TEXAS TECH UNIVERSITY
HEALTH SCIENCES CENTER™

School *of* Health Professions

2018-2019 Catalog

Message from the Dean

Lori Rice-Spearman, MT (ASCP), Ph.D.

University Distinguished Professor and Dean of the School of Health Professions

Welcome to the Texas Tech University Health Sciences Center (TTUHSC) School of Health Professions. Established by the Texas State Legislature in 1981, the School was created to educate health professionals to fill critical shortages in meeting crucial healthcare needs of the people of West Texas. The School of Health Professions is one of five schools that constitute TTUHSC's nationally acclaimed health sciences center.

From its first class of eighteen students in 1983, the School has grown steadily over the past thirty years. The School is one of the largest schools of health professions in the nation with campuses in Amarillo, Lubbock, Midland, and Odessa. The School now serves over 1,300 students enrolled in twenty different degree programs at the doctoral, masters and baccalaureate degree levels. As it continues to prepare health professionals who will meet the evolving healthcare needs of all Texans in the 21st century, the School remains focused on developing and presenting educational programs of the highest quality in a diverse and student-centered learning environment.

Our objective is to 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 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. We are the first choice for health professions education!

Table of Contents

Administration

Board of Regents

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

Members	Term Expires January 31, 2019
L. Frederick "Rick" Francis, Chairman	El Paso
Tim Lancaster, Vice Chairman	Abilene
John Esparza	Austin
	Term Expires January 31, 2021
Mickey L. Long	Midland
Ronnie Hammonds	Houston
Christopher M. Huckabee	Fort Worth
	Term Expires January 31, 2023
J. Michael Lewis	Dallas
John Steinmetz	Dallas
John Walker	Houston
	Term Expires May 31, 2018
Jarett Lujan	San Angelo

School of Health Professions

Lori Rice-Spearman, Ph.D.	Dean
Sherry Sancibrian	Interim Chair, Department of Speech, Language, & Hearing Sciences Program Director, Speech-Language Pathology
Steven F. Sawyer, Ph.D.	Associate Dean for Faculty Development Chair, Department of Rehabilitation Sciences
Phil Sizer, Ph.D.	Associate Dean for Research Program Director, Doctor of Science in Physical Therapy
Lindsay R. Johnson, M.Ed.	Associate Dean for Admissions & Student Affairs

Dawndra Sechrist, Ph.D.	Assistant Dean for Learning Outcomes & Assessments
Wade Redman, Ph.D.	Assistant Dean for Educational Technology Chair, Department of Laboratory Sciences & Primary Care
Micheal West	Assistant Dean for Finance & Administration
Evans H. Spears, Ph.D.	Chair, Department of Clinical Counseling & Mental Health
Ryan N. Schmidt, Ph.D.	Chair, Department of Healthcare Management & Leadership
Michael Hooten, Ed.D.	Regional Dean, Amarillo
Christina Robohm-Leavitt, MS	Regional Dean, Midland
Neeraj Kumar, Ph.D.	Regional Dean, Odessa
Fabian Blanco	Senior Director of Educational Technology

Frequently Asked Questions

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

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

- Certificate
  - Clinical Laboratory Science
  - Health Informatics and Data Analytics
  - Health Systems Policy and Management
- Bachelor of Science (B.S.)
  - Clinical Laboratory Science
  - Healthcare Management
  - Speech, Language, and Hearing Sciences
- Second Degree Bachelor of Science
  - Clinical Laboratory Science
  - Speech, Language, and Hearing Sciences
- Master of Athletic Training (MAT)
- Master of Occupational Therapy (MOT)
- Master of Physician Assistant Studies (MPAS)
- Master of Rehabilitation Counseling
- 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 Philosophy in Rehabilitation Science (Ph.D.)
  - Concentration in Communication Sciences and Disorders
  - Concentration in Movement Sciences and Disorders
- Doctor of Physical Therapy (DPT)
- Transitional Doctor of Physical Therapy (DPT)
- Doctor of Science in Physical Therapy (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 can 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 20 programs are organized into five Departments:

- Department of Laboratory Sciences and Primary Care
  - Programs in Clinical 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.)
- Department of Rehabilitation Sciences
  - Program in Athletic Training (MAT)
  - Program in Occupational Therapy (MOT)
  - Programs in Physical Therapy (DPT, tDPT, Sc.D.)
  - Program in Rehabilitation Science (Ph.D.)
    - Concentration in Communication Sciences and Disorders
    - Concentration in Movement Sciences and Disorders
- Department of Healthcare Management and Leadership
  - Program in Healthcare Management (B.S.)
  - Program in Healthcare Administration (M.S.)
- Department of Clinical Counseling and Mental Health
  - Program in Rehabilitation Counseling (MRC)
  - Program in Clinical Rehabilitation Counseling (M.S.)
  - Program in Clinical Mental Health Counseling (M.S.)

- Program in Addiction Counseling (M.S.)

2018-2019 Academic Calendar

TTUHSC School of Health Professions

http://www.ttuhsc.edu/health-professions/calendar.aspx

FALL 2018

Orientation (CLS, SLHS, SLP, AuD, PhD RS)	August 21
First day of class	August 22
Last day of class	December 7
Last day of the semester	December 14
Final grades due for graduates by 12:00 noon	December 12
All final grades posted by 5:00 p.m.	December 17
First Day of Finals	December 10
CLS Certificate & 2nd Degree: First Day of Finals	December 3
Advance registration for next term begins for currently enrolled students	November 5
Last day for PhD candidates to defend dissertations	October 19
SHP Job Fair	October 16
SHP Endowed Lecture Series	September 12 - 14
TTUHSC IPE Symposium	TBD
Allied Health Professions Week	TBD

MSHA: 8 WEEK TERMS (MSHA ONLY)

	1st 8 Week Term	2nd 8 Week Term
First Day of Class	August 22	October 17
Last Day of Class	October 16	December 14
All final grades posted by 5:00 p.m.	October 22	December 17
Advance registration for current students	November 5	November 5

PAYMENT AND REFUNDS

Drop for Non-Payment of Tuition & Fees	September 10
Last day to withdraw from the University & receive a partial refund	September 19

ADD/DROP (changes in schedule) | WITHDRAWAL (dropping all courses)

Last day to register or withdraw from the University without a penalty	August 21

Add-drop Period (SHP Office only)	August 22 - September 7
Last day to add/drop	September 7
Last day to drop with an Automatic "W"	October 5
CLS Certificate & 2nd Degree: Last day to drop a course or withdraw	November 19
Last day to drop a course or withdraw from the University	December 3

DEADLINES RELATED TO GRADUATION

Detailed information: http://www.ttuhsc.edu/health-professions/

Final grades due for graduates by 12:00 noon	December 12
Official Health Sciences Center Diploma Date	December 15

CLINICAL/PRECEPTORSHIP/CLERKSHIP

MAT 1: Clinical Experience begins	August 5
MAT 2: Clinical Experience begins	August 5
MOT Fieldwork II: 2 begins	August 27
MOT Fieldwork II: 2 ends	November 16
DPT: Clinical Internship 1 begins	August 20
DPT: Clinical Internship 1 ends	October 12
DPT: Clinical Internship 2 begins	October 15
DPT: Clinical Internship 2 ends	December 7
PA: Clerkship 1 begins	August 13
PA: Clerkship 1 ends	September 21
PA: Clerkship 2 begins	September 24
PA: Clerkship 2 ends	November 2
PA: Clerkship 3 begins	November 5
PA: Clerkship 3 ends	December 14

HOLIDAYS AND VACATION DAYS

Labor Day (University Holiday)	September 3
Thanksgiving (University Holiday)	November 21 - 23

SPRING 2019

First day of class	January 14

Last day of class	May 3
Last day of the semester	May 10
Final grades due for graduates by 12:00 noon	May 8
All final grades posted by 5:00 p.m.	May 13
First Day of Finals	May 6
DPT Graduate Seminar Week	May 6 - 10
Advance registration for next term begins for currently enrolled students	April 8
Last day for PhD candidates to defend dissertations	March 29
CLS Cert & 2nd Degree: First Day of Finals	April 22

MSHA: 8 WEEK TERMS (MSHA ONLY)

	1st 8 Week Term	2nd 8 Week Term
First Day of Class	January 14	March 18
Last Day of Class	March 8	May 10
All final grades posted by 5:00 p.m.	March 11	May 13
Advance registration for current students	April 8	April 8

PAYMENT AND REFUNDS

Drop for Non-Payment of Tuition & Fees	January 31
Last day to withdraw from the University & receive a partial refund	February 11

ADD/DROP (changes in schedule) | WITHDRAWAL (dropping all courses)

Last day to register or withdraw from the University without a penalty	January 13
Add-drop Period (SHP Office only)	January 14 - 30
Last day to add/drop	January 30
Last day to drop with an Automatic "W"	February 25
CLS Certificate & 2nd Degree: Last day to drop a course or withdraw	April 15
Last day to drop a course or withdraw from the University	April 29

DEADLINES RELATED TO GRADUATION

Detailed information: http://www.ttuhsc.edu/health-professions/commencement/

Final grades due for graduates by 12:00 noon	May 8
Official Health Sciences Center Diploma Date	May 11
TTUHSC SHP Commencement	May 11

CLINICAL/PRECEPTORSHIP/CLERKSHIP

MAT 1/MAT 2: Clinical Experience begins	January 14
MAT 2: Clinical Immersion begins	April 7
MAT 2: Clinical Immersion ends	May 6
MOT 2 Fieldwork I: 3 begins	January 7
MOT 2 Fieldwork I: 3 ends	January 18
DPT: Clinical Internship 3 begins	January 7
DPT: Clinical Internship 3 ends	March 1
DPT: Clinical Internship 4 begins	March 11
DPT: Clinical Internship 4 ends	May 2
PA: Clerkship 4 begins	January 7
PA: Clerkship 4 ends	February 15
PA: Clerkship 5 begins	February 18
PA: Clerkship 5 ends	March 29
PA: Clerkship 6 begins	April 1
PA: Clerkship 6 ends	May 10
MP: Preceptorship begins	March 18
MP: Preceptorship ends	May 8
CLS Traditional: Preceptorship begins	January 2
CLS Traditional: Preceptorship ends	May 3

HOLIDAYS AND VACATION DAYS

Martin Luther King Jr. Day (University Holiday)	January 21
Spring Break	March 9 - 17

FULL SUMMER 2019

Orientation (PA, PT, AT, OT, SLP, MP, PhD RS)	May 28
First day of class	May 28
Last day of class	August 6
Last day of the semester	August 13
Final grades due for graduates by 12:00 noon	August 14
All final grades posted by 5:00 p.m.	August 19
First Day of Finals	August 7

MAT I: Last Day of Class	July 31
MAT I: Last Day of Semester	August 2
CLS Certificate & 2nd Degree: First Day of Finals	August 7
Advance registration for next term begins for currently enrolled students	June 3
Last day for PhD candidates to defend dissertations	June 24

PAYMENT AND REFUNDS

Drop for Non-Payment of Tuition & Fees	June 13
Last day to withdraw from the University & receive a partial refund	June 17

ADD/DROP (changes in schedule) | WITHDRAWAL (dropping all courses)

Last day to register or withdraw from the University without a penalty	May 27
Add-drop Period (SHP Office only)	May 28 - June 12
Last day to add/drop	June 12
Last day to drop with an Automatic "W"	June 25
Last day to drop a course or withdraw from the University	July 31

DEADLINES RELATED TO GRADUATION

Detailed information: http://www.ttuhsc.edu/health-professions/

Final grades due for graduates by 12:00 noon	August 14
Official Health Sciences Center Diploma Date	August 17

CLINICAL/PRECEPTORSHIP/CLERKSHIP

MOT Fieldwork II: 1 begins	May 27
MOT Fieldwork II: 1 ends	August 16
DPT: Clinical Internship 1 begins	July 15
DPT: Clinical Internship 1 ends	August 9
PA: Clerkship 7 begins	May 13
PA: Clerkship 7 ends	June 21
PA: Clerkship 8 begins	June 24
PA: Clerkship 8 ends	August 2
PA: Final Week	August 5 - 9
CLS Online: Preceptorship begins	May 20

CLS Online: Preceptorship ends	August 16

HOLIDAYS AND VACATION DAYS

Memorial Day (University Holiday)	May 27
Independence Day Holiday	July 4

SUMMER I 2019

First day of class	May 28
Last day of class	July 1
Last day of the semester	July 5
All final grades posted by 5:00 p.m.	July 8
First Day of Finals	July 2
MAT II: Last Day of Semester	July 3
Advance registration for next term begins for currently enrolled students	June 3

PAYMENT AND REFUNDS

Drop for Non-Payment of Tuition & Fees	June 13
Last day to withdraw from the University & receive a partial refund	June 17

ADD/DROP (changes in schedule) | WITHDRAWAL (dropping all courses)

Last day to register or withdraw from the University without a penalty	May 27
Add-drop Period (SHP Office only)	May 28 - 31
Last day to add/drop	May 31
Last day to drop with an Automatic "W"	June 11
Last day to drop a course or withdraw from the University	June 26

HOLIDAYS AND VACATION DAYS

Independence Day Holiday	July 4

SUMMER II 2019

First day of class	July 8
Last day of class	August 9
Last day of the semester	August 16

Final grades due for graduates by 12:00 noon	August 14
All final grades posted by 5:00 p.m.	August 19
First Day of Finals	August 12
Advance registration for next term begins for currently enrolled students	June 3

PAYMENT AND REFUNDS

Drop for Non-Payment of Tuition & Fees	July 12
Last day to withdraw from the University & receive a partial refund	July 26

ADD/DROP (changes in schedule) | WITHDRAWAL (dropping all courses)

Last day to register or withdraw from the University without a penalty	July 7
Add-drop Period (SHP Office only)	July 8 - 11
Last day to add/drop	July 11
Last day to drop with an Automatic "W"	July 22
Last day to drop a course or withdraw from the University	August 7

DEADLINES RELATED TO GRADUATION

Detailed information: http://www.ttuhsc.edu/health-professions/

Final grades due for graduates by 12:00 noon	August 14
Official Health Sciences Center Diploma Date	August 17

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 it's 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 per semester and part-time enrolled in 5 credit hours per semester. 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 66 transfer hours; 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 by four separate programs. These include:

1. Specified College Board (CB) Achievement Tests
2. Specified subject examinations of the CB College Level Examination Program (CLEP) (SAT Subject Tests)
3. CB 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 previous 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.com or 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 on 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 welcomes students in the IB program and will grant a minimum of 24 hours credit for an IB diploma completed with Higher or Standard Level exam scores of 4-7. 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 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.

Recommendations for Laptop Computers

Processor:	Intel or AMD processor, 2.0 GHz or greater
Operating System:	Windows 7 or later; Mac OSX10.8 or greater
Memory (RAM):	4 GB RAM or greater
Storage:	120 GB hard drive or greater
Network:	Built-in LAN and 802.11 Dual Band Wi-Fi
Optical Drive:	DVD+/-RW optical drive (optional)

*If the laptop does not have a built-in network port, an ethernet-to-usb adapter or ethernet-to-thunderbolt adapter will need to be purchased.

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. 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. Information regarding student grievances can be found at **https://www.ttuhsc.edu/student-services/grievances.aspx**. The TTUHSC Institutional Student Handbook may be obtained from the Office of Student Services (suite 2C400 - 806.743.2300), or online at **https://www.ttuhsc.edu/student-services/handbook.aspx**.

TTUHSC Title IX Training for Students and eCheckUp

On behalf of the Texas Tech University Health Sciences Center (TTUHSC), one of your first learning experiences is to complete two mandatory training courses: TTUHSC IX Training for Students and eCheckUp. TTUHSC Title IX Training for students emphasizes Title IX education and requirements (**http://www.ttuhsc.edu/title-ix/**). eCheckUp provides information on alcohol and substance abuse. Completing these trainings are critical steps on your journey toward a rewarding educational experience at TTUHSC.

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, students are required to purchase liability insurance coverage. A nominal yearly charge 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-test) 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 Services (**http://www.ttuhsc.edu/student-services/**).

Student Healthcare

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. Information

concerning student health services can be obtained from the TTUHSC Student Services Office (http://www.ttuhsc.edu/student-services/health.aspx).

Student Hospitalization Insurance Coverage

Students are required to have medical/hospitalization insurance coverage while enrolled as a student in the School of Health Professions. It is the student's responsibility to obtain and maintain medical/hospitalization insurance through the provider of their choice. TTUHSC offers such coverage. Information concerning medical/hospitalization insurance can be found at http://www.ttuhsc.edu/student-services/health.aspx.

Legal Services

Student Legal Services brings legal advice and guidance within the reach of students. Student Legal Services is staffed by three licensed attorneys, an administrative business assistant, law clerks, and student externs from the Texas Tech School of Law. Appointments are necessary to ensure correct placement with the appropriate attorney. The program's primary objectives are providing students with confidential legal advice on individual problems and establishing an educational office designed to inform students of their obligation, duties, and rights as defined by a system of law. Outreach presentations are available for student organizations and academic classes. Mediation services are also available.

