phonetics/Articulation and Phonological Disorders Lab (1:0:1,F) Lab for practice of advanced clinical transcription skills.

HPSH 3219 Introduction to Audiology (2:2:0,O) A supervised observation of various audiometric procedures and patient types. Discussion of clinical protocols, assessment, and management for individuals with hearing disorders.

HPSH 3220 Introduction to Speech-Language Pathology (2:2:0,O) A supervised observation of clinical assessment and management of individuals with speech and language disorders.

HPSH 3321 Speech Science (3:3:0,F) An introduction to the production, perception, and processing of speech, including acoustic phonetics.

HPSH 3322 Hearing Science (3:3:0,F) An introduction to the physics of sound, acoustics, and psychoacoustics.

HPSH 3323 Language Development (3:3:0,F) An introduction to current theories of language and language development, including methods of obtaining and analyzing language samples.

HPSH 3324 Language Disorders (3:3:0,F) An emphasis on language disorders across the lifespan. Topics include the nature and etiologies of language disorders, with an overview of the principles of treatment

HPSH 3326 Phonetics/Articulation and Phonological Disorders (3:3:0,F) The basic principles of assessment and treatment for children and adults with phonological and articulatory disorders.

HPSH 3422 Anatomy & Physiology (4:3:1,F) A study of the anatomical and physiological aspects of speech and hearing in both normal and clinical populations.

HPSH 3427 Phonetics (4:3:1,F) An introduction to production and classification of speech sounds; principles and theories of phonetics; emphasis on development of clinical transcription skills.

HPSH 3442 Clinical Audiology (4:3:1,F) An introduction to hearing assessment techniques and auditory disorders, with adaptation of testing for special populations such as infants, geriatrics, and different language backgrounds. The student will gain proficiency with pure-tone, speech, and impedance testing techniques.

HPSH 4017 Undergraduate Research Experience (1-4:0:1-4,F) An opportunity to obtain first-hand experience with research in speech, language, and/or hearing sciences. May be repeated for credit.

HPSH 4146 Diagnostic Audiology Lab (1:0:1,F) This lab will introduce students to audiological equipment and demonstrate techniques for performing diagnostic audiological procedures. The lab will also address proper report-writing related to case history, description and interpretation of test results, and recommendations.

HPSH 4215 Seminar in Health and Education Professions (2:2:0,F) An insight into the roles and responsibilities of a variety of healthcare and education disciplines for possible future careers and preparation for pursuits and/or collaborations with these professions.

HPSH 4280 Clinical Observation: Speech Language Pathology (2:1:1-30,F) A supervised clinical assisting experience. May be repeated for credit.

HPSH 4290 Clinical Observation: Audiology (2:1:1-3,F) A supervised clinical assisting experience. May be repeated for credit.

HPSH 4346 Diagnostic Audiology (3:3:0,F) This course will present advanced diagnostic techniques for children and adults including those from diverse populations or with special needs.

HPSH 4380 Clinical Experience: Speech Language Pathology (3:2:1-30,F) This course is a supervised clinical assisting experience. It is designed to bridge the gap between theory and practice through hands-on experience.

HPSH 4426 Neural Bases of Communication, Hearing, and Swallowing (4:4:0,F) An exposure to neuroanatomy and neurophysiology through individualized and interactive learning. This course provides strong foundations for future graduate courses in neural aspects of communication and swallowing including neuroanatomy, neurophysiology, and neuropathologies of speech, language, hearing, and swallowing.

Master of Science in Speech Language Pathology (SLP)

This program is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association.

Program Description

Speech-language pathologists specialize in the prevention, identification, evaluation, treatment, and rehabilitation of speech, language, and swallowing disorders. Their work involves conducting research; treating individuals with communication disorders, including children with speech-language disorders, people who stutter, stroke survivors, and persons who have swallowing problems; and instructing various others, such as actors and singers, in the preservation of their voices.

After completing two years of graduate study, graduates of the Speech-Language Pathology program will be eligible to pursue a Clinical Fellowship, which is required for national certification and state licensure.

Technical Standards

To successfully complete the Speech-Language Pathology program in the Department of Speech, Language, and Hearing Sciences, an individual must meet the following technical standards:

1. **Communication**
   Prospective and current students must possess adequate communication skills to:
   - Communicate effectively with individuals and groups in person, by phone, and in written form while considering the communication needs and cultural values of the listener at a level that will support competent professional practice.
   - Communicate proficiently in oral and written English.
   - Communicate professionally, effectively, and legibly to meet demands required as part of coursework and during clinical work to ensure patient safety (e.g., scholarly papers, medical records, clinical reports, standardized assessment).
   - Perceive and demonstrate appropriate non-verbal communication for culture and context.
   - Convey information accurately with relevance and cultural sensitivity.
   - Possess sufficient speech/vocal productions for the provision of clinical services.

2. **Motor Skills**
   Prospective and current students must possess adequate motor skills to:
   - Sustain necessary physical activity levels in required classroom and clinical activities for the defined workday.
   - Efficiently manipulate testing and treatment environments, materials, and equipment to complete screening and evaluation protocols and treatment and behavior plans.
   - Access technology and equipment for clinical management (e.g., billing, charting, therapy programs), diagnostic testing, and treatment protocols.
   - Negotiate patient/client care environments and move between settings such as the classroom, health care facility, educational setting, and community settings.
   - Access transportation to attend academic courses and clinical placements.
   - Use fine motor skills to perform procedures involving the outer ear and speech mechanisms (e.g., ear canal impressions, otoscopy, hearing aid fittings, oral mechanism exams, swallowing protocols).
   - Safely manipulate patient-utilized equipment (e.g., durable medical equipment to include AAC devices, hearing aids).
   - Provide a safe environment for others when responding to emergency situations (e.g., fire, choking, or other medical emergencies) and in the application of universal precautions.

3. **Intellectual/Cognitive**
   Prospective and current students must possess adequate intellectual/cognitive skills to:

- Comprehend, retain, integrate, synthesize, infer, evaluate, and apply large amounts of written and verbal information in a short period of time sufficient to meet curricular and clinical demands.
- Read, comprehend, record, and interpret information accurately from diagnostic tests, equipment, and patient records to formulate a diagnosis, develop a treatment plan, make independent clinical decisions, and ensure patient safety.
- Generate discipline-specific documents and clinical reports in English.
- Seek relevant case information, synthesize, and apply concepts and information from various sources and disciplines.
- Analyze and solve problems, reason, and make sound clinical judgments in patient assessment, diagnostic, and therapeutic planning and implementation.
- Accurately identify and communicate limits in one's own professional knowledge and skills and utilize resources to increase knowledge and skills.
- Use technology to meet requirements of courses and practicum (e.g., internet access, learning management systems, electronic health records).

4. **Sensory/Observation**
   Prospective and current students must possess adequate sensory skills of vision, hearing, touch, and smell to:

   - Visually and auditorily identify normal and disordered characteristics in the areas of semantics, pragmatics, syntax, morphology, phonology, swallowing, cognition, balance, hearing, and social interaction related to communication.
   - Observe patients' activity and behavior accurately during assessment and treatment procedures.
   - Visually monitor client/patient responses and materials.
   - Identify and discriminate anatomic structures and imaging findings (e.g., otoscopy, oral mechanism exam, MBSS, FEES).
   - Discriminate text, numbers, tables, and graphs associated with diagnostic instruments and tests.
   - Accurately monitor, through both visual and auditory modalities, materials and equipment used for assessment and treatment of patients.
   - Recognize and interpret when a client's family/caregiver does or does not understand the clinician's written and/or verbal communication.

5. **Social/Behavioral Skills**
   Prospective and current students must possess adequate social/behavioral skills to:

   - Comply with administrative, legal, and regulatory policies, including upholding the ASHA Code of Ethics.
   - Demonstrate respect for individual, social, and cultural differences in fellow students, faculty, staff, patients, and patients' families during clinical and academic interactions.
   - Maintain adequate physical and mental health and self-care such that the health and safety of self and others in the academic and clinical settings is not jeopardized.
   - Maintain adequate physical and mental health and self-care to access and participate in a variety of educational and clinical settings/activities.
   - Develop and maintain professional relationships with clients/patients, fellow students, and colleagues.
   - Demonstrate flexibility and the ability to adapt to changing situations and uncertainty (which includes maintaining a professional demeanor and emotional health) in academic, clinical, and community settings.
   - Conduct oneself in a mature, empathetic, and effective professional manner by exhibiting compassion, honesty, integrity, professionalism, and concern for others in an ethical and legal manner in all interactions and situations.
   - Maintain regular attendance and meet responsibilities within designated timelines.
   - Manage time effectively to complete professional and technical tasks within constraints.
   - Accept feedback (e.g., suggestions, constructive criticism) and modify behavior accordingly.
   - Maintain appropriate and professional appearance for varied clinical and academic environments.

Admission to the Program

The SLP program begins in August of each year and the application deadline is February 1 of each year for the following fall class. Admission decisions are made by April 15. Class enrollment is limited. Students are required to adhere to all policies as outlined by the Department of Speech, Language, and Hearing Sciences, the School of Health Professions, and Texas Tech University Health Sciences Center. Students also have specific rights as outlined in the student handbook.