The attorneys for students are able to represent students under limited circumstances; however, most cases are resolved through negotiation, advice, and proper direction. The office is dedicated to the concept of preventative law.

Contact: 307 Student Union, 806.742.3289

Alcohol/Drug Education & Prevention

Consistent with its mission, the School of Health Professions and TTUHSC will enforce the provisions of the "Texas Controlled Substance Act" and the "Texas Dangerous Drugs Act." The School of Health Professions and TTUHSC are committed to helping students in health professions make responsible and informed decisions regarding the misuse of drugs and alcohol. The School encourages all students to make use of the education programs offered by the Student Counseling Center at Texas Tech University and/or the Program of Assistance for Students.

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. Students who need special accommodations should be proactive and contact TTUHSC Office of Student Services, (806) 743.2300, immediately after accepting a class position. 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/student-services/ada/default.aspx.

TTUHSC SHP International Student Travel

Eligibility: Students must be eligible to participate in the international program at the time of travel. Contact the School of Health Professions Office of Admissions and Student Affairs for eligibility requirements. If a student has received a Complaint of Misconduct and the complaint has not been resolved prior to the travel date, the student is not eligible to participate in that specific trip. Each student shall verify eligibility requirements with the Program Director and Office of Global Health prior to participation.

Cancellation/Refunds: TTUHSC and the School of Health Professions are not responsible for reimbursement for financial losses as a result of a student canceling travel or losing eligibility to participate in the international program. These financial losses may include

but are not limited to airline fares, payment to country host, or any other expenses incurred for student international 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 transcript notation of the International Health Elective (zero credits).

Diversity Statement

The core foundational value of including the diverse cultures, lifestyles, personal beliefs, and ideas of all those we serve-and serve alongside-provides a positive impact on the health of our regional, national, and global societies. As we pursue excellence in healthcare education, research, and patient care, we will be ever mindful of the strength that is gained through unity in diversity.

Tobacco-Free Environment

TTUHSC prohibits tobacco use in a TTUHSC facility or anywhere on the grounds of any TTUHSC facility to include a leased facility/space. Violations of this policy are subject to disciplinary action as stipulated in HSC Operating Policy and Procedure 70.31, as appropriate. For more information regarding the Tobacco-Free Environment or the Tobacco Intervention Program please visit the TTUHSC web site at www.ttuhsc.edu.

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 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 57 officers and 40 civilian employees. 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 student or student organizations. Students must meet all financial responsibilities due 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

PROGRAM	APPLICATION OPEN	DEADLINE	SEMESTER(S) PROGRAM STARTS
Rehabilitation Sciences (Ph.D.)	August 1 August 1 August 1	February 1 March 15 October 15	Summer Fall Spring
Physical Therapy (Sc.D.)	August 1 January 1	March 15 June 1	Summer Fall
Physical Therapy (DPT)	July 6	October 1	Summer
Athletic Training (MAT)	June 29	February 1	Summer
Occupational Therapy (MOT)	July	November 15	Summer
Physician Assistant Studies (MPAS)	April 26	October 1	Summer
Molecular Pathology (MSMP)	September 1	February 1	Summer
Clinical Laboratory Science (CLS)	September 1	May 1	Fall
Clinical Laboratory Science, Second Degree B.S.	September 1	May 1	Fall
Clinical Laboratory Science, Post-Baccalaureate Certficate	September 1	May 1	Fall

Audiology (Au.D.)	September 1	Early: November 1 Traditional: February 1	Fall
Speech-Language Pathology (SLP)	September 1	January 15	Fall
Speech, Language & Hearing Sciences (SLHS)	December 1	March 1	Fall
Speech, Language & Hearing Sciences, Second Degree B.S.	December 1	March 1	Fall
Healthcare Administration (MSHA)	January 1 January 1 August 1	April 1 July 1 December 1	Summer Fall Spring
Healthcare Management (BSHM)	January 1 January 1 August 1	May 1 July 1 December 1	Summer Fall Spring
Health Informatics and Data Analytics, Post-Baccalaureate Certificate	January 1 January 1 August 1	April 1 July 1 December 1	Summer Fall Spring
Health Systems Policy and Management, Post-Baccalaureate Certificate	January 1 January 1 August 1	April 1 July 1 December 1	Summer Fall Spring
Addiction Counseling (MSAC)	January 1 August 1	June 1 November 1	Fall Spring
Clinical Mental Health Counseling (MSMH)	January 1 August 1	June 1 November 1	Fall Spring
Clinical Rehabilitation Counseling (MSCR)	January 1 August 1	June 1 November 1	Fall Spring

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 web site 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 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

State Authorization for Distance Education

Texas Tech University Health Sciences Center (TTUHSC) has been approved by the Texas Higher Edu- cation Coordinating Board to participate in the National Council for State Authorization Reciprocity Agreements (NC-SARA). NC-SARA is a voluntary, regional approach to state oversight of postsecondary distance education. There are currently three states that are not NC-SARA members. TTUHSC continues to work with these states in order to comply with their regulatory requirements authorizing TTUHSC to deliver online education to students in these states:

California – Allowed for TTUHSC Distance Education Students

TTUHSC is exempt from authorization to offer online education in California.

Florida – Allowed for TTUHSC Distance Education Students

TTUHSC does not conduct educational activity in the state of Florida that requires authorization.

Massachusetts – Allowed for TTUHSC Distance Education Students

TTUHSC does not conduct educational activity in the commonwealth of Massachusetts that requires authorization.

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 implicit or explicit agreement to conduct 100% online learning activities to 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 include approval by State Boards – such as Board of Nursing, Physical Therapy, etc. For TTUHSC School of Health Professions (SHP) and School of Nursing (SON) Licensing Boards, **click here**.

Student Complaints: **http://www.ttuhsc.edu/distance-learning/complaints.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 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 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:

- Adult Tetanus, Diphtheria, Acellular Pertussis (Tdap)
- Two Doses of Measles, Mumps, Rubella, or titers proving immunity
- Two Doses of the Varicella Vaccine or a titer proving immunity. TTUHSC does not accept history of disease
- Three shot series of Hepatitis B, or titers proving immunity
- PPD-TB Skin Test (within 3 months of matriculation date, must be renewed annually)
- Meningococcal (MCV) Adults 22 years of age or younger (within past 5 years)
- Selected programs may have additional requirements based on current CDC (Center for Disease Control) requirements/recommendations for health-care providers.

It is the student's responsibility to obtain and maintain proof of all required immunizations. The cost of immunizations are also the student's responsibility.

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 on 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 for 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.

SHP Readmission Application

Students who fail to register or who leave school during a 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 health.professions@ttuhsc.edu.

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 a 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.

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.

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. A student may not have more than 6 hours remaining after the spring commencement date to be eligible to submit an application for graduation and participate in commencement ceremonies.

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 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 $200 per semester credit hour. Non-resident and foreign students will be charged tuition at a rate of $615 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.

Traditional Tuition & Fees Table*

Fall or Spring Semester

Full-time student enrolled in 15 hours

Tuition

Resident Undergraduate	$3,000.00
Resident Graduate	$3,750.00
Non-Resident Undergraduate	$9,225.00
Non-Resident Graduate	$9,975.00
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, AT, CLS & MP)	$132.00
Data Management Fee (PT)	$160.00
Microscope Usage Fee (CLS Juniors & Seniors annually)	$50.00
CLS (Traditional Program) **Preceptorship Fee**	$100.00
CLS (Online) **Preceptorship Fee**	$325.00
CLS (Traditional/Online) **Clinical Simulation Fee**	$750.00
MP Simulation Fee	$750.00
MP Preceptorship Fee	$350.00
Calibration Fee (Dept. of SLHS only)	$25.00-$100.00

Medical Services Fee	$70.00
Screening & Immunization Fee (Fall & Spring)	$42.50
Recreation Center Fee	$75.00
Identification Card Fee	$6.00
Informational Technology Fee	$225.00
Student Athletic Fee	$59.20
Record Processing Fee	$15.00
Synergistic Center Fee (Student Union Fee)	$5.00
International Education Fee	$4.00
Academic Department Instructional Assessment Fee	$300.00
Graduation Fee	$75.00
Educational Technology Fee	$82.50
Learning Resources Fair	$90.00
Total Tuition & Fees for Semester (estimate)	
Resident Undergraduate	$4,302.70
Resident Graduate	$4,870.70
Non-Resident Undergraduate	$10,527.70
Non-Resident Graduate	$11,095.70

Summer Session

Duration of 10 weeks or longer

Full-time student enrolled in 7 hours

Tuition	
Resident Undergraduate	$1,400.00
Resident Graduate	$1,750.00
Non-Resident Undergraduate	$4,305.00
Non-Resident Graduate	$4,655.00
SHP Anatomy Fee (AT, OT, PA & PT only)	$500
Calibration Fee (Dept. of SLHS only)	$25.00-$50.00
Student Services Fee	$132.00
Medical Services Fee	$70.00
Recreation Center Fee	$75.00

Identification Card Fee	$6.00
Informational Technology Fee	$105.00
Record Processing Fee	$15.00
Synergistic Center Fee (Student Union Fee)	$5.00
International Education Fee	$4.00
Academic Department Instructional Assessment Fee (max of $300)	$300.00
Educational Technology Fee	$82.50
Learning Resources Fee	$42.00
Total Tuition & Fees for Summer Semester (estimate)	
Resident Undergraduate	$2,736.50
Resident Graduate	$3,086.50
Non-Resident Undergraduate	$5,641.50
Non-Resident Graduate	$5,991.50

**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 get 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) Healthcare Management

Out-of-state students enrolled in a distance learning program pay a fee of $485 per credit hour, which is $1,455 per three hour course. A Record Processing Fee of $15 will also be assessed each semester. Texas residents pay tuition at a rate of $200 per semester credit hour, which is $600 per three hour course, and appropriate fees.

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 $570 per credit hour, which is $1,710 per three hour course. A Record Processing Fee of $15 will also be assessed each semester. Texas residents pay tuition of $250 per credit hour, which is $750 per three hour course, and appropriate fees.

Addiction Counseling
Clinical Rehabilitation Counseling
Clinical Mental Health Counseling

Out-of-state students enrolled in a distance learning program pay a fee of $570 per credit hour, which is $1,710 per three hour course. A Record Processing Fee of $15 will also be assessed each semester. Texas residents pay tuition of $250 per credit hour, which is $750 per three hour course, and appropriate fees.

Doctor of Science in Physical Therapy
Transitional Doctor of Physical Therapy Pathway

Out-of-state students enrolled in a distance learning program pay a fee of $710 per credit hour, which is $2130 per three hour course. A Record Processing Fee of $15 will also be assessed each semester. Texas residents pay tuition of $250 per credit hour, which is $750 per three hour course, and appropriate fees.

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*
	Before the 1st class day	100%

Duration of 10 weeks or longer	*First 5 class days*	*80%*
	Second 5 class days	70%
	Third 5 class days	*50%*
	Fourth 5 class days	25%
	21st class day or later	*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 course work at TTUHSC.

Financial Aid

Grants and loans are available through the TTUHSC Financial Aid Office. All students interested in receiving grants and/or loans must complete a Free Application for Federal Student Aid (FAFSA) and include TTUHSC's school code on the FAFSA (016024). The online FAFSA application is available at www.fafsa.ed.gov.

NOTE: Financial aid offers from other colleges and universities, including TTU, are not transferable to TTUHSC. For further

information regarding financial aid, please contact:

TTUHSC Financial Aid Office 3601 4th Street, Suite 2C 400

Lubbock, TX 79430

806-743-3025

financial.aid@ttuhsc.edu

http://www.ttuhsc.edu/financial-aid/types.aspx

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)

The program is seeking accreditation by the Council for Accreditation of Counseling and Related Educational Programs (CACREP).

1001 North Fairfax Street, Suite 510
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 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 health 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 40%. Since the inception of the Department of Clinical Counseling and Mental Health over 87% 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, videotape/audiotape, 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 requirements for practicum and clinical internships as set forth by relevant accrediting and certifying organizations. In order to meet these requirements, Addiction Counseling students will be 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.

Mission Statement

The mission of the Master of Science in Addiction Counseling 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 addiction counselors to work competently and ethically through the mastery of evidence-based counseling practices. Our focus centers on understanding the unique needs of persons with substance use and behavioral health disorders across their lifespans in the community, workplace, 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 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:

- 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.
- 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.
- 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 to prepare entry level addiction counselors who meet national certification standards.
- Working closely with the public and private counseling communities to ensure well-trained graduates who 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 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, an overall grade point average GPA of 2.7 on a 4.0 scale for all college credit is required. Graduate Record Examination (GRE) or Millers Analogies Test (M.A.T.) scores are NOT required for entry into the MSAC 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, a letter from the applicant outlining their rationale for applying to the program, 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 accepted up to three weeks prior to the start of the semester.

MSAC Curriculum

CORE COURSEWORK

Courses		Credit Hours
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 5306	Treatment Planning and Case Management	3
HPAC 5307	Multicultural Counseling	3
HPAC 5308	Research and Statistics	3
HPAC 5309	Group Counseling	3
HPAC 5311	Addictions	3
HPAC 5312	Assessment	3
HPAC 5313	Micro Counseling	3
		Total Hours = 36

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 5333	Professional Development in Addiction Counseling	3
		Total Hours = 12

CLINICAL EXPERIENCE

Courses		Credit Hours
HPAC 5314	Practicum	3
HPAC 6001	Internship	3-9
		Total Hours = 6-12

ELECTIVES*

Elective credits are optional and not required for graduation.

Courses		Credit Hours
HPAC 5111	Independent Study	1
HPAC 5310	Special Topics in Addiction Counseling	3

Master of Science in Addiction Counseling (MSAC) Course Descriptions

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, professional accreditation and licensure requirements, the role of professional organizations in counseling, consultation with counselors and related professionals, counselor supervision, and self-care strategies. Course materials and learning activities foster the development of critical thinking skills in the areas of professional ethics and ethical decision making, multicultural and social justice awareness and competencies, and professional advocacy. This course also focuses on the laws and regulations governing the practice of counseling and the American Counseling Association (ACA) professional code of ethics.

HPAC 5302 Counseling Theories (3:3:0,O) Introduction to the principles of behavior, personality, and human development. Exploration of individual, group, and family counseling theories and practices as they apply to persons with disabilities.

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) The theories, roles and techniques in the development of employment of persons with disabilities are explored in depth. From a career perspective, topic areas include job development, 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-V. Focusing on process, students will learn the descriptive criteria, etiology, assessment, diagnosis, identification of diversity issues, identification of common psychotropic treatments of these disorders, and develop a strong understanding of the major diagnostic categories.

HPAC 5306 Treatment Planning and Case Management (3:3:0,O) Review of the case management process, including case findings, service co-ordination and client advocacy. Identification and development of treatment planning strategies and caseload management.

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 5309 Group Counseling (3:3:0,O) This course is designed to prepare counselors to become knowledgeable and skillful in using theoretical constructs of group counseling including individuals with disabilities. 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. Students must have passed HPCR/HPMC/HPAC/HPRC 5302 or equivalent before enrolling.

HPAC 5310 Special Topics in Addiction Counseling (3:3:0,O) Specialized seminars or courses in specific areas of addiction counseling as identified by faculty, students or the community.

HPAC 5311 Addictions (3:3:0,O) A thorough review of addictions including models of addiction, assessment, treatment, and interactions between addiction and rehabilitation services. Common topics include specific issues of prevalence, culture, and political interactions.

HPAC 5312 Assessment (3:3:0,O) This course focuses on both the tasks of rehabilitation and mental health assessment. Common topics include a comprehensive study of commonly used vocational assessment tools as well as the DSM-V.

HPAC 5313 Micro Counseling (3:3:0,O) Exploration, development, and practice of micro-skills, the essential building blocks of counseling. Training allows for observed development and peer practice in a laboratory setting. Students must have passed HPRC/HPCR/HPMH/HPAC 5302 or equivalent before enrolling.

HPAC 5314 Practicum (3:3:7,H) Supervised counseling practicum fostering professional growth, knowledge skills development, and awareness into the counseling process and issues that affect service delivery. Includes both in-class and on-site experiences in settings that facilitate the development of basic counseling and practice skills. This course may be repeated if the 100 hour requirement is not met. Completion of this course is a prerequisite for the internship phase of the program. Students must have passed HPRC 5311/HPCR/HPMH/HPAC 5313 before enrolling.

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 5333 Professional Development in Addiction Counseling (3:3:0,O) This course serves as the capstone experience for the addiction counseling student. Students are expected to demonstrate both theoretical and skill competence prior to graduation. This course reviews and assesses the theoretical and applied skills, as well as attitudes of the addiction counselor trainee. Topics focus on the work the student has completed throughout the program. This course should be taken concurrently with HPRC 5312/HPCR/HPMH/HPAC 5314.

HPAC 6000 Internship Completion (1-6:1-6:1-40,F) A variable credit course used for completion of core required internship hours after HPRC 5313-15/HPCR/HPMH/HPAC 5315-17 have been completed.

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 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.

Master of Science in Clinical Mental Health Counseling (MSMH)

The program will seek accreditation by the Council for Accreditation of Counseling and Related Educational Programs (CACREP).

1001 North Fairfax Street, Suite 510
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, videotape/audiotape, 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.