Application Process

Minimum admission requirements include:

- Completion of the Communication Sciences & Disorders Centralized Application Services (CSDCAS) application
- Completion of the TTUHSC School of Health Professions supplemental application
- A minimum cumulative GPA of 3.0 on a 4.0 scale
- A GPA of 3.0 on a 4.0 scale in undergraduate audiology and speech pathology courses
- A grade of "C" or better in all prerequisite courses
- Demonstration of superior oral and written communication skills
- Scores above the 10th percentile on the verbal, quantitative, and analytical subtest of the Graduate Record Examination (GRE)
- Proof of appropriate immunizations against infectious diseases
- TOEFL or IELTS scores, if English is the second language
- An earned baccalaureate degree or its equivalent in the area of speech, language, and hearing sciences from an accredited institution. Applicants who have earned undergraduate degrees in fields other than speech, language, and hearing sciences must complete a post-baccalaureate of science in speech, language, and hearing sciences or undergraduate leveling coursework.

Prerequisite Course Requirements

The following courses are required by the American Speech-Language-Hearing Association (ASHA):

Required Course	Semester Hours
Physical Science (physics or chemistry)	3-4
Biological/Life Science (biology of animals, human genetics, or human anatomy & physiology)	3-4
Social & Behavioral Science	3
Statistics	3
	Total Hours = 12-14

SLP Curriculum

Students must maintain a GPA of 3.0 to maintain good academic standing. By the time of graduation, students are expected to have completed the academic and clinical requirements for professional certification by the American Speech-Language-Hearing Association (ASHA) and licensed by the Texas Department of Licensing and Regulation. Students are required to successfully pass a comprehensive written examination or successfully defend a formal thesis project under the supervision of a graduate faculty member in the Department of Speech, Language, and Hearing Sciences.

Example Course Sequence

FIRST-YEAR

Fall Semester Courses		Credit Hours
HPSH 5320	Research Principles & Application	3
HPSH 5381	Graduate Clinical Practicum I: SLP	3
HPSH 5424	Pediatric Language Assessment & Intervention	4

HPSH 5463	Adult Language Assessment & Intervention	4
HPSH 1002	Foundations for Interprofessional Collaborative Practice	NC
		Total Hours = 14

Spring Semester Courses		Credit Hours
HPSH 5325	Childhood Speech Sound Disorders	3
HPSH 5362	Motor Speech Disorders	3
HPSH 5382	Graduate Clinical Practicum II: SLP	3
HPSH 5430	Dysphagia	4
HPSH 6000	Master's Thesis (optional)	1-3
		Total Hours = 13-16

Summer Semester Courses		Credit Hours
HPSH 5215	Culturally & Linguistically Diverse Populations	2
HPSH 5370	Professional Issues in Speech-Language Pathology	3
HPSH 5383	Graduate Clinical Practicum III: SLP	3
HPSH 6000	Master's Thesis (optional)	1-3
		Total Hours = 8-11

SECOND-YEAR

Fall Semester Courses		Credit Hours
HPSH 5243	Aural Rehabilitation	2
HPSH 5244	Audiology for Speech-Language Pathologists	2
HPSH 5226	Voice Disorders	2
HPSH 5227	Fluency Disorders	2
HPSH 5384	Graduate Clinical Practicum IV: SLP	3
HPSH 5366	Augmentative & Alternative Communication	3
HPSH 5110	Capstone Course	1

Or

HPSH 6000	Master's Thesis (optional)	1-3
		Total Hours = 15-18

Spring Semester Courses		Credit Hours
HPSH 5222	Counseling & Interviewing in Speech-Language Pathology	2
HPSH 5239	Evidence-Based Practice in Communication Disorders	2
HPSH 5385	Graduate Clinical Practicum V: SLP	3
HPSH 5010	Special Topics in Speech Pathology	1-6
HPSH 6000	Master's Thesis (optional)	1-3
		Total Hours = 8-13

Master of Science in Speech Language Pathology (SLP) Course Descriptions

HPSH 1002 Foundations for Interprofessional Collaborative Practice (0:0:0,O) An introduction to broad concepts related to interprofessional core competencies for healthcare providers.

HPSH 5010 Special Topics in Speech Pathology (1-6:0:1-6,F) This course addresses emerging issues or specialized content, including directed study projects for non-thesis candidates. May be repeated for credit.

HPSH 5110 Capstone Course (1:1:0,F) A comprehensive review of: the nature of human communication and swallowing processes; prevention, assessment, and intervention for communication and swallowing disorders; and research principles and professional issues.

HPSH 5215 Culturally and Linguistically Diverse Populations (2:2:0,O) This course examines the cultural, linguistic and social factors involved in assessment and intervention of communication disorders in culturally and linguistically diverse populations across the lifespan.

HPSH 5222 Counseling and Interviewing in Speech-Language Pathology (2:2:0,F) This course provides an overview of theory and practice of counseling methods and techniques to be used by speech-language pathologists in varied settings with both adult and pediatric populations.

HPSH 5226 Voice Disorders (2:2:0,F) This course provides an introduction to clinical issues of assessment and treatment of voice disorders in children and adults.

HPSH 5227 Fluency Disorders (2:2:0,O) Development of the knowledge and skills required for evaluation and treatment for individuals with fluency disorders.

HPSH 5239 Evidence-Based Practice in Communication Disorders (2:2:0,F) A course designed to prepare students to access and critically evaluate professional literature; integrate valid scientific and clinical evidence with sound professional judgment to make clinical decisions; and apply principles of evidence-based practice to the provision of speech-language pathology services.

HPSH 5243 Aural Rehabilitation (2:2:0,O) The study of audiological, speech, language, and listening test procedures, intervention techniques, and the use of amplification for infants through adults with hearing loss. Assessment, treatment, cognition, cultural and psychosocial isuues will be discussed in relation to hearing loss.

HPSH 5244 Audiology for Speech-Language Pathologists (2:0:2,F) This course addresses concepts related to hearing, hearing loss, hearing assessment techniques, and interpretation of hearing assessment results that are important in the practice of a speech-language pathologist. Students will also have opportunities for hands-on experiences related to the use, management, and troubleshooting of hearing aids, cochlear implants, and hearing assistive technology systems.

HPSH 5320 Research Principles and Application (3:3:0,F) A summary of the basic concepts of science and research. Emphasis is placed on preparing students to become knowledgeable consumers of research and to apply research principles to evidence-based practice.

HPSH 5325 Childhood Speech Sound Disorders (3:3:0,F) Overview of normal speech acquisition and current approaches to assessment and management of pediatric speech sound disorders.

HPSH 5362 Motor Speech Disorders (3:3:0,F) A study of the neurologic foundations of speech, speech disorders that can develop as a result of damage to the nervous system, and the ways in which motor speech disorders can be diagnosed and managed.

HPSH 5366 Augmentative and Alternative Communication (3:3:0,F) Examination of augmentative and alternative communication (AAC) for individuals with severe communication disorders, including a perspective on how AAC fits within the broad area of communication development and disorders. Topics include assessment and intervention issues, clinical populations who may require AAC, and research in AAC.

HPSH 5370 Professional Issues in Speech-Language Pathology (3:3:0,O) An overview of contemporary professional issues and considerations related to SLP practice, including topics such as ethical conduct, caseload/workload issues, certification and licensure, health literacy, supervision of support personnel, reimbursement, and legislation related to the field.

HPSH 5381 Graduate Clinical Practicum: SLP (3:0:3-30,F) Supervised clinical practice in speech and/or language pathology.

HPSH 5382 Graduate Clinical Practicum:SLP II (3:0:3-30,F) Supervised clinical practice in speech and/or language pathology.

HPSH 5383 Graduate Clinical Practicum SLP III (3:0:3-30,F) Supervised clinical practice in speech and/or language pathology.

HPSH 5384 Graduate Clinical Practicum: SLP IV (3:0:3-30,F) Supervised clinical practice in speech and/or language pathology.

HPSH 5385 Graduate Clinical Practicum: SLP V (3:0:3-30,F) Supervised clinical practice in speech and/or language pathology.

HPSH 5424 Pediatric Language Assessment & Intervention (4:4:0,F) Comparison of typical and atypical language in children from infancy through adolescence. Assessment and management strategies for diverse populations, and varied service delivery models.

HPSH 5430 Dysphagia (4:4:0,F) A detailed study of the anatomy and physiology of normal and disordered swallowing patterns, with discussion of current diagnostic techniques and treatment alternatives. Includes a lab to allow hands-on experience in interpreting swallow studies.

HPSH 5463 Adult Language Assessment & Intervention (4:4:0,F) Effects of normal aging on communication. Assessment and intervention models for acquired adult language disorders (e.g. aphasia, dementia, traumatic brain injury). Medical terminology and report writing will also be included.

HPSH 6000 Master's Thesis (1-6:0:1-6,F) Consent of instructor is required.

HPSH 6001 Master's Thesis (1-6:0:1-6,F) May have 2 enrollments for credit. Consent of instructor is required.

Doctor of Audiology (AuD)

The Doctor of Audiology (Au.D.) education program in audiology (residential) at Texas Tech University Health Sciences Center is accredited by the Council on Academic Accreditation (CAA) in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association (ASHA), 2200 Research Boulevard, #310, Rockville, MD 20850, 800-498-2071 or 301-296-5700.

Program Description

Audiologists assess and treat individuals who are challenged by hearing impairments or balance problems. They test and diagnose hearing and balance disorders, prescribe and dispense hearing aids and assistive listening devices, help prevent hearing loss, and conduct research, among many other professional duties.

The Doctor of Audiology degree is four years of graduate work, three in clinical coursework, and one clinical externship year. The program in audiology at the Texas Tech University Health Sciences Center offers comprehensive academic, research, and clinical experience in a wide variety of settings. A unique feature of the TTUHSC program is the diversity of the clinical and research experiences available. Students obtain clinical and/or research experience at: the TTUHSC Speech and Hearing Clinic, several community-based clinics, public school programs, local private practices, and other medical, rehabilitative, and educational facilities outside the Lubbock community. In these settings, students have the opportunity to explore state-of-the-art technology, instrumentation, and assessment/treatment procedures in audiology and communication sciences.

The department also sponsors a chapter of the Student Academy of Audiology (SAA). This national audiology student group hosts community service events throughout the year to support those individuals with hearing loss and also to educate the local community on hearing and balance concerns. TTUHSC audiology students are active in local, state, and national organizations. These opportunities allow students to be introduced to activities that will advance the profession of audiology in terms of education and advocacy for the profession and patients.

Technical Standards

To successfully complete the Doctor of Audiology program in the Department of Speech, Language, and Hearing Sciences, an individual must meet the following technical standards:

1. **Communication**
   Prospective and current students must possess adequate communication skills to:
   - Communicate effectively with individuals and groups in person, by phone, and in written form while considering the communication needs and cultural values of the listener at a level that will support competent professional practice.
   - Communicate proficiently in oral and written English.
   - Communicate professionally, effectively, and legibly to meet demands required as part of coursework and during clinical work to ensure patient safety (e.g., scholarly papers, medical records, clinical reports, standardized assessment).
   - Perceive and demonstrate appropriate non-verbal communication for culture and context.
   - Convey information accurately with relevance and cultural sensitivity.
   - Possess sufficient speech/vocal productions for provision of clinical services.

2. **Motor Skills**
   Prospective and current students must possess adequate motor skills to:
   - Sustain necessary physical activity level in required classroom and clinical activities for the defined workday.
   - Efficiently manipulate testing and treatment environments, materials, and equipment to complete screening and evaluation protocols and treatment and behavior plans.
   - Access technology and equipment for clinical management (e.g., billing, charting, therapy programs), diagnostic testing, and treatment protocols.
   - Negotiate patient/client care environments and move between settings such as the classroom, health care facility, educational setting, and community settings.

- Access transportation to attend academic courses and clinical placements.
- Use fine motor skills to perform procedures involving the outer ear and speech mechanisms (e.g., ear canal impressions, otoscopy, hearing aid fittings, oral mechanism exams, swallowing protocols).
- Safely manipulate patient-utilized equipment (e.g., durable medical equipment to include AAC devices, hearing aids).
- Provide a safe environment for others when responding to emergency situations (e.g., fire, choking, or other medical emergencies) and in the application of universal precautions.

3. **Intellectual/Cognitive**
   Prospective and current students must possess adequate intellectual/cognitive skills to:

   - Comprehend, retain, integrate, synthesize, infer, evaluate, and apply large amounts of written and verbal information in a short period of time sufficient to meet curricular and clinical demands.
   - Read, comprehend, record, and interpret information accurately from diagnostic tests, equipment, and patient records to formulate a diagnosis, develop a treatment plan, make independent clinical decisions, and ensure patient safety.
   - Generate discipline-specific documents and clinical reports in English.
   - Seek relevant case information, synthesize, and apply concepts and information from various sources and disciplines.
   - Analyze and solve problems, reason, and make sound clinical judgments in patient assessment, diagnostic, and therapeutic planning and implementation.
   - Accurately identify and communicate limits in one's own professional knowledge and skills and utilize resources to increase knowledge and skills.
   - Use technology to meet requirements of courses and practicum (e.g., internet access, learning management systems, electronic health records).

4. **Sensory/Observation**
   Prospective and current students must possess adequate sensory skills of vision, hearing, touch, and smell to:

   - Visually and auditorily identify normal and disordered characteristics in the areas of semantics, pragmatics, syntax, morphology, phonology, swallowing, cognition, balance, hearing, and social interaction related to communication.
   - Observe patients' activity and behavior accurately during assessment and treatment procedures.
   - Visually monitor client/patient responses and materials.
   - Identify and discriminate anatomic structures and imaging findings (e.g., otoscopy, oral mechanism exam, MBSS, FEES).
   - Discriminate text, numbers, tables, and graphs associated with diagnostic instruments and tests.
   - Accurately monitor, through both visual and auditory modalities, materials and equipment used for assessment and treatment of patients.
   - Recognize and interpret when a client's family/caregiver does or does not understand the clinician's written and/or verbal communication.

5. **Social/Behavioral Skills**
   Prospective and current students must possess adequate social/behavioral skills to:

   - Comply with administrative, legal, and regulatory policies, including upholding the ASHA Code of Ethics.
   - Demonstrate respect for individual, social, and cultural differences in fellow students, faculty, staff, patients, and patients' families during clinical and academic interactions.
   - Maintain adequate physical and mental health and self-care such that the health and safety of self and others in the academic and clinical settings are not jeopardized.
   - Maintain adequate physical and mental health and self-care to access and participate in a variety of educational and clinical settings/activities.
   - Develop and maintain professional relationships with clients/patients, fellow students, and colleagues.
   - Demonstrate flexibility and the ability to adapt to changing situations and uncertainty (which includes maintaining professional demeanor and emotional health) in academic, clinical, and community settings.
   - Conduct oneself in a mature, empathetic, and effective professional manner by exhibiting compassion, honesty, integrity, professionalism, and concern for others in an ethical and legal manner in all interactions and situations.
   - Maintain regular attendance and meet responsibilities within designated timelines.
   - Manage time effectively to complete professional and technical tasks within constraints.
   - Accept feedback (e.g., suggestions, constructive criticism) and modify behavior accordingly.
   - Maintain appropriate and professional appearance for varied clinical and academic environments.

Admission to the Program

The Doctor of Audiology (Au.D.) program begins in August of each year. Admission to the program is competitive, and the application deadline is November 1 (for early admission) and February 1 (for traditional admission) of each year for the following fall semester. Students are required to adhere to all policies as outlined by the Department of Speech, Language, and Hearing Sciences, the School of Health Professions, and Texas Tech University Health Sciences Center. Students also have specific rights as outlined in the student handbook. Undergraduate majors in the sciences, particularly the life sciences, are recommended for entrance into the Au.D. program.

Application Process

Admission requirements include:

- Completion of the Communication Sciences & Disorders Centralized Application Service (CSDCAS) application
- Completion of the TTUHSC School of Health Professions supplemental application
- A cumulative and major GPA of 3.0 on a 4.0 scale
- Submission of GRE test scores (including verbal, quantitative, and analytic writing)
- Submission of three letters of recommendation
- Proof of appropriate immunizations against infectious diseases
- A bachelor's degree in Speech, Language, and Hearing Sciences or a related field
- TOEFL or IELTS scores, if English is the second language

AuD Curriculum

Example Course Sequence

*Minimum of 101 credit hours required, which includes 10-11 semesters (based on individual situations)

FIRST-YEAR

Fall Semester		Credit Hours
HPSH 7342	Psychoacoustics & Auditory Perception	3
HPSH 7321/92	Clinical Observation/Clinical Practicum	3
HPSH 7440	Fundamentals of Sound & the Auditory System	4
HPSH 7346	Diagnostic Audiology	3
HPSH 7146	Diagnostic Audiology Lab	1
HPSH 1002	Foundations for Interprofessional Collaborative Practice	NC
		Total Hours = 14

Spring Semester		Credit Hours
HPSH 7285	Audiology Professional Issues & Practice Management	2
HPSH 7344	Clinical Amplification	3
HPSH 7158	Applications of Clinical Amplification	1
HPSH 7350	Pediatric Audiology	3
HPSH 7150	Pediatric Audiology Lab	1

HPSH 7393	Clinical Practicum	3
		Total Hours = 13

Summer Semester		Credit Hours
HPSH 7015	Audiology Clinical Research I	1
HPSH 7251	Counseling	2
HPSH 7330	Speech-Language Development & Disorders	3
HPSH 7394	Clinical Practicum	3
		Total Hours = 9