Mission Statement

The mission of the Master of Science in Clinical Mental Health Counseling 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 Mental Health Counselors to work competently and ethically through the mastery of evidence-based counseling practices. Our focus centers on understanding the unique needs of persons with mental health concerns across their lifespans in the community, workplace, 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. 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:

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 who 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 develop 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 accredited 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 Spring semester must submit an application by October 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, an overall grade point average GPA of 2.7 on a 4.0 scale for most recent 60 credits of undergraduate credit or any graduate study credit is required. 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 are accepted up to three weeks prior to the start of the semester.

MSMH Curriculum

Course		Credit Hours
HPMC 5301	Introduction to Counseling & Ethical	3
HPMC 5302	Counseling Theories	3
HPMC 5303	Human Growth & Development	3
HPMC 5304	Career Counseling	3
HPMC 5305	Psychopathology & Diagnosis	3
HPMC 5306	Treatment Planning & Case Management	3
HPMC 5307	Multicultural Counseling	3
HPMC 5308	Research & Statistics	3

HPMC 5309	Group Counseling	3
HPMC 5311	Addictions	3
HPMC 5312	Assessment	3
HPMC 5313	Micro Counseling	3
		Total Hours = 36

MAJOR COURSEWORK

Course		Credit Hours
HPMC 5330	Foundations of Rehabilitation Counseling & Ethical Development	3
HPMC 5331	Crisis Counseling	3
HPMC 5332	Psycho-pharmacology for Mental Health	3
HPMC 5333	Professional Development in Mental Health Counseling	3
		Total Hours = 12

PRACTICAL EXPERIENCE

Course		Credit Hours
HPMC 5314	Practicum	3
HPMC 5315	Internship I	3
HPMC 5316	Internship II	3
HPMC 5317	Internship III	3
		Total Hours = 12

ELECTIVES*

**Elective credits are optional and not required for graduation.*

Course		Credit Hours
HPMC 5111	Independent Study	1
HPMC 5310	Special Topics	3
HPMC 5345	Special Topics in Mental Health Counseling	3

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

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, professional accreditation and licensure requirements, the role of professional organizations in counseling, consultation with counselors and related professionals, counselor supervision, and self-care strategies. Course materials and learning activities foster the development of critical thinking skills in the areas of professional ethics and ethical decision making, multicultural and social justice awareness and competencies, and professional advocacy. This course also focuses on the laws and regulations governing the practice of counseling and the American Counseling Association (ACA) professional code of ethics.

HPMC 5302 Counseling Theories (3:3:0,O) Introduction to the principles of behavior, personality, and human development. Exploration of individual, group, and family counseling theories and practices as they apply to persons with disabilities.

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) The theories, roles and techniques in the development of employment of persons with disabilities are explored in depth. From a career perspective, topic areas include job development, 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-V. Focusing on process, students will learn the descriptive criteria, etiology, assessment, diagnosis, identification of diversity issues, identification of common psychotropic treatments of these disorders, and develop a strong understanding of the major diagnostic categories.

HPMC 5306 Treatment Planning and Case Management (3:3:0,O) Review of the case management process, including case findings, service coordination and client advocacy. Identification and development of treatment planning strategies and caseload management.

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 5309 Group Counseling (3:3:0,O) This course is designed to prepare counselors to become knowledgeable and skillful in using theoretical constructs of group counseling including individuals with disabilities. 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. Students must have passed HPCR/HPMC/HPAC/HPRC 5302 or equivalent before enrolling.

HPMC 5310 Special Topics in Clinical Mental Health Counseling (3:3:0,O) Specialized seminars or courses in specific areas of addiction counseling as identified by faculty, students or the community.

HPMC 5311 Addictions (3:3:0,O) A thorough review of addictions including models of addiction, assessment, treatment, and interactions between addiction and rehabilitation services. Common topics include specific issues of prevalence, culture, and political interactions.

HPMC 5312 Assessment (3:3:0,O) This course focuses on both the tasks of rehabilitation and mental health assessment. Common topics include a comprehensive study of commonly used vocational assessment tools as well as the DSM-V.

HPMC 5313 Micro Counseling (3:3:0,O) Exploration, development, and practice of micro-skills, the essential building blocks of counseling. Training allows for observed development and peer practice in a laboratory setting. Students must have passed HPRC/HPCR/HPMH/HPAC 5302 or equivalent before enrolling.

HPMC 5314 Practicum (3:3:7,H) Supervised counseling practicum fostering professional growth, knowledge skills development, and awareness into the counseling process and issues that affect service delivery. Includes both in-class and on-site experiences in settings that facilitate the development of basic counseling and practice skills. This course may be repeated if the 100 hour requirement is not met. Completion of this course is a prerequisite for the internship phase of the program. Students must have passed HPRC 5311/HPCR/HPMH/HPAC 5313 before enrolling.

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 5333 Professional Development in Clinical Mental Health Counseling (3:3:0,O) This course serves as the capstone experience for the clinical rehabilitation counseling student. Students are expected to demonstrate both theoretical and skill competence prior to graduation. This course reviews and assesses the theoretical and applied skills, as well as attitudes of the addiction counselor trainee. Topics focus on the work the student has completed throughout the program. This course should be taken concurrently with HPRC 5312/HPCR/HPMH/HPAC 5314.

HPMC 6000 Internship Completion (1-6:1-6:1-40,F) A variable credit course used for completion of core required internship hours after HPRC 5313-15/HPCR/HPMC/HPAC 5315-17 have been completed.

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 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.

Master of Science in Clinical Rehabilitation Counseling (MSCR)

The program is an accredited rehabilitation counseling program by the Council for Accreditation of Counseling & Related Educational Programs (CACREP)

1001 North Fairfax Street, Suite 510
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 & coordinate services for people with a wide range of physical & 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 guals 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.

The Master of Science in Clinical Rehabilitation Counseling (MSCR) program is a distance education, graduate program designed to provide comprehensive training for the counseling field. Our mission is to provide high quality instruction to prepare students for a rewarding career in the counseling specialty of clinical rehabilitation counseling. Clinical education is an important part of counselor education. All students are required to complete a Practicum and Internship at a qualified site under the supervision of a qualified supervisor. The MSCR curriculum has an emphasis on telehealth. This model of distance-based service provision is a cutting edge technique growing in practice and acceptance nationwide. Students will be eligible for a certificate in telehealth upon graduation.

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.

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.

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 who 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 develop a life-long commitment to learning professionalism continuing education throughout their career.

Certification and Licensure

Students who graduate from the MSCR program are eligible to sit for the Certified Rehabilitation Counselor (CRC) exam, and the National Counselor Exam (NCE). Graduates are also eligible to apply to become a Licensed Professional Counselor in and outside the state of Texas.

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 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, an overall grade point average GPA of 2.7 on a 4.0 scale for all college credit is required. 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 will 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 are accepted up to three weeks prior to the start of the semester.

MSCR Curriculum

CORE COURSEWORK

Courses		Credit Hours
HPCR 5301	Introduction to Counseling & Ethical	3
HPCR 5302	Counseling Theories	3
HPCR 5303	Human Growth & Development	3
HPCR 5304	Career Counseling	3

HPCR 5305	Psychopathology & Diagnosis	3
HPCR 5306	Treatment Planning & Case Management	3
HPCR 5307	Multicultural Counseling	3
HPCR 5308	Research & Statistics	3
HPCR 5309	Group Counseling	3
HPCR 5311	Addictions	3
HPCR 5312	Assessment	3
HPCR 5313	Micro Counseling	3
		Total Hours = 36

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 5333	Professional Development in Clinical Rehabilitation Counseling	3
		Total Hours = 12

CLINICAL EXPERIENCE

Course		Credit Hours
HPCR 5314	Practicum	3
HPCR 6001	Internship Completion	3-9
		Total Hours = 6-12

ELECTIVES*

**Elective credits are optional and are not required for graduation.*

Courses	Credit Hours

HPCR 5111	Independent Study	1
HPCR 5310	Special Topics	3

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

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, professional accreditation and licensure requirements, the role of professional organizations in counseling, consultation with counselors and related professionals, counselor supervision, and self-care strategies. Course materials and learning activities foster the development of critical thinking skills in the areas of professional ethics and ethical decision making, multicultural and social justice awareness and competencies, and professional advocacy. This course also focuses on the laws and regulations governing the practice of counseling and the American Counseling Association (ACA) professional code of ethics.

HPCR 5302 Counseling Theories (3:3:0,O) Introduction to the principles of behavior, personality, and human development. Exploration of individual, group, and family counseling theories and practices as they apply to persons with disabilities.

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) The theories, roles and techniques in the development of employment of persons with disabilities are explored in depth. From a career perspective, topic areas include job development, 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-V. Focusing on process, students will learn the descriptive criteria, etiology, assessment, diagnosis, identification of diversity issues, identification of common psychotropic treatments of these disorders, and develop a strong understanding of the major diagnostic categories.

HPCR 5306 Treatment Planning and Case Management (3:3:0,O) Review of the case management process, including case finding, service co-ordination and client advocacy. Identification and development of treatment planning strategies and caseload management.

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 5309 Group Counseling (3:3:0,O) This course is designed to prepare counselors to become knowledgeable and skillful in using theoretical constructs of group counseling including individuals with disabilities. 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. Students must have passed HPCR/HPMH/HPAC/HPRC 5302 or equivalent before enrolling.

HPCR 5310 Special Topics (3:3:0,O) Specialized seminars of courses in specific areas of counseling as identified by faculty, students or the community.

HPCR 5311 Addictions (3:3:0,O) A thorough review of addictions including models of addiction, assessment, treatment, and interactions between addiction and rehabilitation services. Common topics include specific issues of prevalence, culture, and political interactions.

HPCR 5312 Assessment (3:3:0,O) This course focuses on both the tasks of rehabilitation and mental health assessment. Common topics include a comprehensive study of commonly used vocational assessment tools as well as the DSM-V.

HPCR 5313 Micro Counseling (3:3:2,O) Exploration, development, and practice of micro-skills, the essential building blocks of counseling. Training allows for observed development and peer practice in a laboratory setting. Students must have passed HPRC/HPCR/HPMH/HPAC 5302 or equivalent before enrolling.

HPCR 5314 Practicum (3:3:7,H) Supervised counseling practicum fostering professional growth, knowledge skills development, and awareness into the counseling process and issues that affect service delivery. Includes both in-class and on-site experiences in settings that facilitate the development of basic counseling and practice skills. This course may be repeated if the 100 hour requirement is not met. Completion of this course is a prerequisite for the internship phase of the program. Students must have passed HPRC 5311/HPCR/HPMH/HPAC 5313 before enrolling.

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 5333 Professional Development in Clinical Rehabilitation Counseling (3:3:0,O) This course services as the capstone experience for the clinical rehabilitation counseling student. Students are expected to demonstrate both theoretical and skill competence prior to graduation. This course

reviews and assesses the theoretical and applied skills, as well as attitudes of the rehabilitation counselor trainee. Topics focus on the work the student has completed throughout the program. The course should be taken concurrently with HPRC5312/HPCR/HPMC/HPAC 5314.

HPCR 6000 Internship Completion (1-6:1-6:1-40,F) A variable credit course used for completion of core required internship hours after HPRC 5313-15/HPCR/HPMH/HPAC 5315-17 have been completed.

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 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.

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.

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

Students entering the Healthcare Professional Concentration must have an Associate of Applied Science (AAS) degree and certification, licensure or registration in one of the health science concentrations listed above. Other healthcare clinical concentrations will also be considered. The AAS may provide up to 48 Technical Credit Hours for transfer to the BSHM program.

The Healthcare Professional Concentration curriculum is composed of:

- Texas Common Core, 42 hours. Information on the Texas Common Core curriculum can be found at https://www.ttuhsc.edu/health-professions/admissions/texas-common-core.aspx.
- BSHM Healthcare Professional Concentration Core Courses, 27 hours
- Clinical Discipline Specific Advanced Case Study, 3 hours
- Technical/Approved Health Professions Credits, 48 hours

Executive Management Concentration

Students who do not have an AAS 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/Approved Credits, 24 hours. Technical credits must be pre-approved by the academic advisor and must be completed prior to enrollment in the Case Study courses.

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 and Fall and on 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: An Associate of Applied Science (AAS) degree 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 effective summer 2019.

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 effective summer 2019. 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 http://www.ttuhsc.edu/health-professions/.

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.

Bachelor of Science in Healthcare Management (BSHM) Master of Science in Healthcare Administration (MSHA) Dual Track

The Master of Science in Healthcare Administration (MSHA) track within the Bachelor of Science in Healthcare Management (BSHM) program will encourage students to continue their education by allowing them to take certain courses within the MSHA program that

will count towards both the BSHM degree and the MSHA degree.

Qualifications

A candidate for the MSHA program must have completed at least 12 hours in the BSHM program and have a minimum overall GPA of 3.0 on a 4.0 GPA scale. The candidate must complete the admission application for the MSHA program and will be admitted on a contingent basis pending completion of the BSHM degree. Admission will remain contingent until the student has successfully completed the BSHM degree with a cumulative GPA of 2.7 or better.

BSHM/MSHA Dual Track Curriculum

Students will take 6 hours in the MSHA program that will count towards both the BSHM and MSHA degree requirements.

COURSES

HPHA 5306 Healthcare Delivery System
**This course will replace HPHM 4311 Principles of Health Systems Policy & Management*

HPHA 5322 Quality, Patient Safety & Risk Management
**This course will replace HPHM 4314 Quality, Patient Safety, & Risk Management in Healthcare*

Bachelor of Science in Healthcare Management (BSHM) Health Systems Policy & Management Graduate Certificate (CRHS) Dual Track

The Health Systems Policy and Management Graduate Certificate (CRHS) track within the Bachelor of Science in Healthcare Management (BSHM) program will encourage students to continue their education by allowing them to take certain courses within the CRHS program that will count towards both the BSHM degree and the CRHS graduate certificate.

Qualifications

A candidate for the CRHS program must have completed at least 12 hours in the BSHM program and have a minimum overall GPA of 3.0 on a 4.0 GPA scale. The candidate must complete the admission application for the CRHS program and will be admitted on a contingent basis pending completion of the BSHM degree. Admission will remain contingent until the student has successfully completed the BSHM degree with a cumulative GPA of 2.7 or better.

BSHM/CRHS Dual Track Curriculum

Students will take 3 hours in the CRHS program that will count towards both the BSHM degree and the CRHS graduate certificate requirements.

COURSE

HPHA 5306 Healthcare Delivery System
**This course will replace HPHM 4311 Principles of Health Systems Policy & Management*

Bachelor of Science in Healthcare Management (BSHM) Health Informatics & Data Analytics Graduate Certificate (CRHI) Dual Track

The Health Informatics & Data Analytics Graduate Certificate (CRHI) track within the Bachelor of Science in Healthcare Management (BSHM) program will encourage students to continue their education by allowing them to take certain courses within the CRHI program that will count towards both the BSHM degree and the CRHI graduate certificate.

Qualifications

A candidate for the CRHI program must have completed at least 12 hours in the BSHM program and have a minimum overall GPA of 3.0 on a 4.0 GPA scale. The candidate must complete the admission application for the CRHI program and will be admitted on a contingent basis pending completion of the BSHM degree. Admission will remain contingent until the student has successfully completed the BSHM degree with a cumulative GPA of 2.7 or better.

BSHM/CRHI Dual Track Curriculum

Students will take 3 hours in the CRHI program that will count towards both the BSHM degree and the CRHI graduate certificate requirements.

COURSE	
HPHA 5306	Healthcare Delivery System

**This course will replace HPHM 4311 Principles of Health Systems Policy & Management*

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 their career goals following graduation.

Technical Credits – Healthcare Professional Concentration

Students entering the program with training in a healthcare concentration (e.g., clinical laboratory technicians, nursing, respiratory care, medical imaging, medical information management, EMT/ paramedic, occupational therapy assistant, physical therapy assistant) 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.

Technical Credits - Executive Management Concentration

Students who lack training in a clinical concentration may complete BSHM elective courses beyond the required 12 credits, and apply these elective courses to the technical credit portion of the degree plan. Technical credit requirements may be fulfilled by completing courses in accounting, finance, marketing, business administration, and economics. These courses must be pre-approved by the student's academic advisor.

A grade of a “C” or better is required for all technical credit coursework.

All technical credits must be completed prior to enrollment in HPHM 4477.

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

(Students Technical Area of Concentration or Executive Management Concentration)

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 for the Executive Management Concentration

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 4333 Fundamentals of Population Health

HPHM 4335 Healthcare Operations & Supply Chain Management

HPHM 4336 Fundamentals of Epidemiology & Applied Biostatistics

Bachelor of Science in Healthcare Management (BSHM) Course Descriptions

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 Organizational Behavior (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 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 4335 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.

HPHM 4336 Fundamentals of Epidemiology and Applied Biostatistics (3:3:0,O) This course introduces the field of epidemiology, it's history, methods and contribution with the emphasis to help future administrators of health services in planning and delivery of health services through data-driven evidence-based management practices.

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. Prerequisites include: HPHM 4302, 4303, 4304, 4311, 4313, 4314, 4317, 4318 and 4334.

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 (Executive) (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 (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.

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 fully online, 12-semester hour program.

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 and 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 one of the following qualifications:

1. Bachelor's degree from an accredited university with a minimum overall GPA of 2.7 or minimum overall GPA of 2.7 in the last 60 semester hours of courses, OR
2. Bachelor's degree from an accredited university with a minimum overall GPA of 2.5, AND at least three years of professional or executive work experience, OR
3. Bachelor's degree from an accredited university with a minimum overall GPA of 2.5, AND at least 9 semester hours of graduate education from an accredited university with a minimum GPA of 3.0, OR
4. Graduate degree from an accredited university with a minimum GPA of 2.7.

The following are considered in the admissions process:

- All official college transcripts
- Acceptable grade point average
- Professional healthcare or executive experience

Applications may be submitted at anytime; however, applications are considered approximately 3 months prior to the beginning of each term. 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 certificate 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

HPHA 5306	Healthcare Delivery System
HPHA 5309	Healthcare Research Methods & Statistics
HPHA 5311	Healthcare Finance

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

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 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 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 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 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 fully online, 12-semester hour program.

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 and 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 one of the following qualifications:

1. Bachelor's degree from an accredited university with a minimum overall GPA of 2.7 or minimum overall GPA of 2.7 in the last 60 semester hours of courses, OR
2. Bachelor's degree from an accredited university with a minimum overall GPA of 2.5, AND at least three years of professional or executive work experience, OR
3. Bachelor's degree from an accredited university with a minimum overall GPA of 2.5, AND at least 9 semester hours of graduate education from an accredited university with a minimum GPA of 3.0, OR
4. Graduate degree from an accredited university with a minimum GPA of 2.7.

The following are considered in the admissions process:

- All official college transcripts
- Acceptable grade point average
- Professional healthcare or executive experience

Applications may be submitted at anytime; however, applications are considered approximately 3 months prior to the beginning of each term. 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 certificate 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

HPHA 5306	Healthcare Delivery System
HPHA 5310	Health Law & Ethics
HPHA 5312	Strategic Planning & Marketing in Healthcare

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

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 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 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.

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 distance-based, 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 and 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 one of the following qualifications:

1. Bachelor's degree from an accredited university with a minimum overall GPA of 2.7 or minimum overall GPA of 2.7 in the last 60 semester hours of courses, OR
2. Bachelor's degree from an accredited university with a minimum overall GPA of 2.5, AND at least three years of professional or executive work experience, OR
3. Bachelor's degree from an accredited university with a minimum overall GPA of 2.5, AND at least 9 semester hours of graduate education from an accredited university with a minimum GPA of 3.0, OR
4. Graduate degree from an accredited university with a minimum GPA of 2.7.

The following are considered in the admissions process:

- All official college transcripts
- Acceptable grade point average
- Professional healthcare or executive experience

Applications may be submitted at any time; however, applications are considered approximately 3 months prior to the beginning of each term. 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, should 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 5316	Independent Study
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

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

Master of Science in Healthcare Administration (MSHA) Course Descriptions

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 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.

Bachelor of Science in Clinical Laboratory Science (CLS)

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 Clinical Laboratory Science (medical technology) analyze patient specimens for indications of disease. Results of these tests are used by the physician in confirming the patient diagnosis and in prescribing therapy. Academic preparation for a career in clinical 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 clinical laboratory science. The professional program combines didactic instruction with student laboratory experience, followed by clinical practice in affiliated laboratories.

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

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

Special Features

Candidates seeking a degree in clinical laboratory science have the option of pursuing the Bachelor of Science in clinical laboratory science tract offered at the Lubbock campus or the second degree online tract for students who already hold a Bachelor of Science degree. A third tract is available for students who wish to earn a certificate in clinical 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 an additional state licensure (California, Florida, Georgia, Hawaii, Louisiana, Mon- tana, 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

To successfully complete didactic, laboratory, and clinical/fieldwork/preceptorship portions in the CLS programs, an individual must meet the following essential functions:

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 table top, 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 Clinical 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 CLS 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 application to the professional phase of the Clinical 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 required courses.

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 Clinical 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 clinical 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

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

GPA: Minimum 3.0 overall & science GPA (as calculated by CASPA)

GRE

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.

Bachelor of Science in Clinical Laboratory Science (CLS) Master of Science in Healthcare Administration (MSHA) Dual Track

The Master of Science in Healthcare Administration (MSHA) track within the clinical laboratory science program (CLS) 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 CLS program and have been accepted into the CLS 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 CLS program.

Bachelor of Science in Clinical 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
HPCS 3110	Professional Issues in CLS	1
HPCS 3400	Clinical Chemistry I	4
HPCS 3405	Clinical Bacteriology I	4

HPCS 3455	Principles of Immunology	4
		Total Hours = 13

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

SECOND YEAR (SENIORS)

Summer II Semester Courses		Credit Hours
HPCS 3310	Urinalysis & Body Fluids	3
HPCS 4300	Applied Research & Statistics	3
HPCS 4420	Laboratory Management	4
HPCS 4455	Parasitology/Mycology	4
		Total Hours = 14

Fall Semester Courses		Credit Hours
HPCS 3465	Immunohematology	4
HPCS 4185	Clinical Correlations	1
HPCS 4480	Hematology II	4
HPCS 4640	Clinical Preceptorship I	6
		Total Hours = 15

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

HPCS 4842	Clinical Preceptorship III	8
		Total Hours = 16

Total Hours Required (Standard Option)	Credit Hours
Prerequisites	58
Professional Curriculum	74
	Total Hours = 132

Total Hours Required (Pre-Med Option)	Credit Hours
Prerequisites	69
Professional Curriculum	74
	Total Hours = 143

Total Hours Required (Pre-PA Option)	Credit Hours
Prerequisites	58
Professional Curriculum	74
	Total Hours = 132

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.

CLS/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 27 hours of core requirements within the MSHA program, 7 credit hours of requirements within the Clinical Laboratory Science program, and 3 credit hours within the Molecular Pathology 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 one of the following electives:

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

CLS CORE COURSES

HPCS 4420 Laboratory Management

HPCS 4300 Applied Statistics & Research

MP CORE COURSE

HPMP 5301 Management of the Molecular Clinical Laboratory

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

THIRD YEAR (1st year in CLS Program)

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

Spring Semester Courses		Credit Hours
HPCS 4305	Molecular Diagnostics	3
HPCS 3450	Clinical Chemistry II	4
HPCS 3460	Clinical Bacteriology II	4

HPCS 3470	Hematology I	4
		Total Hours = 15

Apply to the TTUHSC MSHA Program (April 1st Deadline).

FOURTH YEAR (2nd year in CLS Program)

Summer II Semester Courses		Credit Hours
HPCS 3110	Urinalysis & Body Fluids	3
*HPCS 4300	Applied Research & Statistics	3
*HPCS 4420	Laboratory Management	4
HPCS 4455	Parasitology/Mycology	4
		Total Hours = 14

Summer Semester Courses		Credit Hours
HPHA 5307	Human Resources Management	3
		Total Hours = 3

Fall Semester Courses		Credit Hours
HPCS 4185	Clinical Correlations	1
HPCS 3465	Immunohematology I	4
HPCS 4480	Hematology II	4
HPCS 4640	Clinical Preceptorship	6
		Total Hours = 15

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

Complete Requirements for BSCLS.

FIFTH YEAR (MSHA courses & one MP course)

Summer Semester Courses		Credit Hours
HPHA 5306	Healthcare Delivery System	3
HPHA 5310	Health Law & Ethics	3
HPHA 5312	Strategic Planning & Marketing	3
		Total Hours = 9

Fall Semester Courses		Credit Hours
HPHA 5311	Healthcare Finance (Fall I or II)	3
HPHA 5313	Healthcare Economics & Policy (Fall I or II)	3
HPHA 5330	Health Informatics & Data Analytics (Fall I or II)	3
		Total Hours = 9

Spring Semester Courses		Credit Hours
*HPMP 5301	Management of the Molecular Lab	3
HPHA 5314	Healthcare Administration Capstone (Spring I or II)	3
And choose one of the following (to be taken in the Spring I or II term):		
HPHA 5318	Organizational Behavior in Healthcare	3
HPHA 5320	Health Insurance & Reimbursement	3
HPHA 5321	Healthcare Operations & Supply Management	3
HPHA 5322	Quality, Patient Safety & Risk Management	3
		Total Hours = 9

*Dual Credit Courses

Failure to comply with the CLS/MSHA dual degree plan will result in the loss of dual credits for HPCS 4420 and HPCS 4300. Examples of noncompliance include failure to maintain a minimum GPA of 3.0 (CLS classes), setting out a semester, or not taking the allotted number of hours.

Bachelor of Science in Clinical Laboratory Science (CLS) Course Descriptions

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

HPCS 3310 Urinalysis and Body Fluids I (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.

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

HPCS 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.

HPCS 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.

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

HPCS 3465 Immunohematology I (4:3:4,F) Prerequisite: HPCS 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.

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

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

HPCS 4185 Clinical Correlations (1:1:0,H) Prerequisites: HPCS 3400, 3405, 3450, 3455, 3460, 3465, 3470, 4480. Review of current topics and case studies in clinical laboratory science.

HPCS 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.

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

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

HPCS 4455 Clinical Parasitology and Mycology (4:4:6,F) Prerequisite: HPCS 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.

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

HPCS 4640 Clinical Preceptorship I (6:0:40,H) A course designed for the senior student to begin preparation for supervised clinical practicum in an affiliated clinical laboratory.

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

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

Second Degree Bachelor of Science in Clinical Laboratory Science

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

This is a 12-month online, second degree tract in clinical 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 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 2.5 GPA based on a 4.0 scale and a 2.5 science GPA on a 4.0 scale.

Prerequisite Course Requirements for CLS 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 Clinical Laboratory Science Curriculum

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

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

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

Second Degree Bachelor of Science in Clinical Laboratory Science Course Descriptions

HPCS 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.

HPCS 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.

HPCS 4146 Advanced Microbiology (1:1:0,O) Prerequisite: HPCS 4345. 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.

HPCS 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.

HPCS 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.

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

HPCS 4242 Advanced Hematology (2:2:0,O) Prerequisite: HPCS 4341. A concise review of hematological disorders. The diagnostic implications and laboratory diagnosis of anemias, polycythemias, leukemias, and lymphomas is included.

HPCS 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.

HPCS 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.

HPCS 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.

HPCS 4348 Foundations of Immunohematology (3:3:0,O) Prerequisite: HPCS 4147. 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.

HPCS 4450 Clinical Lab 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.

HPCS 4451 Clinical Lab Practice II (4:0:48,F) Prerequisite: HPCS 4450. 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.

HPCS 4752 Clinical Preceptorship (7:0:40,F) Prerequisites: HPCS 4341, 4242, 4144, 4147, 4348, 4345, 4146, 4450, 4451, 4343, 4145. An advanced supervised clinical practicum in an affiliated clinical laboratory.

Post Baccalaureate Certificate in Clinical Laboratory Science

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

This is a 12-month online, certificate tract in clinical 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 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 2.5 GPA based on a 4.0 scale and a 2.5 science GPA on a 4.0 scale.

Prerequisite Course Requirements for CLS 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 Clinical Laboratory Science/Medical Technology/Technologist

http://www.ttuhsc.edu/health-professions/documents/second-degree-postbac-clinical-laboratory-science/CLS_ED_Gainful_Employment_2016.pdf

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 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 Clinical Laboratory Science, NOT solely Laboratory Certificate as we cannot separate the survey as it is anonymous. Total N for both Second Degree & Post Baccalaureate Certificate programs for 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 Clinical Laboratory Science Curriculum

Fall Semester Courses	Credit Hours

HPCS 4147	Clinical Immunology	1
HPCS 4341	Foundations of Hemastasis	3
HPCS 4343	Foundations of Clinical Chemistry	3
HPCS 4345	Foundations of Clinical Microbiology	3
HPCS 4450	Clinical Laboratory Practice I	4
		Total Hours = 13

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

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

Post Baccalaureate Certificate in Clinical Laboratory Science Course Descriptions

HPCS 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.

HPCS 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.

HPCS 4146 Advanced Microbiology (1:1:0,O) Prerequisite: HPCS 4345. 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.

HPCS 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.

HPCS 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.

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

HPCS 4242 Advanced Hematology (2:2:0,O) Prerequisite: HPCS 4341. A concise review of hematological disorders. The diagnostic implications and laboratory diagnosis of anemias, polycythemias, leukemias, and lymphomas is included.

HPCS 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.

HPCS 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.

HPCS 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.

HPCS 4348 Foundations of Immunohematology (3:3:0,O) Prerequisite: HPCS 4147. 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.

HPCS 4450 Clinical Lab 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.

HPCS 4451 Clinical Lab Practice II (4:0:48,F) Prerequisite: HPCS 4450. 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.

HPCS 4752 Clinical Preceptorship (7:0:40,F) Prerequisites: HPCS 4341, 4242, 4144, 4147, 4348, 4345, 4146, 4450, 4451, 4343, 4145. 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 clinical diagnostic laboratory entering a new phase of development and expansion. For the first time in the history of the diagnostic laboratory, molecular pathology is extending the range of information available to physicians, research scientists, and other health professions. Biotechnology, in all its forms, 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 (BOC) has developed a national certification examination for the Certified Laboratory Technologist (ASCP) 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.

Essential Functions

A student admitted to the Molecular Pathology program must meet basic and essential requirements. To successfully complete didactic, laboratory, and clinical/fieldwork/preceptorship portions in the MP program, an individual must meet the following essential functions:

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 table top, 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)

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 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 Clinical Laboratory Sciences 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).

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

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 5400	Research Design & Statistical Analysis	4
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	Pathophysiology/Clinical Laboratory	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 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 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 essays, writing a scientific article, critical evaluation of scientific literature, 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 5400 Research Design and Statistical Analysis (4:6:4,F) Introduction to the process of basic and clinical research design. Critical evaluation of the scientific literature will be a focus, including writing a literature review paper on a topic in molecular pathology. Introduction to descriptive, parametric, and non-parametric statistics. Includes laboratory component covering fundamental laboratory skills, proper equipment usage, and laboratory math.

HPMP 5406 Molecular Biology of the Cell (4:6:0,F) 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 Pathophysiology (4:4:0,H) Presentation of the basis of human disease with regard to the major determinants of disease in human organ systems with discussion of normal anatomy and physiology. 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.

Master of Physician Assistant Studies (PA)

The Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) has granted Accreditation-Continued status to the Texas Tech University Health Sciences Center 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 2023. The review date is contingent upon continued compliance with the Accreditation Standards and ARC-PA policy.

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, preform 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 a variety of medical settings.

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 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 for the 2018-2019 admissions cycle will open in late April. 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 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.

The selection process for the TTUHSC PA Program is highly competitive. Applicants must meet the minimum prerequisite requirements. 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 PA program including previous achievement and academic potential, character, motivation and understanding of the profession, and life experience. In accordance with the mission and goals of the PA program, special consideration may be given to the following applicants: Residents from the 108 counties in the service area of TTUHSC;

Veterans; Residents from underserved populations; or Residents from economically or environmentally disadvantaged backgrounds. Invitations to interview at the TTUHSC PA Program in Midland are extended to the most competitive applicants. Completion of prerequisite coursework, strength of the academic record, experiences, essays, letters of recommendation, and interviews are all strongly considered in the admissions process.

Prerequisite Course Requirements

Required Course	Semester Hours
Genetics	3
Microbiology	4
Human Anatomy & Physiology (human preferred)	8
Organic Chemistry or Biochemistry	3-4
Psychology	3
Statistics	3

PA Curriculum

*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.

FIRST YEAR

First Summer Semester Courses		Credit Hours
HPPA 5191	Professional Development I	1
HPPA 5301	Clinical Laboratory	3
HPPA 5306	Pharmacology I	3
HPPA 5406	Physiology	4
HPPA 5501	Human Anatomy	5
		Total Hours = 16

First Fall Semester Courses		Credit Hours
HPPA 5202	Clinical Decision Making I	2
HPPA 5304	Clinical Medicine I	3

HPPA 5307	Pharmacology II	3
HPPA 5308	Neuroscience	3
HPPA 5392	Professional Development II	3
HPPA 5502	Physical Examination	5
HPPA 6306	Medical Psychology	3
		Total Hours = 18

First Spring Semester Courses		Credit Hours
HPPA 5193	Professional Development III	1
HPPA 5203	Clinical Decision Making II	2
HPPA 5309	Pediatrics	3
HPPA 5313	Clinical Medicine IV	3
HPPA 5403	Clinical Medicine II	4
HPPA 5411	Cardiology	4
HPPA 5412	Clinical Medicine III	4
		Total Hours = 21

SECOND YEAR

Second Summer Semester Courses		Credit Hours
HPPA 5194	Professional Development IV	1
HPPA 6203	Clinical Decision Making III	2
HPPA 6301	Clinical Medicine VI	3
HPPA 6302	Cultural Competency for the Physician Assistant	3
HPPA 6501	Clinical Medicine V	5
		Total Hours = 14

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 = 48

**Clinical Study (6 week rotations)*

Throughout the Clerkship Year Course		Credit Hours
HPPA 6404	Master Project Track	4
		Total Hours = 4

Master of Physician Assistant Studies (PA) Course Descriptions

HPPA 5191 Professional Development I (1:1:0,F) This professional development sequence of courses spans the didactic program curriculum and is intended to provide a foundation for development of the PA role to care for diverse populations in the healthcare system. This first semester focuses on the history of the profession, professionalism, and working as part of a health care delivery team.