SECOND-YEAR

Fall Semester		Credit Hours
HPSH 5320	Research Principles & Application	3
HPSH 7016	Audiology Clinical Research II	1
HPSH 7247	Aural Rehabilitation	2
HPSH 7365	Balance Function	3
HPSH 7165	Balance Function Lab	1
HPSH 7370	Implantable Devices in Audiology	3
HPSH 7395	Clinical Externship	3
		Total Hours = 16

Spring Semester		Credit Hours
HPSH 7215	Balance Function II	2
HPSH 7260	Hearing Conservation & Instrumentation	2
HPSH 7243	Clinical Applications of Aural Rehabilitation	2
HPSH 7364	Auditory Electrophysiology	3
HPSH 7164	Auditory Electrophysiology Lab	1
HPSH 7017	Audiology Clinical Research III	1
HPSH 7396	Clinical Externship	3
		Total Hours = 14

Summer Semester		Credit Hours
HPSH 7397	Clinical Externship	3
		Total Hours = 3

THIRD-YEAR

Fall Semester		Credit Hours
HPSH 7110	Special Topics in Audiology	1
HPSH 7286	Business Management Practices for Audiologists	2
HPSH 7348	Educational Audiology	3
HPSH 7352	Clinical Disorders in Audiology	3
HPSH 7198/7398	Clinical Practicum	1-3
		Total Hours = 11-13

Spring Semester		Credit Hours
HPSH 7255	Advanced Concepts in Audiology	2
HPSH 7225	Evidence-Based Practices in Audiology	2
HPSH 7322	Auditory Processing Disorders	3
HPSH 7357	Amplification Systems and Special Applications	3
HPSH 7199/7399	Clinical Practicum	1-3
		Total Hours = 11-13

Summer Semester		Credit Hours
HPSH 7019	Advanced Summer Clinical Experience	6
		Total Hours = 6

FOURTH-YEAR

Fall Semester		Credit Hours
HPSH 7020	Advanced Clinical Placement	5
		Total Hours = 5

Spring Semester		Credit Hours
HPSH 7021	Advanced Clinical Placement	5
		Total Hours = 5

Doctor of Audiology (AuD) Course Descriptions

HPSH 1002 Foundations for Interprofessional Collaborative Practice (0:0:0,O) An introduction to broad concepts related to interprofessional core competencies for healthcare providers.

HPSH 5320 Research Principles and Application (3:3:0,F) A summary of the basic concepts of science and research. Emphasis is placed on preparing students to become knowledgeable consumers of research and to apply research principles to evidence-based practice.

HPSH 7010 Independent Study (1-6:0:1-6,F) A variable credit course used for individualized leveling plans created by the program director.

HPSH 7011 Independent Study (1-6:0:1-6,F) A variable credit course used for individualized leveling plans created by the program director.

HPSH 7015 Audiology Clinical Research I (1:0:1,F) Clinical research course in which students prepare literature review and research questions in preparation for prospectus.

HPSH 7016 Audiology Clinical Research II (1:0:1,F) Clinical research course in which students complete portions of the required clinical research project.

HPSH 7017 Audiology Clinical Research III (1:0:1,F) Clinical research course resulting in completion of data analysis and results sections of the student

clinical research project, in addition to preparation for presentation of the project.

HPSH 7019 Advanced Summer Clinical Experience (1-6:0:32-40,F) Supervised clinical practicum for Au.D. students. The placement is typically the initial enrollment of the fourth year clinical externship.

HPSH 7020 Advanced Clinical Placement (5-9:0:32-40,F) Advanced clinical placement for students in the fourth year of the Au.D. program. Two enrollments of advanced Au.D. clinical placement are required before graduation (typically fall and spring of fourth year unless prior approval has been obtained from the department). May not be taken before all courses and comprehensive examinations are successfully completed. No textbook is required.

HPSH 7021 Advanced Clinical Placement (5-9:0:32-40,F) Advanced clinical placement for students in the fourth year of the Au.D. program. Two enrollments of advanced Au.D. clinical placement are required before graduation (typically fall and spring of fourth year unless prior approval has been obtained from the department). May not be taken before all courses and comprehensive examinations are successfully completed. No textbook is required.

HPSH 7022 Advanced Clinical Placement (5-9:0:32-40,F) Advanced clinical placement for students in the fourth year of the Au.D. program. Two enrollments of an advanced Au.D. clinical placement re required before graduation (typically fall and spring of fourth year unless prior approval has been obtained from the department). May not be taken before all courses and comprehensive examinations are successfully completed.

HPSH 7110 Special Topics in Audiology (1:1:0,F) This course is a capstone course taken in the third year of the Au.D. program. This course will allow for integration of knowledge in a case-based format.

HPSH 7146 Diagnostic Audiology Lab (1:0:1,F) This lab will introduce students to audiological equipment and demonstrate techniques for performing diagnostic audiological procedures. The lab will also address proper report-writing related to case history, description and interpretation of test results, and recommendations.

HPSH 7150 Pediatric Audiology Lab (1:0:1,F) This lab course is designed to provide hands-on experiences in audiological testing of pediatric patients, along with expanding knowledge related to audiological issues in the pediatric population.

HPSH 7158 Applications of Clinical Amplification (1:0:1,F) This course will focus on the clinical mechanics of fitting a hearing aid. It will include hands on, practical use of equipment and techniques for fitting, adjusting and verifying amplification.

HPSH 7164 Auditory Electrophysiology Lab (1:0:1,F) This lab course is designed to provide hands-on experiences with equipment utilized during electrophysiological testing.

HPSH 7165 Balance Function Lab (1:0:1,F) This lab course is designed to provide hands-on experiences with equipment utilized in assessment and management of balance function.

HPSH 7198 Clinical Practicum (1:0:1-3,F) Supervised clinical practicum in audiology.

HPSH 7199 Clinical Practicum (1:0:1-3,F) Supervised clinical practicum in audiology.

HPSH 7215 Balance Function 2 (2:2:0,F) The second course in the vestibular assessment and management series that covers advanced approaches to diagnostic assessment methods/interpretation and rehabilitation techniques. Prerequisites: HPSH 7365 Balance Function.

HPSH 7225 Evidence-Based Practices in Audiology (2:2:0,F) This course will focus on incorporating evidence-based practice in the field of audiology. The elements of evidence-based practice will be explored, including research evidence, clinical expertise, and client preferences and goals.

HPSH 7243 Clinical Applications of Aural Rehabilitation (2:2:0,F) This course is designed to provide clinical training on using additional testing and techniques to expand the diagnostic and rehabilitative focus of audiologists.

HPSH 7247 Aural Rehabilitation (2:2:0,F) The study of audiological, speech, language and listening test procedures, intervention techniques, and the use of amplification for infants through adults with hearing loss. Assessment, treatment, cognition, cultural and psychosocial issues will be discussed in relation to hearing loss.

HPSH 7251 Counseling in Audiology (2:2:0,F) An introduction to counseling the communicatively disordered and their families. Emphasis will be placed on special education, vocational, and emotional issues surrounding hearing impairment. Considerations of special populations and lifespan issues will be included.

HPSH 7255 Advanced Concepts in Audiology (2:2:0,F) This course is to provide clinical training in use of additional testing and techniques to expand the diagnostic and rehabilitative focus of audiologists. It will address audiometric problems from both a clinical and experimental point of view. There will be an emphasis on the theoretical basis behind clinical instrumentation and methodologies in clinical diagnosis. Based on the focus for this course, prerequisite knowledge of basic audiometric testing and interpretation are expected.

HPSH 7260 Hearing Conservation and Instrumentation (2:2:0,F) This course will present the physiologic and behavioral effects of noise exposure, hearing conservation programs, and clinical services to children and adults from diverse populations. Instrumentation associated with the measurement of noise across multiple environments will be a central aspect of the course.

HPSH 7285 Audiology Professional Issues and Practice Management (2:2:0,F) This course is designed to provide an overview of audiology practice management. Course topics will include issues related to ethical practice, multicultural issues, interprofessional collaboration, billing and coding for reimbursement, personnel management, insurance, strategic planning, and audiology service delivery. Considerations associated with audiological service delivery for patients of various socioeconomic statuses will also be discussed.

HPSH 7286 Business Management Practices for Audiologists (2:2:0,F) This course will study a variety of topics important to the management and operation of audiology clinics and professional practices as a business. Course topics will include financial management and accounting, personnel management, marketing, strategic planning, business outcome measures as related to reimbursement, and supervision of students.

HPSH 7321 Clinical Observation and Methods (3:0:4-8,F) Supervised observation of clinical assessment and management of individuals with communication disorders.

HPSH 7322 Auditory Processing Disorders (3:3:0,F) This course is designed to address the functional aspects of the auditory system. It will include an overview of anatomy, testing for auditory processing disorders, differential diagnosis, and management. It will also include information on differentiating functional difficulties as symptomology of other disabilities versus auditory processing disorders as the primary diagnosis.

HPSH 7330 Speech and Language Development and Disorders (3:3:0,O) An overview of speech and language development and the basic principles of assessment and treatment for speech sound and language disorders. Includes a review of phonetics and a special focus on speech and language problems in persons with hearing loss.