HPPA 5193 Professional Development III (1:1:0,H) The professional development sequence of courses spans the entire didactic program curriculum and is intended to provide a foundation for development of the PA role to care for diverse populations in the healthcare system. The third in this four course sequence includes and examination of alternative, integrative and preventive approaches to health care, and a focus on inter-professional practice, utilizing the IPPH 1002 Foundations for Inter-professional Collaborative modules, this semester.

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 development of the PA role to care for diverse populations in the healthcare system. Offered during the final semester of the didactic curriculum, this course focuses on health care disparities and provider sensitivity to cultural diversity, socioeconomic differences, and their impact on health and wellness. Topics in preparation for clinical practice regarding legal and practice-based issues will be discussed including: electronic data management, rules regulations, confidentiality, certification and licensure, and safety.

HPPA 5201 Medical Ethics & Jurisprudence (2:2:0,F) This course examines prominent ethical and legal issues in healthcare delivery. Students are engaged in discussion of ethical dilemmas relevant to clinical practice and introduced to the unique relationship of the healthcare provider and patient. The course also examines quality assurance and risk management, legal issues, practice statutes and rules regulating physician assistant practice in Texas.

HPPA 5202 Clinical Decision Making I (2:2:0,F) This course is intended to expand student's knowledge base gained in the clinical medicine course series and facilitate critical thinking and clinical diagnostic skills. The student will develop differential diagnoses, evaluate clinical data presented, and demonstrate the ability to succinctly present a working diagnosis, treatment/intervention plan and prognosis.

HPPA 5203 Clinical Decision Making II (2:2:0,F) This course is intended to expand student's knowledge base gained in the clinical medicine course series and facilitate critical thinking and clinical diagnostic skills. The student will develop differential diagnoses, evaluate clinical data presented, and demonstrate the ability to succinctly present a working diagnosis, treatment/intervention plan and prognosis.

HPPA 5301 Clinical Laboratory (3:3:0,F) This lecture series describes the significance, ordering and interpretation of laboratory studies routinely ordered in the clinical setting. Concepts of microbiology, including immunology and infectious disease will be examined. Case studies are incorporated into the teaching process.

HPPA 5302 Pathology (3:3:0,F) This lecture series integrates normal human physiology with the pathological basis of disease. It illustrates abnormal cellular physiologic function in disease conditions, introduces major concepts of cellular pathophysiology and demonstrates abnormal physiologic function in disease conditions. The principles of cellular pathophysiology are applied to organ system pathology and the study of representative and important diseases. The lectures examine the function of major organ systems in addressing the pathological basis for disease. This series discusses the molecular and genetic basis for selected diseases.

HPPA 5304 Clinical Medicine I (3:3:0,F) This lecture series surveys the acute and chronic disease states frequently encountered in the primary care setting. Students are challenged to correlate the subjective signs and symptoms with physical examination findings and clinical pathophysiology in

developing critical thinking and a problem oriented approach to diagnosis and treatment. The family medicine relevance to EENT, infectious disease, dermatology, hematology /oncology and alternative /complementary medicine and the important aspects of acute, chronic, continuing and rehabilitative care are explored. Referral of patients to other healthcare providers or agencies is discussed. Case studies and patient education are incorporated into the teaching process.

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 Neuroscience (3:3:0,F) This lecture series details the human nervous system, with emphasis on the recognition of neuroanatomical arrangement. The course explores neurophysiology and concepts of neurochemistry.

HPPA 5309 Pediatrics (3:3:0,F) This lecture series surveys the acute and chronic disease states frequently encountered in the primary care setting as well as normal child growth and development, childhood immunizations, disease prevention, health maintenance and neonatology. Pediatric, patient physical examination is demonstrated and practiced. Students are challenged to correlate the subjective signs and symptoms with physical examination findings and clinical pathophysiology in developing critical thinking and a problem oriented approach to diagnosis and treatment. Referral of patients to other healthcare providers or agencies is discussed. Case studies and patient education are incorporated into the teaching process. This series discusses the genetic and molecular basis for selected diseases.

HPPA 5310 Medical Interviewing (3:2:2,F) This course focuses on the “how to” aspects of patient interviewing, communication skills, and counseling skills. It stresses attributes of respect for self and others, adherence to the concepts of privilege and confidentiality in communicating with patients and a commitment to the patient’s welfare. Class sessions include lectures, interviewing labs and role-playing exercises. Small groups meet on a regularly scheduled basis each week to discuss and “actively” practice interviewing skills. This practice may include interviewing other students, simulated patients, or real patients in a medical setting.

HPPA 5313 Clinical Medicine IV (3:3:0,F) This lecture series surveys the acute and chronic disease states frequently encountered in the primary care setting. Students are challenged to correlate the subjective signs and symptoms with physical examination findings and clinical pathophysiology in developing critical thinking and a problem oriented approach to diagnosis and treatment. The family medicine relevance to genitourinary, reproductive (including family planning) and endocrinology processes including acute, chronic, continuing, rehabilitative care are explored. Referral of patients to other healthcare providers or agencies is discussed. Case studies and patient education are incorporated into the teaching process. This series discusses the genetic and molecular basis for selected diseases.

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 development of the PA role to care for diverse populations in the healthcare system. This second course in the series focuses on Medical Ethics and the physician assistant responsibilities in the area of public/population health and the practice of preventative medicine. The organizational and economic elements of a systems-based practice are examined focusing on cost-effective and efficient healthcare, case management, risk management, coding, billing, reimbursement, error prevention, patient safety, and quality improvement.

HPPA 5403 Clinical Medicine II (4:4:0,F) This lecture series examines the complex disease states frequently encountered in the adult internal medicine setting. Students are challenged to correlate the subjective signs and symptoms with physical examination findings and clinical pathophysiology in developing critical thinking and a problem oriented approach to diagnosis and treatment. The approach to problems in pulmonology and gastroenterology are explored including the important aspects acute, chronic, continuing and rehabilitative care. The role of proper nutrition for health and disease prevention is discussed. Referral of patients to other healthcare providers or agencies is discussed. The fundamentals of radiology are taught and students evaluate imaging studies. Case studies and patient education are incorporated into the teaching process. This series discusses the genetic and molecular basis for selected diseases.

HPPA 5406 Physiology (4:4:0,F) This lecture series investigates human physiology through a detailed explanation of the functions and activities of bodily processes as related to healthcare. It discusses the fundamental principles of cellular physiology, considers the important concepts necessary for understanding the integrated cellular function of the human body and develops the explanation of human physiology as relevant to the health professional. The class sessions assimilate an approach to major organ systems and develop important concepts and principles necessary for understanding the integrated function of major organs systems of the human body in a collaborative learning setting, utilizing a variety of teaching methods.

HPPA 5411 Cardiology (4:3:1,F) This lecture series examines the complex disease states frequently encountered in the adult internal medicine setting. Students are challenged to correlate the subjective signs and symptoms with physical examination findings and clinical pathophysiology in developing a problem oriented approach to diagnosis and treatment. The approach to problems in cardiology and EKG interpretation is explored. The course is taught utilizing a hybrid approach where traditional face-to-face lectures are delivered on-line and “hands-on” learning modules are incorporated utilizing case studies and patient simulation to enhance the learning experience and develop critical thinking skills.

HPPA 5412 Clinical Medicine III (4:3:1,F) This lecture series examines the complex Orthopedic and Rheumatology disease states frequently encountered in the primary care medicine setting. Students are challenged to correlate the subjective signs and symptoms with physical examination findings and clinical pathophysiology in developing critical thinking and a problem oriented approach to diagnosis and treatment. Referral of patients to other healthcare providers or agencies is discussed. The approach to problems in Orthopedic and Rheumatology disease processes including acute, chronic, continuing, rehabilitative care is explored. Case studies and patient education are incorporated into the teaching process.

HPPA 5501 Human Anatomy (5:6:10,H) This lecture / laboratory series encompasses a regional study of the gross morphological features of the human body emphasizing functional anatomy. A portion of the laboratory experience involves computer-assisted learning.

HPPA 5502 Physical Examination I (5:3:2,F) This is a lecture/laboratory series in which the adult patient physical examination is demonstrated and practiced. Students learn and apply the techniques of a comprehensive physical examination with the proper use of diagnostic instruments. The laboratory experience utilizes students acting as patients, other simulated patients and real patients in a long term care facility.

HPPA 6203 Clinical Decision Making III (2:2:0,F) This course is intended to expand student's knowledge base gained in the clinical medicine course series and facilitate critical thinking and clinical diagnostic skills. The student will develop differential diagnoses, evaluate clinical data presented, and demonstrate the ability to succinctly present a working diagnosis, treatment/intervention plan and prognosis.

HPPA 6301 Clinical Medicine VI (3:3:0,F) This lecture series surveys the acute and chronic disease states frequently encountered in the primary care setting. Students are challenged to correlate the subjective signs and symptoms with physical examination findings and clinical pathophysiology in developing critical thinking and a problem oriented approach to diagnosis and treatment. The family medicine relevance to the geriatrics population, neurology, nephrology, and speech and hearing disorders are addressed. Referral to patients to other healthcare providers and agencies is discussed. Case studies and patient education are incorporated into the teaching process.

HPPA 6302 Cultural Competency for Physician Assistants (3:3:0,O) 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 6306 Medical Psychology (3:3:0,F) This lecture series analyzes acute and chronic psychiatric diseases frequently encountered in primary care clinical practice. It also explores personality development, child development, normative responses to stress, psychosomatic manifestations of illness and injury, sexuality, responses to death and dying and basic counseling techniques. Adherence to the concepts of privilege and confidentiality in communicating with patients and a commitment to the patient's welfare is stressed.

HPPA 6404 Master Project Track (4:0:4,F) This course is taught during the end of rotation days held at the completion of each clerkship and includes a research and writing project. The basics of biomedical research are explored prior to the writing phase. Students are instructed on the techniques necessary to search and interpret the medical literature and its application to patient care. Students prepare and submit a manuscript for evaluation. The document must be informative, established from published evidence based research and stress current and operational knowledge of new medical findings. Throughout the clinical year during grand rounds at the end of each clinical rotation, the students are instructed and monitored in the stages of developing a text suitable for publication.

HPPA 6501 Clinical Medicine V (5:4:2,F) This lecture series explores specialized and tertiary healthcare. Students learn the importance of the relationship between primary care practice and specialty practices. Areas of study include medical specialties, surgical specialties, and emergency medicine. Technical healthcare in sophisticated, research and teaching hospitals is evaluated. This course prepares the student for clinical clerkships. Discussions address appropriate protocol, behavior and dress within the clinical setting. Weekly workshops enable students to learn and perform procedures that are essential to clinical practice. Students perform histories and physical examinations and develop further case presentation skills. Case studies and patient education are incorporated into the teaching process.

HPPA 6601 Family Medicine Clerkship (6:0:40,F) This clerkship provides experience with common diseases and chronic illnesses in the family practice setting and is composed of one six-week rotation. 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 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 and is composed of one six week rotation. The 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 a six-week clinical experience in the care of prenatal and gynecologic patients. Training will emphasize the examination of the female patient with focus on the most common gynecologic problems and their diagnostic assessment, the formulation of appropriate treatment plans, the utilization of preventive medicine modalities and the evaluation and education of the pre-natal 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 and is composed of one six week rotation. 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 and is composed of one six week rotation. 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)

HPPA 6607 Psychiatry Clerkship (6:0:40,F) The six-week Psychiatry clerkship provides experience with common acute and chronic psychiatric diseases and illnesses in both the outpatient and inpatient settings. The student learns about and interacts with public and private treatment facilities for substance abusers and their affiliated support groups, local public counseling agencies, and state psychiatric facilities

HPPA 6608 Surgery Clerkship (6:0:40,F) The six-week clerkship in surgery general provides experience in the presentation and treatment of surgical disease and illness. This rotation allows the PA student to experience the approach to and the management of the surgical patient in the pre-operative, intra-operative, and postoperative phase of care.

Master of Athletic Training (MAT)

This program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE).

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The AT Profession

In 1990 the American Medical Association recognized athletic training as an allied health profession. Athletic trainers (ATs) are "health care professionals who render service or treatment, under the direction of or in collaboration with a physician, in accordance with their education and training and the states' statues, rules and regulations. As a part of the health care team, services provided by ATs include injury and illness prevention, wellness promotion and education, emergent care, examination and clinical diagnosis, therapeutic intervention, and rehabilitation of injuries and medical conditions" as defined by the Athletic Training Strategic Alliance (**https://www.nata.org/about/athletic-training/athletic-training-glossary**). 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

In July 2000, the Master of Athletic Training program at TTUHSC received notification from the Texas Higher Education Coordinating Board (THECB) that TTUHSC had been granted approval to offer the Master of Athletic Training degree beginning in the Fall of 2000. With THECB approval the Master of Athletic Training program began working toward accreditation by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). The MAT program was granted CAAHEP accreditation in January 2004. As of July 1, 2006 all athletic training education programs (including the MAT program) are accredited by CAATE. The MAT program received the maximum (10 year) continuing accreditation by CAATE in 2009.

Educational reform in the field of athletic training and the needs of the West Texas area have prompted the development of an innovative, modern educational program in the School of Health Professions at Texas Tech University Health Sciences Center. The Master of Athletic Training degree program is a 60-semester credit hour, two-year lock step graduate program providing comprehensive exposure to the field of Athletic Training. Classroom, clinical laboratory, and clinical experiences are integrated throughout the professional curriculum. Settings for clinical experiences include colleges, high schools, outpatient rehabilitation clinics, as well as physicians' offices. By providing clinical experience early in professional education, students are able to integrate classroom and clinical skills. Students must pass a criminal background check in order to participate in clinical experiences. The program is housed on the Lubbock campus within the TTUHSC system. Upon graduation from the MAT program students will be eligible to sit for both the BOC and State licensure examinations, which vary by state. Individuals must pass these examinations before they are eligible to practice Athletic Training. Successful completion of the professional curriculum leads to a Master of Athletic Training degree.

Classes are limited to 25-30 full-time students to ensure optimal student/instructor ratios and to enable each student to receive comprehensive instructional and clinical experience. Students entering the program should have a laptop computer and be familiar

with basic internet skills, including the use of e-mail, searching the World Wide Web, and using a basic word processing package.

Essential Functions

The Athletic Training Program (MAT) at Texas Tech University Health Sciences Center (TTUHSC) and the athletic training profession in general is a rigorous and intense program that places specific professional, intellectual, physical, psychological, 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 patients. The essential functions 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 abilities an athletic trainer needs for safe practice and patient safety are those described below, in the National Athletic Trainers' Association (NATA) Educational Competencies, and in the Board of Certification, Inc. (BOC) Practice Analysis. The following abilities and expectations must be met by all students admitted to the Athletic Training Program, with or without reasonable accommodation.

Compliance with the program's essential functions 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 they have:

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 normal patient.
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 communicate effectively (both orally and in writing) at a level consistent with competent professional practice.
4. The ability to record the 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, preceptors, colleagues, coaches, athletes 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 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 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 written); 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 Code of Ethics (http://www.nata.org/codeofethics); NATA Education Council Guideline Technical Standards for Entry-level Athletic Training Education (http://www.nata.org/education/educational-programs/technical-standards); Boston University Technical Standards (http://www.bu.edu/sargent/academics/programs/athletic-training/bachelor-of-science-in-athletic-training/technical-standards-and-reasonable-accommodations/); Whitworth College Technical Standards (https://www.whitworth.edu/Academic/Programs/AthleticTraining/TechnicalStandards.htm); University of Arkansas for Medical Sciences Department of EMS Paramedic Policy Manual p.11-12 (*http://healthprofessions.uams.edu/files/2018/01/policy-manual-paramedic-2017-18.pdf*).

The list of common essential functions is not intended to be an all-inclusive list as to all activities that could be required of an athletic trainer to provide safe patient care in any environment. Any physical or intellectual disabilities must not pose a threat to the safety of the student, faculty, patients or other health care workers.

Accepted applicants to the MAT program are required to verify that they understand and meet these essential functions, or that they believe that with reasonable accommodations they can meet the standards.

The 504 coordinator in the TTUHSC Office of Student Services will evaluate a student who states he or she could meet the program's essential functions with accommodation(s) and confirm that the stated condition qualifies as a disability under applicable laws. If a

student states he or she can meet the essential functions but needs accommodation, then the University will determine whether it agrees that the student can meet the essential functions with reasonable accommodation; this includes a review of whether the accommodations requested are reasonable, 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 essential functions/technical standards form and to update their responses on this form if their health status changes. Students who require accommodation to meet the essential functions/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 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 very competitive.