HPSH 7342 Psychoacoustics and Auditory Perception (3:3:0,F) This course will present the physiological bases of auditory perception and the corresponding behavioral manifestations, including higher-level cognitive and developmental aspects of speech perception.

HPSH 7344 Clinical Amplification (3:3:0,F) Basic process of hearing aid evaluation, selection, and dispensing. Includes patient considerations, selection,

verification and validation measures, introduction to hearing aid systems, earmold impression and ear mold selection. Prerequisites: HPSH 7342 Psychoacoustics and Auditory Perception or equivalent.

HPSH 7346 Diagnostic Audiology (3:3:0,F) This course will present advanced diagnostic techniques for children and adults including those from diverse populations or with special needs.

HPSH 7348 Educational Audiology (3:3:0,F) Audiological considerations in educational settings. The incidence, treatment, and educational sequela of hearing impairment in the auditory-verbal classroom will be covered.

HPSH 7350 Pediatric Audiology (3:3:0,F) A study of behavioral and objective audiological evaluation, as well as the habilitation and rehabilitation, of infants and children.

HPSH 7352 Clinical Disorders in Audiology (3:3:0,F) The purpose of this course is to provide students with information to understand the following areas: 1) the anatomy and physiology of auditory mechanisms; 2) etiology and pathology of auditory disorders; and 3) audiological and otologic evaluation/management of auditory disorders.

HPSH 7357 Amplification Systems and Special Applications (3:3:0,F) This course explores the technology and theories behind amplification systems. It also explores how these systems apply to low-incidence and difficult to fit populations. This course will also include: Discussion of specialized amplification features, verification of these features, and fitting special populations (e.g., children, non-verbal, conductive hearing loss, auditory neuropathy/dyssynchrony). Prerequisite: HPSH 7344 Clinical Amplification or permission of the instructor.

HPSH 7364 Auditory Electrophysiology (3:3:0,F) Covers clinical and theoretical knowledge and applied skills of normal and pathological auditory systems. This course will provide clinical instruction in the application of electrophysiological testing techniques and interpretation. Emphasis will be placed on evaluation of auditory functional and site of lesion testing, protocols, and interpretation. Prerequisite: HPSH 7440 Fundamentals of Sound and the Auditory System or equivalent.

HPSH 7365 Balance Function (3:3:0,F) Covers theoretical knowledge and applied skills of normal and pathological vestibular system.

HPSH 7370 Implantable Devices in Audiology (3:3:0,F) Electrophysiology of implantable devices. Also includes processor strategies, and speech/language learning in prelingually deafened listeners. Prerequisite: HPSH 7440 Fundamentals of Sound and of the Auditory System or equivalent.

HPSH 7390 Clinical Practicum-Individualized Experience (3:0:4-16,F) The course is intended to allow for individualized student instruction of clinical procedures and protocols. This course may be repeated for credit.

HPSH 7392 Clinical Practicum (3:0:4-8,F) Supervised clinical practicum in audiology.

HPSH 7393 Clinical Practicum (3:0:4-8,F) Supervised clinical practicum in audiology.

HPSH 7394 Clinical Practicum (3:0:6-10,F) Supervised clinical practicum in audiology.

HPSH 7395 Clinical Practicum (3:0:4-8,F) Supervised clinical practicum in audiology.

HPSH 7396 Clinical Practicum (3:0:4-8,F) Supervised clinical practicum in audiology.

HPSH 7397 Clinical Practicum (3:0:32-40,F) Supervised clinical practicum in audiology.

HPSH 7398 Clinical Practicum (3:0:4-16,F) Supervised clinical practicum in audiology.

HPSH 7399 Clinical Practicum (3:0:4-16,F) Supervised clinical practicum in audiology.

HPSH 7440 Fundamentals of Sound and of the Auditory System (4:4:0,F) This course is an in-depth exposure to the structure and function of the auditory system, including principles of the physics of sound as applied to physiology of auditory structures. Emphasis is placed on peripheral structure and function, up to and including important brainstem nuclei. An introduction to cortical structures and processing is presented.

School of Health Professions Faculty

Full Time

Last Name	First Name	Title	Degrees
Alexander	Belinda	Assistant Professor	OTD, Eastern Kentucky University, 2021; MOT, Texas Woman's University, 1991; BS, Texas Tech University, 1989
Alexander	Laura	Assistant Professor	OTD, Texas Tech University Health Sciences Center, 2022; BS, Texas Tech University Health Sciences Center, 1995
Allen	Bethany	Assistant Director of Clinical Education; Assistant Professor	DPT, Texas Tech University Health Sciences Center, 2013; BS, Baylor University, 2002
Allen	Brad	Director; Assistant Professor	ScD, Texas Tech University Health Sciences Center, 2010; BS, Texas Tech University Health Sciences Center, 1993
Bennett	Katie	Full Professor	PhD, Texas Tech University Health Sciences Center, 2009; BS, West Texas A&M University, 2000
Benninghoff	Lori	Assistant Professor	MPAS, Texas Tech University Health Sciences Center, 2009
Blair	Kary	Instructor; Senior Clinical Department Administrator and Executive Director of Southwest Institute of Addictive Diseases	MBA, Texas Tech University, 2002; BS, Lubbock Christian University, 1999
Brashear	Jessica	Assistant Professor	DCLS, University of Texas Medical Branch, 2022; MS, Texas Tech University Health Sciences Center, 2010; BS, Texas Tech University Health Sciences Center, 2009
Brismee	Jean-Michel	Full Professor	ScD, Texas Tech University Health Sciences Center, 2003; MS, Texas Tech University, 1996; APE, Catholic Univ of Louvain-la-Neuve, 1982; BS, Catholic University Of Louvain-la-Neuve, 1982
Brockman	Merritt	Assistant Professor	Doctor of Health Administration, Medical University of South Carolina, 2014; MS, University of Washington, 2007; BS, United States Air Force Academy, 2003
Brooks	Toby	Assistant Dean; Program Director; Associate Professor	PhD, The University of Arizona, 2001; MA, The University of Arizona, 2000; BS, Southern Illinois University Carbondale, 1998; AS, Southeastern Illinois College, 1995

Brunet	Joan	Regional Dean; Assistant Director, Doctor of Physical Therapy Program, Amarillo Campus; Assistant Professor	DPT, A. T. Still University, 2010; MS, West Texas A&M University, 2002; BS, West Texas A&M University, 1990
Burgess	Nathan	Associate Director, Doctor of Physical Therapy Program ; Assistant Professor	ScD, Texas Tech University Health Sciences Center, 2018; BS, Wayland Baptist University, 2001
Buterbaugh	Abby	Assistant Professor	MMS, Saint Louis University, 2013; BS, University of South Carolina, 2011
Carter	Tammy	Associate Professor; Director, Clinical Laboratory Science Programs	BS, Texas Tech University Health Sciences Center, 2000; PhD, Texas Tech University Health Sciences Center, 2013
Chavez-Palacios	Elizabeth		PhD, The University of Texas Rio Grande Valley, 2013; MA, The University of Texas Rio Grande Valley, 2006; BA, The University of Texas Rio Grande Valley, 2003
Cheng	Xiaodong	Assistant Professor	MD, Peking Union Medical College, 1997; PhD, University of Texas Health Science Center at Houston, 2006; Certificate PB Clinical Lab Science, Texas Tech University Health Sciences Center, 2017
Choudhury	Moumita	Assistant Professor	AuD, A. T. Still University, Arizona School of Health Sciences, 2016; M.Phil, University of Manchester, 2010; MS, University of Mysore, 2004; BS, University of Calcutta, 2002
Collins	Leslie	Instructor	JD, Texas Tech University, 2012
Corwin	Melinda	Assistant Director; Full Professor; Co-Advisor, TTUHSC Chapter of NSSLHA; Director, Stroke & Aphasia Recovery (STAR) Program	PhD, Texas Tech University, 2006; MS, Texas Tech University, 1989; BS, Texas Tech University, 1987
Dayama	Neeraj	Assistant Professor	PhD, University of Arkansas for Medical Sciences, 2019; MBA, Maharashtra University of Health Sciences, 2014; MD, Terna Medical College, 2009
Dendy	Douglas	Assistant Director of Clinical Education; Assistant Professor	ScD, TTUHSC, 2016; BS, Lubbock Christian University, 2015