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

- Completion of the Athletic Training Centralized Application Service (ATCAS) application and TTUHSC School of Health Professions supplemental 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 Essential Functions/Technical Standards form
- Verification of all required immunizations

All AT applications are submitted through ATCAS and the School of Health Professions supplemental 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 February 1st (the application must be verified by ATCAS and the TTUHSC SHP supplemental application must be complete). Please note there is a lag in submitting your application to ATCAS and the application being verified. Applicants will need to plan accordingly. It is in the best interest of the applicant to apply as early as possible (December 1st). It is the applicant's responsibility to ensure all application materials have been received by ATCAS and 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*** .

Required Course	Semester Hours
Human Anatomy (or A&P I)	3-4
Human Physiology (or A&P II)	3-4
Exercise Physiology	3
Kinesiology/Biomechanics	3
Statistics (Tests & Measurement is not accepted)	3
Nutrition	3
	Total Hours = 18-20

*Recommended Courses: Physics with lab, Chemistry with lab, and 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

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 5203	Functional Anatomy	2
HPAT 5222	Introduction to Clinical Education	2
HPAT 5500	Human Anatomy	5
		Total Hours = 9

Fall Semester Courses		Credit Hours
HPAT 5200	Research Methods	2
HPAT 5201	Clinical Experience I	2
HPAT 5215	Therapeutic Modalities	2
HPAT 5217	Pathophysiology	2
HPAT 5303	Management & Prevention of Injuries	3
HPAT 5305	Biomechanics	3
		Total Hours = 14

Spring Semester Courses		Credit Hours
HPAT 5206	Clinical Experience II	2
HPAT 5223	Special Populations & Concerns for the Athletic Trainer	2
HPAT 5234	Pharmacology	2
HPAT 5312	Introduction to Therapeutic Exercise & Strength Training	3
HPAT 5324	Lower Extremity Evaluation	3
		Total Hours = 12

SECOND YEAR

Summer I Semester Courses		Credit Hours
HPAT 5120	Research Directed Study I	1
HPAT 5210	Head, Neck & Spine Evaluation	2
Optional	*Practicum or Independent Study Options*	5
		Total Hours = 3

Fall Semester Courses		Credit Hours
HPAT 5225	Clinical Experience III	2
HPAT 5302	Therapeutic Exercise	3
HPAT 5323	Management & Identification of General Medical Conditions	3
HPAT 5401	Upper Extremity Evaluation	4
		Total Hours = 12

Spring Semester Courses		Credit Hours
HPAT 5130	Athletic Training Review	1
HPAT 5214	Seminar in Athletic Training	2
HPAT 5227	Current Medical Diagnosis & Treatment	2
HPAT 5228	Clinical Experience IV	2
HPAT 5322	Athletic Training Administration	3
		Total Hours = 10
		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 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 5120 Research Directed Study (1:4:0,F) This course prepares students to critically appraise peer-reviewed scientific literature and apply evidence to athletic training practice. The primary goal of the course is for students to become confident consumers of scientific literature.

HPAT 5130 Athletic Training Review (1:2:0,F) This course is devoted to discussion of current issues and advanced techniques in athletic training/sports medicine. co-requisite HPAT 5228

HPAT 5200 Research Methods (2:2.5:0,F) This course prepares students to develop the knowledge and skills needed for evidence-based athletic training practice. Students will learn to apply all steps involved in evidence-based practice to their clinical practice by integrating evidence, patient values, and clinical experience.

HPAT 5201 Clinical Experience I (2:0:17-27,F) A supervised educational experience in athletic training under the supervision of a certified athletic trainer or other healthcare professional. The objective is to obtain hands-on experiences in a variety of athletic training settings including intercollegiate, high school, and clinical. The experience includes a one-week immersion experience. *Contact hours may vary based on the clinical site where the student is assigned for the semester.

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 5206 Clinical Experience II (2:1:17-27,F) A supervised educational experience in athletic training under the supervision of a certified athletic trainer or other healthcare professional. The objective is to obtain hands-on experiences in a variety of athletic training settings including intercollegiate, high school, and clinical. This experience includes a five-week immersion experience. * Contact hours may vary based on the clinical site where the student is assigned for the semester.

HPAT 5210 Head, Neck & Spine Evaluation (2:8:8,F) Theory, principles, clinical applications and literature review associated with athletic training evaluation, assessment, and management of musculoskeletal conditions. The focus will be within the head, neck, and spine.

HPAT 5214 Seminar in Athletic Training (2:3:4,F) Graduate seminar focusing on current events in athletic training and preparation for BOC certification and Texas Licensure athletic training credentialing exams. Psychosocial concerns and issues will be discussed. BOC Role Delineation Study. Co-Requisite HPAT 5228.

HPAT 5215 Therapeutic Modalities (2:1.5:3,F) Therapeutic modalities will emphasize the use of physical agents, biofeedback and expand upon the theory, principles, pertinent literature and clinical applications associated with patient management.

HPAT 5217 Pathophysiology (2:2.5:0,F) Pathophysiology will introduce basic concepts of cell biology, physiology, pathophysiology and the inflammatory/healing process as they relate to the athletic training profession.

HPAT 5222 Introduction to Clinical Education (2:2:4,F) An introduction to basic athletic training skills including clinical safety (blood-borne pathogens, ECC, first-aid, etc), medical terminology, clinical documentation, taping, on-field emergency management, and clinical reasoning.

HPAT 5223 Special Populations and Concerns for the Athletic Trainer (2:2.5:0,F) Examination and discussion of issues related to sports nutrition and the physiological demands of exercise. Survey of injury and illness risk factors associated with sports participation by the preadolescent/adolescent, geriatric, disabled, male, and female athlete.

HPAT 5225 Clinical Experience III (2:0:17-27,F) A supervised educational experience in athletic training under the supervision of a certified athletic trainer or other healthcare professional. The objective is to obtain hands-on experiences in a variety of athletic training settings including intercollegiate, high school, and clinical. The experience includes a one-week immersion experience. *Contact hours may vary based on the clinical site where the student is assigned for the semester.

HPAT 5227 Current Medical Diagnosis and Treatment (2:3.5:0,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 the relate to athletic training intervention. co-requisite HPAT 5228

HPAT 5228 Clinical Experience IV (2:1:17-27,F) A supervised educational experience in athletic training under the supervision of a certified athletic trainer or other healthcare professional. The objective is to obtain hands-on experiences in a variety of athletic training settings including intercollegiate, high school, and clinical. This experience includes a five-week immersion experience. * Contact hours may vary based on the clinical site where the student is assigned for the semester.

HPAT 5234 Pharmacology (2:2.5:0,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.

HPAT 5302 Therapeutic Exercise (3:3:3,F) Assimilation of all aspects of patient evaluation, treatment, and rehabilitation of injuries, with a focus on functional rehabilitation and return to activity.

HPAT 5303 Management & Prevention of Injuries (3:3:3,F) This course covers the breadth of the athletic training profession including history of the profession, AT professional practice, and fundamentals of inquiry evaluation and management.

HPAT 5305 Biomechanics (3:3:0,F) Biomechanics of the musculoskeletal system and integrated human movement with clinically relevant applications.

HPAT 5312 Introduction to Therapeutic Exercise & Strength Training (3:3:3,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. Additionally, the application of contemporary periodization concepts

and methods of athletic and functional assessment will also be addressed.

HPAT 5322 Administration of Athletic Training Programs & Professional Development (3:6:0,F) This course discusses planning, coordinating, and supervising all administrative components of an Athletic Training program. Coverage includes theories and concepts in the management of sports healthcare delivery systems, facilities, equipment, and financial resources. Co-Requisite HPAT 5228.

HPAT 5323 Management & Identification of General Medical Conditions (3:3:3,F) Study of the etiology, pathology, and clinical manifestations of common illnesses, infectious diseases, and dermatological conditions in athletic populations.

HPAT 5324 Lower Extremity Evaluation (3:3:3,F) Theory, principles, clinical applications and literature review associated with athletic training evaluation, assessment and management of musculoskeletal conditions. The focus will be within the lower extremity.

HPAT 5401 Upper Extremity Evaluation (4:3.5:3,F) Theory, principles, clinical applications, and literature review associated with athletic training evaluation, assessment and management of musculoskeletal conditions. The focus will be with the upper extremity.

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.

Master of Occupational Therapy (OT)

The program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA).

4720 Montgomery Lane, Suite 200
Bethesda MD, 20814-3449
(301) 652-AOTA
www.acoteonline.org

Program Description

During the program, students are required to adhere to all program, departmental, and school policies as outlined in the student handbooks, fieldwork manual, and course syllabi. Students typically complete Level II Fieldwork within 12 months following completion of the didactic portion of the program. Successful completion of the program leads to a Master of Occupational Therapy (MOT) degree. Graduates of the program will be eligible to sit for the National Certification Examination for the Occupational Therapist administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). Licensure requirements for occupational therapists vary by state according to practice act and state regulations that govern the practice of occupational therapy. A felony conviction may affect a graduate's eligibility to take the NBCOT Certification Examination or attain state licensure.

Program Mission

The mission of the TTUHSC Master of Occupational Therapy program is to provide students with a strong foundation in clinical reasoning, knowledge, and skills to become competent occupational therapists who improve the health of individuals and communities. Academic and professional citizenship of students is cultivated through mentorship in scholarly activities.

Philosophy Statement

G Grounded in Bloom's Taxonomy

O Occupation-based approaches

T Teamwork in scholarship and practice

E Education of future professionals

C Clinical Reasoning/Case Mapping

H Hands on learning

Beliefs about Humans

Human beings possess a unique array of interests, values, skills, abilities, and experiences which influence the way each perceives, chooses, and engages in various, meaningful activities (also called occupations). Occupations are the ordinary and familiar things that people do every day. The selection of and engagement in these meaningful activities contributes to one's identity, sense of purpose, health, and well-being.

Beliefs about the Nature of Occupational Therapy

Occupational therapy is the art and science of helping people do the day to day activities that are important and meaningful to them. Engagement in valued occupations is used in treatment to facilitate health and well-being. Valued occupations include the following areas: self-care, learning, work, play, leisure, social participation, and rest.

Occupational therapists work collaboratively with individuals, families, caregivers, and other groups whose life patterns and abilities to engage in valued occupations have been altered as a result of various circumstances (e.g. cognitive or developmental problems, injury or illness, social or emotional deficits, or the aging process). Occupational therapists apply clinical reasoning as they plan, facilitate, and reflect on client care. The focus of occupational therapy is to facilitate the individual's ability to participate in meaningful, purposeful activities (occupations) at home, school, the workplace, community, and other various settings.

Occupational Therapy Practice Areas & Settings:

- Acute care
- Assistive technology
- Burn centers
- Case management
- Community health practice
- Driver rehabilitation
- Early intervention services
- Ergonomics consultation
- Hand rehabilitation
- Health and wellness consultation
- Home health
- Home modifications access
- Hospice services
- Hospitals
- Low vision services
- Nursing homes
- Private practice
- Psychiatric Hospitals
- Psychosocial needs of youth
- Rehabilitation centers (inpatient and outpatient)
- Schools
- State-Supported Living Centers

Beliefs about the Nature of Learning

Human beings learn through and are shaped by experiences throughout their lives. Opportunities for learning occur in many ways, such as acquiring knowledge, skill development, and personal growth. Through these varied experiences, changes in a person's knowledge, abilities, behavior, and attitudes occur.

The curriculum of the occupational therapy program is shaped by two guiding frameworks. Bloom's levels of learning serve as framework that faculty utilize to inform and guide the student learning process. Students develop critical thinking skills as concepts are introduced and reintroduced in increasing complexity. The other framework consists of the following six curriculum threads: Fundamental Concepts, Theoretical Foundations, Clinical Reasoning, Research Methods, Occupational Therapy Processes, and Professional Practice. These curriculum threads further focus the development of the students' knowledge, skills, attitudes, and behaviors with respect to the profession of occupational therapy. The program fosters the development of each student's clinical reasoning and professionalism through a combination of didactic and experiential processes.

Fieldwork

Fieldwork education is an integral aspect of our program. Students must pass a Criminal Background Check, maintain CPR

certification, maintain immunizations, and complete annual tuberculosis testing and influenza vaccination in order to participate in fieldwork experiences. The student is responsible for fees related to Criminal Background Checks, Drug Screenings, and Immunizations. Students must be approved for fieldwork placement by the Program Director and the Academic Fieldwork Coordinator. Considerations in this recommendation include student's academic performance, completion of program requirements, and demonstration of adequate professionalism and behaviors indicative of the ability to be effective and productive during clinical training. This includes problem solving ability and critical thinking. Students on fieldwork are expected to follow safety procedures of the clinical site, plus any other requirements deemed important by the Academic Fieldwork Coordinator and/or Fieldwork Educator for a specific clinical site. Behaviors observed during the professional curriculum are taken to be a measure of a student's readiness for Clinical Fieldwork. Students are responsible for all costs associated with fieldwork including transportation, housing, meals, uniforms, Criminal Background Checks, and other incidental expenses.

Students will be involved in Level I Fieldwork experiences during the second year in the program. Students complete 24 weeks of full-time Level II Fieldwork during the third year of the program. No part of Fieldwork Level I may be substituted for any part of Fieldwork Level II. The length of the entire program is two and a half years. Level II Fieldwork is typically completed within 12 months following the completion of academic preparation.

Fieldwork education consists of five experiences designed to prepare and expose the student to a variety of applied settings in occupational therapy:

- **Fieldwork I: Pediatric Process in Fieldwork** AND **Fieldwork I: Psychosocial Group Process** occur in the summer semester of the second year. The student will actively participate in active learning experiences within the community to develop professional and therapeutic skills.
- **Fieldwork I: Adult Physical Dysfunction** occurs prior to beginning classes in the spring semester of the second year. The student actively participates in occupational therapy as it is practiced in an adult physical disabilities setting for a total of 80 hours.
- **Fieldwork II 1:** This full-time fieldwork experience typically begins in May of the third year. The student integrates client evaluation and intervention planning/implementation skills and develops entry-level competency in essential skills. The student has the opportunity to develop advanced competencies beyond entry-level where applicable.
- **Fieldwork II 2:** This full-time fieldwork experience typically begins in September of the third year. The student integrates client evaluation and intervention planning/implementation skills and develops entry-level competency in essential skills. The student has the opportunity to develop advanced competencies beyond entry-level where applicable.

Clinical facilities that have occupational therapy clinical education agreements with TTUHSC may be used for Fieldwork sites. The MOT Academic Fieldwork Coordinator provides detailed information for selection procedures. The student's selection of a Fieldwork site must be approved by the MOT Academic Fieldwork Coordinator and/or the Program Director prior to the student enrolling in the applicable Fieldwork courses. The MOT Academic Fieldwork Coordinator reserves the right not to approve a student's selection of any clinical education site. The MOT Academic Fieldwork Coordinator may consult with MOT faculty and the MOT Program Director in order to determine a Fieldwork placement for any student.

As such, the MOT Academic Fieldwork Coordinator further reserves the right to place the student at any clinical site determined necessary for successful completion of a student clinical fieldwork experience, or to not allow a student to enroll in a clinical fieldwork experience, for the following reasons:

- The student is on Academic Probation.
- The student has previously displayed behavior resulting in counseling using the Generic Abilities.

Essential Functions

To successfully complete the didactic and clinical portion in the MOT program, a student must meet the following essential functions:

1. **Observation:** Observe a patient's/client's 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/clients.
2. **Communication:** Communicate professionally (orally and in writing) as required for course work and clinical placements to

ensure patient/client safety. Complete clinical instructions and maintain productivity standards in a timely manner according to facility guidelines for safe and effective entry-level patient care. Use technology to meet requirements of courses 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).

3. **Cognition:** Comprehend, integrate and synthesize a large amount of information in a short period of time. Read, comprehend, record and interpret information accurately from diagnostic tests, equipment and patient/client 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 of fellow students, faculty, staff, patients'/clients' and patient's/client's 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 and clinical placements.

Admission to the Program

The MOT 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 MOT 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, two recommendation letters, verification of required immunizations, verification of CPR certification, and a personal essay.

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 MOT 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 MOT program. Invitations to interview with the MOT program faculty in Lubbock, Texas are extended to the most competitive applicants. Completion of prerequisite coursework, 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 a consideration 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 professional curriculum, or preferably by the application deadline. 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 complete 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 MOT 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 (Lifespan)	3
Statistics	3

MOT Curriculum

This program prepares the student to enter the field of occupational therapy with a background in fundamental concepts, theoretical foundations, clinical reasoning, occupational therapy processes, professional practice, and research methods. The curriculum covers the life span from birth to older adults and reflects a broad perspective of the physical, cognitive, emotional and social issues that affect a person's performance in meaningful occupations. Lectures, case studies, concept mapping, laboratory experiences, and clinical education provide opportunities to integrate prior knowledge with new learning and develop competency in clinical reasoning. This program fosters professional behavior and utilizes community experiences to incorporate the classroom material into actual practice. Class sizes are restricted to ensure optimal student/instructor ratios and to enable each student to receive comprehensive instructional and clinical experiences.