Donai	Jeremy	Associate Professor; Program Director, Doctor of Audiology Program	PhD, TTUHSC, 2013; AuD, Towson University, 2004
Driskill	Matt	Instructor	MBA, Texas Tech University, 1998
Eaves	Taylor	Assistant Professor	MS, Texas Tech University Health Sciences Center, 2016; BS, Wayland Baptist University, 2013
Edwards	Deborah	Assistant Program Director; Regional Dean; Assistant Professor	DPT, Texas Tech University Health Sciences Center, 2016; BS, Howard Payne University, 1998
Flores	Debra	Director	PhD, Texas Tech University, 2013; MA, Wayland Baptist University, 2006; Certification, Texas Department of State Health Services, 2006; BS, Lubbock Christian University, 2003
Gehring	Reid	Assistant Professor	ScD, Texas Tech University Health Sciences Center, 2020; DPT, Texas Tech University Health Sciences Center, 2008; BS, Texas Tech University Health Sciences Center, 2006; AS, Amarillo College, 2004
Gibbs	Celesta	Assistant Professor	MS, Texas Tech University Health Sciences Center, 2015; BS, Texas Tech University, 2014
Gilbert	Kerry	Assistant Dean; Co-Director; Director	ScD, Texas Tech University Health Sciences Center, 2004; BS, University of Texas, 1993
Granados	Sarai	Director of Clinical Operations, Assistant Professor	MS, Texas Tech University Health Sciences Center, 2004; BS, Texas Tech University Health Sciences Center, 2002
Greenhill	Richard	Director; Assistant Professor	MS, Texas Tech University, 2022; DHA, Central Michigan University, 2019; MBA, University of Maryland Global Campus, 2012; MS, University of Maryland Global Campus, 2011; BS, Southern Illinois University Carbondale, 2009
Gustafson	Tori	Associate Professor	AuD, Central Michigan University, 2003; MS, Texas Tech University, 1992; BS, Texas Tech University, 1990; AAS, McLennan Community College, 1986
Hall	Brittany	Program Director; Assistant Professor	MS, Texas Tech University Health Sciences Center, 2005; BS, Texas Tech University Health Sciences Center, 2003
Hendrix	Ericka	Director; Associate Professor	PhD, Texas Tech University, 2014; MS, Texas Tech University Health Sciences Center, 2003; BS, Texas Tech University, 1997
Hicks	Candace	Chairperson;	PhD, Vanderbilt University, 2000; MS, Purdue University, 1995; BSE,

		Associate Program Director, PhD in Rehabilitation Science; Full Professor	Arkansas State University , 1992
Holland	Hesper	Assistant Professor	MS, Texas Tech University Health Sciences Center, 2003; BS, Texas Tech University Health Sciences Center, 2001
Hooper	Troy	Associate Dean; Associate Professor	PhD, Texas Tech University Health Sciences Center, 2015; MSPT, Texas Tech University Health Sciences Center, 2001; BS, Angelo State University, 1996
House	Morgan	Assistant Professor	PhD, Texas Tech University, 2018; MBA, Wayland Baptist University, 2003; BS, Wayland Baptist University, 2002
Hunt	Sharon	Assistant Professor	PhD, Texas Tech University, 2021; MBA, Wayland Baptist University, 2002; BBA, Texas Tech University, 1988
James	Roger	Full Professor; Director	PhD, University of Oregon, 1996; MS, University of Oregon, 1991; BS, Missouri State University, 1988
Jennings	Lynn	Instructor	PhD, Texas Tech University, 2015
Kearns	Gary	Assistant Professor	ScD, Texas Tech University Health Sciences Center, 2015
Knight	Jacqueline	Academic Instructor/Clinical Education Coordinator	BS, Texas Tech University Health Sciences Center, 1997; MS, Texas Tech University Health Sciences Center, 2011
Kroll	Tobias	Associate Professor; Co-Coordinator	PhD, University of Louisiana at Lafayette, 2014; M.A., Magister Artium, University of Münster, 2007
Kubala	Koy	Assistant Program Director of Traditional CLS program; Assistant Professor	MS, Texas Tech University Health Sciences Center, 2007; BS, Texas Tech University Health Sciences Center, 2006
La Fave	Dee	Instructor	MS, Texas Tech University , 1988; BS, Texas Tech University , 1985
La Vallee	Dayna	Assistant Professor	MPAS, Texas Tech University Health Sciences Center, 2016; BA, Arizona State University , 2009
Larson	Robert	Assistant Professor	PhD, Brigham Young University, 2020; OTD, University of Toledo, 2015; BS, Brigham Young University Idaho, 2012; AA, Lower Columbia College, 2005
Lee	Sue Ann	Full Professor; President, Asia Pacific Society of Speech-Language-Hearing; ; Affiliate	PhD, University of Texas, 2003; MA, The Ohio State University, 1998; BA, Ewha Womans University, 1990

		Faculty	
Lierly	Micah	Assistant Professor	PhD, Texas Tech University Health Sciences Center, 2022; DPT, Texas Tech University Health Sciences Center, 2014; BS, Cameron University, 2010; AA, Western Texas College, 2008
Lummus	Stephen	Assistant Professor	MPAS, Texas Tech University Health Sciences Center, 2007
Miller	Misty	Assistant Professor; Director of Clinical Education, Doctor of Physical Therapy Program	DPT, Texas Tech University Health Sciences Center, 2011
Munger	Larry	Assistant Program Director ; Assistant Professor	PhD, Texas Tech University, 2010; MS, Arizona School of Health Sciences, 1997; BSE, University of Kansas, 1995
Newcome	Andre		BA, Hardin-Simmons University, 2009; DPT, Hardin-Simmons University, 2011
Panasci	Kate	Associate Professor; Assistant Dean	DPT, Texas Tech University Health Sciences Center, 2011; MSPT, Northeastern University, 2004; BS, Northeastern University, 2003
Pendergrass	Timothy	Assistant Professor	ScD, Texas Tech University Health Sciences Center, 2013; MS, Texas Tech University, 2002; BS, University of North Texas, 1998
Perry	Carolyn	Director of Clinical Education ; Assistant Professor	MS, Texas Tech University, 1993; BS, Texas Tech University, 1991
Pfaff	David	Instructor	PhD, University of the Cumberlands, 2020; MEd, Oklahoma City University, 2014; BA, University of Oklahoma, 2003
Posteraro	Robert	Full Professor; Assistant Program Director (Graduate Certificates)	MD, Yale University , 1973; MBI, Oregon Health & Science University, 2005; Fellowship, Duke University Medical Center, 1988; Fellowship, Yale-New Haven Hospital, 1979; BS, Fordham College, 1969
Preble	Kaitlyn	Assistant Professor	MPAS, Texas Tech University Health Sciences Center, 2019; MPH, Baylor University, 2017; BSED, Baylor University, 2015
Redman	Wade	Associate Dean; Chair, Department of Laboratory Sciences and Primary Care; Associate Professor	PhD, Texas Tech University, 2014; MBA, Wayland Baptist University, 2004; BS, Texas Tech University Health Sciences Center, 1999; AS, South Plains College, 1995
Reel	Leigh	Associate	PhD, Texas Tech University Health Sciences Center, 2009; AuD,

		Professor	Texas Tech University Health Sciences Center, 2005; Bachelor of Behavioral Science (B.B.S.), Hardin-Simmons University, 2001
Robohm-Leavitt	Christina	Regional Dean, Midland; Associate Professor; Director, Master of Physician Assistant Studies Program	DMSc, University of Lynchburg, 2020; MS, University of Colorado , 1999; Child Health Associate/Physician Assistant Program Certificate, University of Colorado Health Science Center, 1997; BS, University of Colorado , 1995
Rosenblad	Sherry		PhD, Sam Houston State University, 2014; MA, University of Mary Hardin-Baylor, 2007; BA, University of Mary Hardin-Baylor, 2005
Sancibrian	Sherry	Associate Dean; Associate Chair; Professor ; Director	MS, Texas Tech University, 1978; BS, Texas Tech University, 1976
Schmidt	Ryan	Chair, Department of Healthcare Management and Leadership	Association to Advance Collegiate Schools of Business Post Doctoral Bridge to Business , University of Florida , 2015; Post Doctorate , Massachusetts Institute of Technology (Zaragoza, Spain), 2014; PhD, University of South Carolina, 2013; MBA, Brenau University , 2010; MS, Texas Tech University Health Sciences Center, 2010; MA, Louisiana Tech University, 2007; MA, Louisiana Tech University , 2007; BA, Montana State University , 2002
Schroeder	Dave	Associate Professor; Associate Clinical Instructor; Coordinator	PhD, Michigan State University, 2012; MA, Michigan State University, 2003; BA, Michigan State University, 1980
Sechrist	Dawndra	Full Professor; Dean	PhD, Texas Tech University, 2006; MA, Texas Womans University, 2001; BS, Texas Tech University Health Sciences Center, 1994; BS, Texas Tech University, 1990
Setliff	Molly	Assistant Professor	OTD, Texas Tech University Health Sciences Center, 2022; BSOT, Texas Tech University Health Sciences Center, 1993
Sizer	Phillip	Associate Dean for Research	PhD, Texas Tech University, 2002; MEd, Texas Tech University, 1993
Sneed	Susan	Clinical Instructor; Co-Advisor, TTUHSC Chapter of NSSLHA	MS, Texas Tech University Health Sciences Center, 2014; BS, Texas Tech University Health Sciences Center, 2012
Sneed	Zachery	Director; Assistant Dean; Assistant Professor	PhD, Southern Illinois University, 2006; MS, University of North Texas, 2003; BS, University of North Texas, 2001
Spears	Evans	Chair, Department of Clinical Counseling and	PhD, University of Arizona, 2003; MA, University of Iowa, 1994; BA, Coe College, 1991