FIRST YEAR

Summer Semester Courses

HPOT 5209	Kinesiology in Occupational Therapy
HPOT 5220	Introduction to Occupational Therapy
HPOT 5500	Human Anatomy

Total Hours = 9

Fall Semester Courses

HPOT 5227	Introduction to Clinical Reasoning
HPOT 5319	Occupational Performance throughout the Lifespan
HPOT 5330	Conditions in Occupational Therapy: Part 1
HPOT 5410	Theory & Foundations of Occupational Therapy
HPOT 5415	Fundamental Skills in Practice

Total Hours = 16

Spring Semester Courses

HPOT 5111	Overview & Analysis of Occupational Therapy Assessment
HPOT 5307	Psychosocial Interventions in Occupational Therapy
HPOT 5316	Research Process in Occupational Therapy
HPOT 5317	Hand & Upper Extremity Rehabilitation
HPOT 5430	Conditions in Occupational Therapy: Part 2

Total Hours = 14

SECOND YEAR

Summer Semester Courses

HPOT 5105	Clinical Reasoning for Fieldwork
HPOT 5142	Assistive & Adaptive Technology

HPOT 5205 Fieldwork I: Pediatric Process in Fieldwork

HPOT 5210 Fieldwork I: Psychosocial Group Process

Total Hours = 6

Fall Semester Courses

HPOT 5226 Professional Development in Occupational Therapy

HPOT 5314 Health & Community Settings

HPOT 5449 Occupational Assessment & Intervention in Children & Adolescents

HPOT 5450 Occupational Assessment & Intervention in Adults & Older Adults

Total Hours = 13

Spring Semester Courses

HPOT 5201 Fieldwork I: Adult Physical Dysfunction

HPOT 5315 Organization & Management in Occupational Therapy

HPOT 5327 Evidence for Research & Practice

HPOT 5355 OT Practice Seminar

Total Hours = 11

THIRD YEAR

Summer Semester Courses

HPOT 5931 Fieldwork II:1

Total Hours = 9

Fall Semester Courses

HPOT 5932 Fieldwork II:2

HPOT 5160 Professional Seminar

Total Hours = 10

Total = 88 hours

Master of Occupational Therapy (OT) Course Descriptions

HPOT 5105 Clinical Reasoning for Fieldwork (1:2:0,F) This course focuses on preparing students for their final fieldwork placements. Professional behavior, ethics, supervision, clinical reasoning, and tools/strategies for a successful fieldwork experience will be utilized in this course. Student levels of learning in this course focus on application and analysis.

HPOT 5111 Overview and Analysis of Occupational Therapy Assessment (1:0:2,F) This course provides the student with an overview and analysis of various assessment measures used in occupational therapy practice. Students learn components of critiquing tests and measures which include the type of assessment, format, applicable population, psychometric properties, and utility. Students also practice the administration of both standardized and non-standardized assessments as well as the interpretation and documentation of assessment results. Student levels of learning in this course focus on knowledge/comprehension, application, and analysis.

HPOT 5142 Assistive and 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. Student levels of learning in this course focus

on knowledge/comprehension, application, analysis, synthesis, and evaluation.

HPOT 5160 Professional Seminar (1:1:0-8,F) This integrative capstone seminar course format is designed to prepare graduates for the national certification examination and entering the work force. Learning method includes online supplementary review and seminar format.

HPOT 5201 Fieldwork I: Adult Physical Dysfunction (2:0:40,F) Co-requisite: HPOT 5355 This course focuses on the application of evaluation, intervention (e.g. individual and group), and outcome processes utilized in a variety of settings that address adult physical dysfunction. Instruction and lab experiences provide opportunities for students to practice therapeutic skills as they develop and implement treatment plans. Student levels of learning in this course focus on the following: application, analysis, synthesis, and evaluation

HPOT 5205 Fieldwork I: Pediatric Process in Fieldwork (2:0:0-20,F) Co-Requisite HPOT 5105. This course focuses on the application of evaluation, intervention, and outcome processes in a pediatric setting. Experiential learning provides opportunities for students to practice pediatric practice skills as the develop and implement session plans for individual and/or groups of children. Student levels of learning in this course focus on application, analysis, synthesis, and evaluation.

HPOT 5209 Kinesiology in Occupational Therapy (2:2:4,F) This course focuses on the analysis of normal human movement with an emphasis on how movements are produced at specific joints and the influence movements have on occupational performance.

HPOT 5210 Fieldwork I: Psychosocial Group Process (2:0:0-5,F) Co-Requisite: HPOT 5105. This course focuses on evaluation, intervention, and outcome processes in a psychosocial practice setting. Experiential learning provides opportunites for students to practice therapeutic skills as they develop and implement session plans for a group of individuals. Student levels of learning in this course focus on application, analysis, synthesis, and evaluation.

HPOT 5220 Introduction to Occupational Therapy (2:3:0,F) Introduction to key terms and concepts used in occupational therapy practice. Course includes self-paced learning and testing for medical terminology. This course introduces students to OT professional practice, OT framework, and prepares them for learning theoretical foundations and performing activity analysis. Student levels of learning in this course focus on knowledge and comprehension.

HPOT 5226 Professional Development in Occupational Therapy (2:2:0,F) Students will identify current policy issues in the various contexts in which occupational therapy services are provided and how to advocate for the profession. Students will be introduced to the grant writing process and benefits of securing a grant. This course will address ongoing professional development and responsibilities including the benefits of professional state and national organizations. Student levels of learning in this course focus on the following: knowledge/comprehension, application, analysis, synthesis, and evaluation.

HPOT 5227 Introduction to Clinical Reasoning (2:2:0,F) This course focuses on the exploration of illness and/or disability experiences from the perspectives of the individual, healthcare professional, and society. Students will examine the influences of culture, poverty and ethics on disability through conditional and interactive reasoning using case studies and personal reflection. Student levels of learning in this course focus on knowledge/comprehension, and application.

HPOT 5307 Psychosocial Intervention in Occupational Therapy (3:3:0,F) This course focuses on concepts and methods for the provision of individual and group-based intervention for persons who have a mental illness or who experience significant psychosocial stressors. Topics include, but are not limited to: evaluation and treatment planning, therapeutic use of self, specific intervention strategies (e.g., stress management, relaxation, living skills training), group dynamics, and group intervention.

HPOT 5314 Health and Community Settings (3:3:0,F) This course reviews trends affecting healthcare system delivery and implications for community practice. An appreciation for difference in cultural and social systems is emphasized. Evaluation of community needs, alternative settings, practice expansion, and consultation skills are discussed. Student levels of learning in this course focus on knowledge/comprehension, application, and analysis.

HPOT 5315 Organization and Management in Occupational Therapy (3:3:0,F) Overview of management theories, budgeting, marketing, writing a business plan, strategic planning, performance appraisals, interviewing, billing and OT procedures, insurance and payment systems, and documentation issues. Prepares students in professional practice and theoretical background for management or supervision in the healthcare field. Student levels of learning in this course focus on the following: knowledge/comprehension, application, analysis, synthesis, and evaluation.

HPOT 5316 Research Process in Occupational Therapy (3:3:0,F) This course is the first of two research courses designed to prepare the student as both a consumer of research and a participant in the research process. Content includes: an introduction to the research process; resources necessary for research in occupational therapy; evaluation and use of the professional literature relevant to occupational therapy practice; qualitative and quantitative design and analysis (including inferential statistics) methods. Student levels of learning in this course focus on knowledge/comprehension and application.

HPOT 5317 Hand and Upper Extremity Rehabilitation (3:2:3,F) This course integrates anatomy, kinesiology, assessment, and intervention principles for the treatment of upper extremity and hand conditions. Common injuries and conditions for the shoulder, elbow, forearm, wrist, and hand are covered. Advanced splinting skills are taught. Student levels of learning in this course focus on application and analysis.

HPOT 5319 Occupational Performance Throughout the Lifespan (3:3:0,F) The focus of this course is on the skill progressions in typical and atypical development and how those sequences impact occupational performance across the lifespan. Students will be introduced to various occupational therapy practice settings that individuals may encounter throughout their lifespan when experiencing challenges in areas of occupation. Student levels of learning in this course focus on the following: knowledge/comprehension and application.

HPOT 5327 Evidence for Research and Practice (3:3:0,F) This course focuses on the importance and use of evidence-based practice. Students will establish specific patient questions to guide their learning and will produce critically appraised topics (CAT's). Students will learn and practice the research skills of data collection, data analysis, report and dissemination of results and conclusions within class research activities. Students will present their findings to the class. This course is writing intensive. Student levels of learning in this course focus on knowledge/comprehension, application, and analysis.

HPOT 5330 Conditions in Occupational Therapy (3:3:0,F) This course provides an overview of the etiology, epidemiology, signs and symptoms, associated conditions/complications, prognosis, and medical management of disorders and injuries in children and adults relevant to occupational therapy practice. This course focuses on health conditions (e.g., stroke, brain injury, Parkinson's disease, spinal cord injury, mood disorders, schizophrenia, anxiety disorders, dementia, behavioral disorders, ADHD) commonly encountered in occupational therapy practice settings. Students examine areas of occupation, performance skills, and client factors potentially affected as a result of the condition or complications of the condition. Student levels of learning in this course focus on knowledge/comprehension, application, and analysis.

HPOT 5355 OT Practice Seminar (3:2:6,F) The focus of this course is to prepare students for the transition from classroom to clinic. This course prepares students for level II fieldwork rotations and entry-level practice through utilization of an individualized competency checklist. Student levels of learning in this course focus on the following: knowledge/comprehension, application, analysis, and synthesis, and evaluation.

HPOT 5410 Theory and Foundations of Occupational Therapy (4:4:0,F) This course examines the philosophical, theoretical, and professional concepts that are foundational to occupational therapy. Students learn and apply several occupation-based theories, frames of references, and treatment approaches utilized in occupational therapy practice. Student levels of learning in this course focus on the following: knowledge/comprehension, application, analysis, synthesis, and evaluation.

HPOT 5415 Fundamental Skills in Practice (4:3:3,F) This course introduces key OT practice skills including basic evaluation techniques, clinical documentation, clinical safety, physical handling techniques, and interventions. Student levels of learning in this course focus on knowledge/comprehension

and application.

HPOT 5430 Conditions in Occupational Therapy: Part 2 (4:4:0,F) This course provides an overview of the etiology, epidemiology, signs and symptoms, associated conditions/complications, prognosis, and medical management of disorders and injuries in children and adults relevant to occupational therapy practice. This course focuses on health conditions (e.g., cerebral palsy, developmental disorders, cardiac conditions, cancer, burns, amputations) commonly encountered in occupational therapy settings. Students examine areas of occupation, performance skills, and client factors potentially affected as a result of the condition or complications of the condition. Student levels of learning in this course focus on knowledge/comprehension, application, and analysis.

HPOT 5449 Occupational Assessment & Intervention in Children and Adolescents (4:3:3,F) This course focuses on how typical and atypical sequences are used in pediatric occupational therapy assessment and treatment. Lab experiences include the observation and assessment of children. Clinical reasoning and occupational therapy processes focus on documentation of assessment findings, goal development, and determination of therapy interventions based on assessment findings. Student levels of learning in this course focus on the following: knowledge/comprehension, application, analysis, and synthesis/evaluation.

HPOT 5450 Occupational Assessment and Intervention in Adults and Older Adults (4:3:3,F) This course builds on student knowledge in earlier courses, applying specific OT techniques to diagnostic areas and individual conditions found in adults and older adults. Instruction and laboratory practice incorporates active learning to cultivate critical thinking skills needed in practice. Through case studies and treatment plans students will utilize clinical reasoning skills, occupational therapy processes, and treatment planning required for fieldwork and occupational therapy practice. Student levels of learning in this course focus on the following: knowledge/comprehension, application, analysis, and synthesis/evaluation.

HPOT 5500 Human Anatomy (5:6:10,F) Integrated study of gross 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. Lays a scientific foundation for other courses in the curriculum. Human cadaver dissection is the primary lab activity. Student levels of learning in this course focus on knowledge/comprehension.

HPOT 5931 Fieldwork II:1 (9:0:40,F) Prerequisites: Successful completion of all previous professional and fieldwork courses and approval of Program Director. Full-time, supervised clinical experience for 12 weeks (480 hours). Development of knowledge and skills needed for entry-level practice. Use of the occupational therapy process and clinical reasoning skills, working with individuals and groups. Introduction to clinical administration, supervision, quality assurance, consultation, and research. Student levels of learning in this course focus on knowledge/comprehension, application, analysis, and synthesis/evaluation.

HPOT 5932 Fieldwork II: 2 (9:0:40,F) Prerequisites: Successful completion of all previous professional and fieldwork courses and approval of Program Director. Full-time, supervised clinical experience for 12 weeks (480 hours). Development of knowledge and skills needed for entry-level practice. Use of the occupational therapy process and clinical reasoning skills, working with individuals and groups. Introduction to clinical administration, supervision, quality assurance, consultation, and research. Student levels of learning in this course focus on knowledge/comprehension, application, analysis, and synthesis/evaluation.

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), 1111 North Fairfax Street, Alexandria, Virginia 22314; 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 unprecedented 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 to their community 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 Physical Therapy (D.P.T.) 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 educate students to be autonomous, evidence-based practitioners who improve the health of people through the application of their clinical skills, collaboration with other health care professionals, and are committed to life-long learning and community service.

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 clinical experience (4 weeks of full-time clinical experience and 32 weeks of full-time clinical internship). Clinical internships 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, sports medicine,

women's health, 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. Many clinical education sites also require a drug screening prior to beginning the internship. Costs for criminal background checks and drug screenings 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.

Essential Functions

A student admitted into the DPT program must meet essential functions that are necessary to be able to obtain employment in the physical therapy field. These are established minimum physical and mental guidelines necessary for the DPT program. Prior to matriculation, all students must submit verification of their ability to perform at or above the minimum physical and mental guidelines established by the Department of Rehabilitation Sciences (DRS).

To successfully complete the didactic and clinical/fieldwork portion in the DPT program, an individual must meet the following essential functions:

1. **Observation**: Observe patient's/client's 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/clients.

2. **Communication**: Communicate professionally (orally and in writing) as required for course work and clinical/fieldwork placements to ensure patient/client safety. Complete clinical/fieldwork instructions and maintain productivity standards in a timely manner according to facility guidelines for safe and effective entry-level patient care. Use technology to meet requirements of courses and clinical/fieldwork placements (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/client 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/clients and patient's/client's families during clinical/fieldwork and academic interactions. Demonstrate flexibility and the ability to adjust to changing situations and uncertainty in academic and clinical/fieldwork 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/ fieldwork activities during the defined workday. Efficiently manipulate testing and treatment environment, materials and equipment. Access transportation to attend academic courses and clinical/fieldwork placements.

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 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 must have completed at least 100 clock hours of experience in a physical therapy setting prior to May 1 of the year of matriculation. Applicants are encouraged to gain as much experience in as many different settings (inpatient, outpatient, rehab, acute care, aquatics, wound care, etc.) as possible. Greater clock hours of experience in a variety of settings may strengthen an application.

*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, volunteer/work experience in physical therapy, 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 Internship I (8 weeks)	4
HPPT 8455	Clinical Internship II (8 weeks)	4
		Total Hours = 9

Spring Semester Courses		Credit Hours
HPPT 8160	Graduate Seminar	3
HPPT 8456	Clinical Internship III (8 weeks)	4
HPPT 8458	Clinical Internship IV (8 weeks)	4
		Total Hours = 11

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 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 internships, students will integrate evidence-based practice into their clinical experience by developing patient-specific, critically-appraised topics (CAT), best available scientific evidence to direct patient 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 Internship 1 (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 Internship 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 8456 Clinical Internship 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 8458 Clinical Internship 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 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.

Transitional Doctor of Physical Therapy (tDPT)

The Commission on Accreditation in Physical Therapy Education (CAPTE) does not offer accreditation for post-professional programs in physical therapy, such as the transitional-DPT.

Program Description

Effective July 1, 2018, we will no longer be accepting any applications for the transitional Doctor of Physical Therapy program. We will continue to teach out our currently enrolled students.

The Transitional Doctor of Physical Therapy is a clinical doctoral degree designed for licensed physical therapists seeking to advance their knowledge, skills, and behaviors to a level consistent with the current professional entry-level Doctor of Physical Therapy (DPT) standards. It is designed for experienced physical therapists who wish to augment their current knowledge and skills in order to keep up with changing expectations of the profession. The Transitional DPT differs from an advanced post-professional degree in that it does not reflect the acquisition of advanced or specialized clinical skills, but rather it reflects the augmentation in the physical therapy professions body of knowledge and state of practice.

tDPT Curriculum

Students with a master's degree in physical therapy are required to complete 27 semester credit hours. Students with a bachelor's degree in physical therapy are required to complete 33 semester credit hours. All students are required to take the 7 core (required) courses. Students with a master's degree in physical therapy choose 2 electives and students with a bachelor's degree in physical 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 course work requirements for the Transitional DPT degree be completed within five years. Each student will design a degree plan on admission to the program in conjunction with the Program Director. All students are required to develop a Graduate Portfolio in their final semester. The portfolio will consist of a collection of works completed throughout the program and will be compiled in conjunction with a written reflection highlighting student learning and application to clinical practice.