		Mental Health; Associate Professor	
Stein	Carmen	Clinical LPC-A Supervisor	PhD, University of South Florida, 2011; MA, The University of South Florida, 1985; BA, University of Tampa, 1985
Stelter	Laurie	Doctoral Capstone Coordinator; Academic Fieldwork Coordinator; Assistant Professor	PhD, Texas Woman's University, 2018; MA, Texas Woman's University, 2004; BSOT, Texas Tech University Health Sciences Center, 1998
Stringer	Sarah	Assistant Professor	DMSc, University of Lynchburg, 2022; MPAS, Texas Tech University Health Sciences Center, 2013; BS, Texas Tech University, 2008
Swackhammer	Corey	Assistant Professor	MS, Texas Tech University Health Sciences Center, 2020; BS, Texas Tech University Health Sciences Center, 2014; BS, Texas Tech University, 2012
Taylor	Megan	Academic Fieldwork Coordinator; Assistant Professor	OTD, Texas Woman's University, 2018; MSOT, Washington University in St. Louis, 2003; BBA, Texas Tech University, 2001
Taylor	Mike	Associate Professor; Associate Director; Physician Assistant	Master, University of Nebraska Medical Center, 1997; Physician Assistant Fellowship in Orthopedics Certificate, David Grant Medical Center, 1988; BS, University of Oklahoma, 1982
TenBensel	Joshua	Assistant Professor	DPT, University of Nebraska Medical Center, 2011; BS, University of Nebraska, 2007
Tiongco	Cynthia	Assistant Professor	PhD, Texas Woman's University, 2022; MOT, Texas Tech University Health Sciences Center, 2002; BS, Texas Tech University Health Sciences Center, 2002
Townsend	Christopher	Assistant Professor; Director	PhD, North Carolina Agricultural and Technical State University, 2018; MA, Appalachian State University, 1998
Van Sickle	Angela	Assistant Professor	BA, University of Pittsburgh, 1989; MS, Texas Tech University, 1992; PhD, Texas Tech University Health Sciences Center, 2015
Varis	Tracey	Instructor	BS, Texas Tech University Health Sciences Center, 2006
Villegas	Elesea	Director of Clinical Education; Assistant Professor	MPAS, Texas Tech University Health Sciences Center, 2015; BS, Angelo State University, 2012
Whisner	Sandra	Associate	PhD, Texas Woman's University, 2014; MA, Texas Womans

		Professor ; Director, Occupational Therapy Program	University, 2003; BS, Texas Tech University Health Sciences Center, 1997; BBA, Texas Tech University, 1992
Winkelman	Logan	Clinical Assistant Professor; Director; Assistant Professor	PhD, Texas Tech University, 2018; MEd, Texas Tech University, 2013; BS, Texas Tech University, 2011
Yi	Hoyoung		PhD, University of Texas at Austin, 2018; MS, Korea University, 2010; BA, Daegu Univeristy, 2006
Zimmerman	Renee	Audiology Clinical Coordinator; Assistant Professor	AuD, Texas Tech University Health Sciences Center, 2009; BS, Texas Tech Universtiy Health Sciences Center, 2005
Zupancic	Steven	Audiology Division Chief-ENT ; Associate Professor	PhD, Texas Tech University Health Sciences Center, 2007; AuD, Texas Tech University Health Sciences Center, 2003; BS, Eastern New Mexico State University, 1999

Part Time and Adjunct

Last Name	First Name	Title	Degrees
Acevedo-Santiago	Itxia	Assistant Professor	MPAS, Texas Tech University Health Sciences Center, 2016; BAS, University of North Texas- College of Arts & Science, 2013; AAS, Richland Community, 2009
Albers	Kelly		ScD, Texas Tech University Health Sciences Center, 2017; BS, Northwestern University, 1990
Altmire	Jason		DBA, University of Florida, 2020; BS, Florida State University, 1990
Alvarado	Adiel	Instructor;	DHA, Central Michigan University, 2013; MHA, University of Phoenix, 2006; BS, University of Texas of The Permian Basin, 2004; AAS, , 2000
Alvarez	Manuel		DHA, Central Michigan University, 2009; MPA, West Virginia University, 1979; BA, West Virginia University, 1973
Atkinson	Jessica		MSPA, A.T. Still University, 2016
Azevedo	Esteban		ScD, Texas Tech University Health Sciences Center, 2011; BS, The University of Arizona, 1997
Barnhart	Jeff	Instructor	MS, Texas Tech University Health Sciences Center, 2013; BA, Ottawa University, 2007
Bassett	Cameron		DPT, Texas Tech University Health Sciences Center, 2016
Beck	Marisha		AuD, Texas Tech University Health Sciences Center, 2008; BS, Texas Tech University Health Sciences Center, 2004
Bekemeier	Karsten	Adjunct Faculty; Policy	PhD, Michigan State University, 2009; MA, Michigan State

		Consultant	University, 1998
Benton	Timothy	Full Professor; Associate Health Authority for Ector County ; Medical Director;	MD, Texas Tech University HSC, 1994; BS, Dallas Baptist University, 1989
Besser	Christopher		PhD, University of Florida, 2014; MS, University of Florida, 2014; Other, Baylor University, 2008; MBA, Baylor University, 2008
Blackwell	Hayley		Other, Rocky Mountain College, 2022
Brake	Rika	Adjunct Faculty	OTD, Texas Tech University Health Sciences Center, 2022; MOT, Texas Tech University Health Sciences Center, 2006
Brooks	Courtney		DPT, Texas Tech University Health Sciences Center, 2014
Brostrand	Heather	Adjunct Faculty	PhD, Southern Illinois University Carbondale, 2006
Burrow	Trevor		MS, Texas Tech University Health Sciences Center, 2015; BS, Wayland Baptist University, 2014
Chapa	Alison	Adjunct Faculty	BSOT, Texas Tech University Health Sciences Center, 1996
Childress	Cynthia		PhD, Virginia Commonwealth University, 2013; BS, United States Military Academy, 1994
Clipper	Christie		
Coulter	Daniel		BA, Providence College, 2003
Craig	Jordan		DPT, Texas Tech University Health Sciences Center, 2017
Cramer	Jenna		BS, West Virginia University, 2015; AuD, West Virginia University, 2019
Crawford	Jay		Doctor of Health Administration, Medical University of South Carolina, 2017
Cristy	Debra		BSPT, Texas Tech University Health Sciences Center, 1993
Culbert	Richard		MD, University of Oklahoma, 1993
Dalehite	Jess	Instructor	MD, University of Texas Southwestern Medical School, 1982; BS, University of California, Irvine, 1977
Davies	Andy		DPT, Texas Tech University Health Sciences Center, 2014; BS, Grand Canyon University, 2011
Davis	Aaron	Adjunct Instructor;	BBA, Texas Tech University, 2011
Davis	Melinda		BSPT, California State University , 1985
Davis-Pitre	Aletta		MPT, Texas Tech University Health Sciences Center, 2003
Denny	Brent		ScD, Texas Tech University Health Sciences Center, 2018; DPT, Texas Tech University Health Sciences Center, 2011
Diersing	Dean		MS, Texas Tech University, 2005; BS, Texas Tech University, 2003

Dixon-Lawson	Kimberly	Adjunct Faculty	DHA, University of Phoenix, 2009; MS, Jackson State University, 2000; BS, Jackson State University, 1998
Downs	Lynn		PhD, American University, 2004
Dragun	Michael	Instructor	MD, University of California at Los Angeles Medical School, 1989; BS, University of California at Riverside, 1985
Escobedo	Gerardo		DO, New York Institute of Technology, 1998
Espinoza	Javier		MPAS, Texas Tech University Health Sciences Center, 2008; BS, University of Texas of the Permian Bain, 2005
Fasko	Steve	Instructor	Doctor of Health Administration, Central Michigan University, 2016; MBA, St. Ambrose University, 2003
Flitton	Johnny	Instructor	MS, Texas Tech University Health Sciences Center, 2006; AAS, Midland College, 2004
Fox	Taylor	Adjunct Faculty	BS, University of Texas Health Science Center at San Antonio, 2010; MPAS, University of Texas at San Antonio, 2010; BBA, Texas Tech University, 2001
Frick	Kimberly		MPT, Texas Tech University Health Sciences Center, 1998
Gaytan	Jorge		EdD, The University of Texas at El Paso, 2000; MBA, The University of Texas at El Paso, 1991
Geddie	Matthew	Director; Assistant Professor	PhD, Texas Tech University, 2011; MBA, Wayland Baptist University, 2002; BS, Texas Tech University Health Sciences Center, 1994
Ginnity	John	Instructor	MS, State University of New York Polytechnic Institute, 1995
Glover	Haley		MOT, Texas Tech University Health Sciences Center, 2021; BS, Tarleton State University, 2019
Goodson	Yvette	Instructor; Laboratory Manager	BS, Texas Tech University Health Sciences Center, 1995
Gordon	Jean		MBA, Nova Southeastern University, 2015; MSN, Kaplan University, 2010; DBA, Nova Southeastern University, 2001; MS, Nova Southeastern University, 1997; BSN, University of Miami, 1974
Gore	Lisa	Instructor	MS, Texas Woman's University , 1995; BS, Texas Tech University , 1991
Graefe	Beth		
Graham	Carlos		
Guerra	Luis	Regional Medical Director ; Clinical Assistant Professor of Medicine	MD, Ponce Medical School, 1986
Gutierrez-Leal	Silvia	Adjunct Faculty	MS, University of Texas Rio Grande Valley, 2014; BS, University of Texas Rio Grande Valley, 2008

Hammit	Jani		MA, Texas Tech University, 2017; BS, West Texas A&M University, 2011
Hardy	Meredith		BA, Wayland Baptist University, 2010
Harrell	Kristyn		DPT, Texas Tech University Health Sciences Center, 2020
Healy-Collier	Kathleen		Doctor of Health Administration, Medical University of South Carolina, 2012
Helton	Jeff	Assistant Professor	PhD, University of Texas School of Public Health, 2011; MS, The University of Alabama at Birmingham, 1985; BBA, Eastern Kentucky University, 1982
Hernandez	Liz	Adjunct Faculty	MS, Texas A&M University Corpus Christi, 2016
Hinojos	Sissy	Instructor	MPAS, Texas Tech University Health Sciences Center, 2012
Holly	Carrie		DPT, Hardin-Simmons University, 2015
Hutchinson	Mark		DrPH, Capella University, 2018; MS, Western Michigan University, 2002
Hutto	Debbi	Instructor	MS, Texas Tech University Health Sciences Center, 1995
Jones	Alan		PhD, The University of Alabama at Birmingham, 2015
Jones	Kevin		EdD, Northern Illinois University, 2001; MA, University of Kansas, 1991
Josserand	Amelia		MPAS, University of Nebraska Medical Center, 2017; BS, Kansas State University, 2015
Kapila	Jeegisha		Master of Health Sciences, Drexel University, 2010; DPT, Drexel University, 2009
Kelly	Erica	Adjunct Faculty;	BSED, University of Virginia, 2010
Kemper	James	Adjunct Faculty; Assistant Professor	MS, West Texas A&M, 2011; BBA, West Texas A&M, 2006
Kerns	Sara	Adjunct Faculty;	BS, Texas Tech University, 2005
Ketchersid	Kathryn		MS, Texas Tech University Health Sciences Center, 2010
Kincheloe	Kristi	Adjunct Faculty	MPAS, Texas Tech University Health Sciences Center, 2013
Klein Levine	Lauren		
Kremer	Mary	Instructor;	ScD, Texas Tech University Health Sciences Center, 2013
Kublawi	Marwan	Instructor;	ScD, Texas Tech University Health Sciences Center, 2014
LaBauve	Peyton		MS, Texas Tech University Health Sciences Center, 2018
Lalani	Karima		BS, Texas State University, 2010; MBA, Houston Baptist University, 1999; BBA, University of Houston, 1994
Lee	Derek	Adjunct Faculty	Master of Rehabilitation Counseling, , 2010
Leighton	Cassandra		PhD, University of Pittsburgh, 2019; MPH, University of South Carolina, 2013

Lester	Jordan		PHMD, Texas Tech University Health Sciences Center, 2017
Lingle	Susan		
McFatridge	Kelsey		MPAS, Texas Tech University Health Sciences Center, 2018; BA, Texas State University, 2013
McMahon	Brian		PhD, University of Wisconsin - Madison, 1977; MS, Illinois Institute of Technology, 1974
Melvin	Andre		PhD, University of South Carolina, 2012; MBA, Troy University, 2007
Melvin	Elisa		PhD, University of South Carolina, 2012
Mendoza	Michael		DPT, Texas Tech University Health Sciences Center, 2017
Mitchell	Jordan	Instructor	PhD, University of South Carolina, 2012; MBA, East Carolina University, 2009
Monte	Whitney		DPT, Texas Tech University Health Sciences Center, 2008
Muldoon	Kaitlyn		BS, University of South Carolina, 2024; MS, Medical University of South Carolina, 2017
Murillo	Kasey		MS, Texas Tech University Health Sciences Center, 2002
Olshine	Rachel		EdD, Stephen F. Austin State University, 2019
Ortega	Cameron	Adjunct Faculty	MS, The University of Texas Rio Grande Valley, 2009; BFA, The University of Texas Rio Grande Valley, 2006
Ott	Kayla	Instructor	MPAS, University of North Texas Health Science Center, 2013; BA, University of Texas, 2010
Panich-Temm	Mary		DSc in Health Services Administration, University of Alabama at Birmingham, 2013; Master of Health Services Administration, Arizona State University, 1990
Parks	Ashley		MPH, California State University, 2008; BS, California State University, 2006
Pendergrass	Colleen		BS, University of Texas Southwestern Medical School, 1988; BS, Texas A&M University, 1983
Peters	Ginger		MPAS, Texas Tech University Health Sciences Center, 2010; MS, Texas Tech University Health Sciences Center, 2005; BS, Eastern New Mexico University, 2001
Phipps	Greg	Adjunct Faculty	PhD, North Carolina A&T University, 2018; MS, North Carolina A&T State University, 2015
Porcaro	Joan	Instructor	Master of Management, University of Phoenix, 2007; BSN, Saint Xavier College, 1982
Posey	Michael	Instructor; Adjunct Faculty	PhD, The Chicago School of Professional Psychology, 2019
Pradhan	Rohit		PhD, University of Florida, 2010
Queen	Courtney	Assistant Professor;	PhD, University of North Texas, 2009; MS, University of North

			Texas, 2004; BS, Hardin-Simmons University, 1997; BBS, Hardin-Simmons University, 1997
Ramello	Natalie		JD, Loyola University Chicago , 2008
Redd	Kolby		PhD, University of South Carolina, 2015
Ricci	Laura		DPT, Texas Tech University Health Sciences Center, 2008; BS, Texas Tech University Health Sciences Center, 2006
Richardson	Eric		PhD, Saint Leo University, 2011; MBA, Liberty University, 2006
Richter	Jason		PhD, Ohio State University, 2013; MS, Ohio State University, 2013; MBA, Baylor University, 2007
Rios	Steven		MS, Texas Tech University, 2016; BS, Texas Tech University, 2013
Roeder	Hannah		Master of Medical Science - PA Studies, Wake Forest School of Medicine, 2017; BS, University of Tennessee Knoxville, 2015
Sargent	Elizabeth	Instructor;	ScD, Texas Tech University Health Sciences Center, 2015
Sharer	Beth	Instructor	MS, Central Michigan University, 1988; BS, Indiana University, 1978
Smith	Susan		Doctor of Health Administration, Central Michigan University, 2009
Spulick	Stephen		PhD, Georgia Southern University, 2015; MBA, University of Phoenix, 2007; BA, Fordham University, 1990
Stennett	Nicole		MPAS, Texas Tech University Health Sciences Center, 2015
Stock	Eileen		
Stump	Matt	Instructor;	ScD, Texas Tech University Health Sciences Center, 2010
Tarr	Mary Rebecca	Instructor	BS, University of South Florida, 2002; MBA, University of South Florida, 1990; BS, Loyola University, 1975
Taylor	Frank	Adjunct Faculty;	MA, Michigan State University, 1991; BS, Michigan State University, 1985
Towers	Tyler		PhD, The Pennsylvania State University, 2013
Tuell	Christina		EdD, University of Houston, 2020; MS, The University of Texas at Tyler, 2016; BS, The University of Texas at Tyler, 2013
Vargo	Ali		ScD, Texas Tech University Health Sciences Center, 2019
Vela	Christopher		MPAS, Texas Tech University Health Sciences Center, 2011; BS, Angelo State University, 2007
Velsor	David		MS, Southern Illinois University, 2017
Vintimilla	Antonio		DPT, Texas Tech University Health Sciences Center, 2019
Walters-Zucco	Lisa	Instructor	MPH, University of Massachusetts Amherst, 1999

Weber	Jason		MA, Concordia University, 2008; BS, Evangel University, 2004
Weigel	Fred		PhD, Auburn University, 2011; BS, Embry-Riddle Aeronautical University, 1996; AA, Brookdale Community College, 1988
Welch	Rachel		BS, Texas Tech Unviersity Health Sciences Center, 2005
Whitaker	Melissa	Clinical Instructor	MS, TTUHSC, 2004; BS, TTUHSC, 2002
Wilkes	McKenzie	Adjunct Faculty	PhD, Texas Tech University, 2016; MS, Texas Tech University, 2008
Williams	Irene		PhD, Northcentral University, 2011; MBA, Wayland Baptist University, 2007; BBA, Lubbock Christian University, 2005; Subbaccalaureate Certificate, South Plains College, 1997
Wiswell	Kelly		MS, Texas A&M University, 2017
Wolfe	Jessica		DPT, Texas Tech University Health Sciences Center, 2019
Wylie	Mary		Doctor of Health Administration, Medical University of South Carolina, 2013; MBA, Texas Woman's University, 2000; MS, Texas Woman's University, 2000