Core Courses

HPPT 8361	Professional Development
HPPT 8362	Health and Wellness Promotion
HPPT 8363	Screening and Differential Diagnosis
HPPT 8364	Diagnostic Imaging
HPPT 8365	Evidence-Based Practice
HPPT 8366	Clinical Application of Pharmacology
HPPT 8367	Business Concepts for Physical Therapists

Electives

HPPT 8371	Musculoskeletal PT Practice

HPPT 8372	Neuromuscular PT Practice
HPPT 8373	Pediatric PT Practice
HPPT 8374	Women's PT Practice
HPPT 8375	Integumentary PT Practice
HPPT 8376	Geriatric PT Practice
HPPT 8377	Assistive Technology
HPPT 8378	Applied Clinical Anatomy

tDPT/ScD in PT Coordinated Curriculum

The Transitional Doctor of Physical Therapy (tDPT) and Doctor of Science in Physical Therapy (ScD) programs have designed a pathway to earning both degrees. The purpose of the coordinated tDPT-ScD curricula is:

- To advance the knowledge, skills and behaviors of the BSPT and MPT professional to a level consistent with the current professional (entry-level) Doctor of Physical Therapy (DPT) standards;
- To allow the BSPT and MPT professional the opportunity to coordinate curricula that would permit the earning of credit hours in the tDPT program that would also meet some of the academic credit hour requirements in the ScD in PT (ScD) degree.

BSPT Students

BSPT students entering the tDPT program are required to take 7 core courses and 4 electives for a total of 33 credit hours (3 credit hours per course).

1. The student needs to apply and be accepted to both the tDPT and ScD programs; acceptance into the programs can occur in different semesters.

2. The student must complete the 7 tDPT core courses. It is recommended that Diagnostic Imaging (HPPT 8364) and Screening and Differential Diagnosis (HPPT 8363) be taken in the tDPT curriculum. These 6 SCH can then be applied toward the required ScD credit hours. *The student may choose to take Radiological Anatomy (HPPT 6317) and/or Orthopedic Physical Therapy Screening (HPPT 6404) in the ScD program to fulfill tDPT courses HPPT 8364 and/or HPPT 8363. The student should recognize that there will be a required contact session (2-3 days duration) at the Lubbock campus for both of these ScD courses; the student will be responsible for the expenses associated with the travel.*

3. The students must complete 4 tDPT elective courses with the option of enrolling in 2 ScD courses (see list below) that can be taken in place of 2 (of the 4) tDPT electives. These 6 SCH can then be applied towards the required ScD credit hours. The remaining 2 tDPT electives will be chosen from tDPT courses. Eligible ScD courses include:

- HPPT 6321 Advanced Clinical Practice for the Shoulder Complex
- HPPT 6322 Advanced Clinical Practice for the Elbow and Forearm
- HPPT 6323 Advanced Clinical Practice for the Wrist and Hand
- HPPT 6324 Advanced Clinical Practice for the Hip Complex
- HPPT 6325 Advanced Clinical Practice for the Knee Complex
- HPPT 6326 Advanced Clinical Practice for the Ankle and Foot
- HPPT 6327 Advanced Clinical Practice for the Upper Cervical Spine
- HPPT 6328 Advanced Clinical Practice for the Lower Cervical Spine
- HPPT 6329 Advanced Clinical Practice for the CTJ and TOS
- HPPT 6330 Advanced Clinical Practice for the Thoracic Spine and Ribs
- HPPT 6331 Advanced Clinical Practice for the Acute Lumbosacral Pain
- HPPT 6332 Advanced Clinical Practice for the Recurrent and Chronic Lumbosacral Pain
- HPPT 6303 Basic and Applied Science in Orthopaedics
- HPPT 6305 Updates in Orthopedic Surgical Management

- HPPT 6311 Clinical Studies in Anatomy
- HPPT 6312 Neuroscience of Pain
- HPPT 6313 Biomechanics in Orthopaedics
- HPPT 6314 Motor Control in Orthopedic Physical Therapy
- HPPT 7301 Seminar in Clinical Research Design
- HPPT 7305 Curriculum Design and Teaching in Health Professions
- HPPT 7404 Education Evaluation in Health Professions
- HPPT 7406 Advanced Statistics in Health Professions

There is a need for students with a BSPT degree who are enrolled in both tDPT and ScD programs to take the following into account: (i) tDPT courses do not have contact sessions – students enrolling in an ScD course should understand that they will need to attend the associated contact session, and (ii) upon successful completion of the tDPT curriculum, the student will graduate with their DPT degree and will be eligible for the ScD program curriculum requirements that apply to DPT graduates.

MPT Students

MPT students entering the tDPT program are required to take 7 core courses and 2 electives for a total of 27 credit hours (3 credit hours per course).

1. The student needs to apply and be accepted to both the tDPT and ScD programs; acceptance into the programs can occur in different semesters.

2. The student must complete the 7 tDPT core courses. It is recommended that Diagnostic Imaging (HPPT 8364) and Screening and Differential Diagnosis (HPPT 8363) be taken in the tDPT curriculum. These 6 SCH can then be applied toward the required ScD credit hours. *The student may choose to take Radiological Anatomy (HPPT 6317) and/or Orthopedic Physical Therapy Screening (HPPT 6404) in the ScD program to fulfill tDPT courses HPPT 8364 and/or HPPT 8363. The student should recognize that there will be a required contact session (2-3 days dura- tion) at the Lubbock campus for both of these ScD courses; the student will be responsible for the expenses associated with the travel.*

3. The students must complete 2 tDPT elective courses with the option of enrolling in 2 ScD courses (see list below) that can be taken in place of their tDPT electives. These 6 SCH can then be applied towards the required ScD credit hours. Eligible ScD courses include:

- HPPT 6321 Advanced Clinical Practice for the Shoulder Complex
- HPPT 6322 Advanced Clinical Practice for the Elbow and Forearm
- HPPT 6323 Advanced Clinical Practice for the Wrist and Hand
- HPPT 6324 Advanced Clinical Practice for the Hip Complex
- HPPT 6325 Advanced Clinical Practice for the Knee Complex
- HPPT 6326 Advanced Clinical Practice for the Ankle and Foot
- HPPT 6327 Advanced Clinical Practice for the Upper Cervical Spine
- HPPT 6328 Advanced Clinical Practice for the Lower Cervical Spine
- HPPT 6329 Advanced Clinical Practice for the CTJ and TOS
- HPPT 6330 Advanced Clinical Practice for the Thoracic Spine and Ribs
- HPPT 6331 Advanced Clinical Practice for the Acute Lumbosacral Pain
- HPPT 6332 Advanced Clinical Practice for the Recurrent and Chronic Lumbosacral Pain
- HPPT 6303 Basic and Applied Science in Orthopaedics
- HPPT 6305 Updates in Orthopedic Surgical Management
- HPPT 6311 Clinical Studies in Anatomy
- HPPT 6312 Neuroscience of Pain
- HPPT 6313 Biomechanics in Orthopaedics
- HPPT 6314 Motor Control in Orthopedic Physical Therapy
- HPPT 7301 Seminar in Clinical Research Design
- HPPT 7305 Curriculum Design and Teaching in Health Professions
- HPPT 7404 Education Evaluation in Health Professions

- HPPT 7406 Advanced Statistics in Health Professions

There is a need for students with a MPT degree who are enrolled in both tDPT and ScD programs to take the following into account: (i) tDPT courses do not have contact sessions – students enrolling in an ScD course should understand that they will need to attend the associated contact session, and (ii) upon successful completion of the tDPT curriculum, the student will graduate with their DPT degree and will be eligible for the ScD program curriculum requirements that apply to DPT graduates.

Transitional Doctor of Physical Therapy (tDPT) Course Descriptions

HPPT 8361 Professional Development (3:4:0,O) This course focuses on the professional role and responsibility of the physical therapist at a doctoral level. Students will analyze professional core values and their own professional development as a DPT. There will be a focus on the application of ethical analysis and decision-making as physical therapists become an entry-point into healthcare for patients and clients.

HPPT 8362 Health and Wellness Promotion (3:4:0,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, and 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.

HPPT 8363 Screening and Differential Diagnosis (3:4:0,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 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.

HPPT 8364 Diagnostic Imaging (3:4:0,O) This course will cover the basic science behind multiple imaging modalities (x-rays, MRI, CT, arthrograms, USI, PET scans, etc), advantages and disadvantages of each intervention, and referral for imaging services or consultation. Anatomy of bone, joint, cartilage, soft tissue, and CNS structure for the appropriate imaging devices will be discussed by joint/region along with clinical reasoning algorithms for assistance with imaging selection and interpretation. Special features and views will be discussed as applicable for each imaging device.

HPPT 8365 Evidence-Based Practice (3:4:0,O) This course will prepare the student to develop the knowledge and skills needed for evidence-based physical therapist practice. 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 if the evidence is applicable to clinical practice. The main goal of the course is for students to become consumers of scientific literature.

HPPT 8366 Clinical Application of Pharmacology (3:4:0,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 the management of disease. Basic principles of pharmacology are addressed with focus on the mechanisms of action of classes of drugs and effects of specific drugs on the major systems of the body (nervous, musculoskeletal, cardiorespiratory, immune, endocrine, gastrointestinal, and other body systems). The pathophysiology of disease is also reviewed. The major focus of this course is on the relevant applications of pharmacotherapy to physical therapy clinical practice and patient management.

HPPT 8367 Business Concepts for Physical Therapists (3:4:0,O) This course focuses on the issues faced by physical therapy administration within the current healthcare industry. Topics include business analysis, human resources, marketing, legislation, reimbursement models, ethical issues, compliance, and advocacy as components of a strategic planning process.

HPPT 8371 Musculoskeletal PT Practice (3:4:0,O) This course surveys evidence-based physical therapy examination, evaluation, and interventions for patients with musculoskeletal pathologies and impairments. The student will apply clinical decision making and clinical practice guidelines. The course includes an overview of current intervention philosophies.

HPPT 8372 Neuromuscular Physical Therapy Practice (3:4:0,O) This course surveys evidence-based physical therapy examination, evaluation, and interventions for patients with neuromuscular pathologies and impairments. The student will apply clinical decision making and clinical practice guidelines. The course includes an overview of current intervention philosophies to enhance neuroplasticity.

HPPT 8373 Pediatric Physical Therapy Practice (3:4:0,O) This course surveys evidence-based physical therapy examination, evaluation, and interventions for pediatric clients with musculoskeletal and neuromuscular conditions. The student will apply clinical decision making and clinical practice guidelines in different environments of care.

HPPT 8374 Women's Physical Therapy Practice (3:4:0,O) This course survey's evidence-based physical therapy examination, evaluation, and interventions for conditions specific to women from adolescence to old age. The student will apply clinical decision making and clinical practice guidelines. The course includes an overview of current intervention philosophies.

HPPT 8375 Integumentary Physical Therapy Practice (3:4:0,O) This course surveys evidence-based physical therapy examination, evaluation, and interventions for patients with integumentary pathologies. The student will apply clinical decision making and clinical practice guidelines. The course includes an overview of current intervention philosophies.

HPPT 8376 Geriatric Physical Therapy Practice (3:4:0,O) This course provides an in-depth approach to exploring the physiologic, pathologic, and socio-cultural changes in musculoskeletal, neurological, integumentary, cardiopulmonary and metabolic systems that occur with aging. Emphasis is placed on application of evidence-based physical therapy assessment and intervention in the geriatric practice setting.

HPPT 8377 Assistive Technology (3:4:0,O) This course surveys evidence-based patient management using assistive and adaptive devices and rehabilitation technology across the lifespan. Information specific to mobility devices (manual and power wheelchairs), standers, gait trainers, environmental control units, and assistive and augmentative communication are emphasized. In addition, current technologies to assess and document architectural barriers will be addressed. The student will apply clinical decision making relative to current and emerging technologies in physical therapy patient management.

HPPT 8378 Applied Clinical Anatomy (3:4:0,O) This course incorporates an integrated study of human anatomy within the context of clinical practice. Focus is given to the general review of human anatomy for the clinician, but is expanded to include the application of clinical anatomy knowledge as a foundation for physical therapy practice. The course includes prosecution review videos to enhance the anatomical overview of the upper extremity, lower extremity, spine, and major body systems.

Doctor of Science in Physical Therapy (ScD)

Program Description

The mission for the Doctor of Science (ScD) Program in Physical Therapy is to provide advanced post-professional education to practicing physical therapists in Texas and nationwide. There is a strong need for advanced clinical mastery in Physical Therapy, based on unique decisions and functions of practicing physical therapists. The ScD program will provide practitioners with the opportunity to develop the advanced knowledge base, clinical skills, and professional competencies needed for state-of-the-art evaluation and treatment of their patients, as well as the successful management of clinical services located in isolated practice settings. The ScD program will provide clinicians a means to develop into highly skilled participants in clinical education and research, thus contributing to the growth and development of evidence-based practice within the profession.

There is a knowledge revolution found in Physical Therapy literature, advancing the boundaries of clinical science, technology, and therapeutic insight. This advancement has created potential for excellence in clinical evaluation, management and research skills. The ScD program will prepare licensed therapists to develop the needed competencies in advanced Physical Therapy diagnosis and therapeutic interventions required in the isolated practice settings. The clinical doctorate is a logical means for therapists to achieve needed levels of expertise and specialization with the aim to increase the level of sophistication, efficiency, efficacy, and clinical outcomes in physical therapy practice. This clinical expertise will equip the ScD practitioner with the advanced skill set that is increasingly essential for successful practice. This advanced level of information, skills, competencies and critical thinking requires the rigorous, formalized study that is not available in an entry level program or post-graduate continuing education.

The ScD is a terminal doctoral degree designed for licensed Physical Therapy practitioners to develop into advanced clinicians. It emphasizes orthopaedic Physical Therapy in response to the great number of orthopedic afflictions suffered by patients. Over 80% of all patients seeking Physical Therapy services suffer from orthopedic afflictions. Thus, this program will provide concentrated study at the applied doctoral level in the clinical science areas of orthopedic Physical Therapy practice.

The ScD program emphasizes orthopedic Physical Therapy diagnostics and management, to include orthopedic manual therapy and sensorimotor functional rehabilitation. Courses will be conducted through a weekend format with Web-based course enhancement. Faculty and students communicate with each other in person, via phone, fax, electronic mail or internet. 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 Summer or Fall enrollment. The deadline for the Summer semester is March 15. The deadline for the Fall semester is June 1.

Application Process

The following requirements will be considered for admission into the program:

- A Bachelor's, Master's, or Doctorate (DPT) professional degree in Physical Therapy
- At least one year of clinical experience
- Current engagement in practice as a 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. Applicants should understand that fulfillment of the basic

requirements does not guarantee admission.

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 admissions committee who will evaluate if any DPT courses will substitute for a 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 early in their curriculum. While each student's curriculum schedule is flexible, students are expected to finish the program within seven years.

Clinical Coursework

D.P.T. & Master's graduates are required to successfully complete 6 courses in either of the following ways:

1. *All extremity courses*
2. *All spine courses*
3. *All upper quarter with 3 upper extremity courses + 3 upper spine courses*
4. *All lower quarter with 3 lower extremity courses + 3 lower spine courses*

B.S.P.T. graduates are required to successfully complete all.

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 (threaded discussions) 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 Clinical Practice for the Shoulder Complex	3
HPPT 6322	Advanced Clinical Practice for Elbow & Forearm	3
HPPT 6323	Advanced Clinical Practice for Wrist & Hand	3
HPPT 6324	Advanced Clinical Practice for the Hip Complex	3
HPPT 6325	Advanced Clinical Practice for the Knee Complex	3
HPPT 6326	Advanced Clinical Practice for the Ankle & Foot	3

Spine Topic Courses		Credit Hours
HPPT 6327	Advanced Clinical Practice for the Upper Cervical Spine	3
HPPT 6328	Advanced Clinical Practice for the Lower Cervical Spine	3
HPPT 6329	Advanced Clinical Practice for CTJ & TOS	3
HPPT 6330	Advanced Clinical Practice for the Thoracic Spine & Ribs	3

HPPT 6331	Advanced Clinical Practice for Acute Lumbosacral Pain	3
HPPT 6332	Advanced Clinical Practice for Recurrent & Chronic Lumbosacral Pain	3

Core Coursework

D.P.T., Master's, and B.S.P.T. graduates are required to successfully complete all.

The total core coursework (7 semester hours for all students) will include systems screening and imaging content and skills 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 6317	Radiological Anatomy	3
HPPT 6404	Orthopedic Physical Therapy Screening	4

Elective Coursework

D.P.T. & Master's graduates complete 3 courses and B.S.P.T. 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 6311	Clinical Studies in Anatomy	3
HPPT 6312	Neuroscience of Pain	3
HPPT 6313	Biomechanics in Orthopedic Physical Therapy	3
HPPT 6314	Motor Control 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 week- end 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 chat-room 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.

EDUCATION COURSES

D.P.T., Master's, and B.S.P.T. graduates are required to successfully complete all.

Course		Credit Hours
HPPT 7404	Educational Evaluation in Health Professions	4

CLINICAL DISSERTATION

D.P.T., Master's, and B.S.P.T. 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
HPPT 7305	Curriculum Design & Teaching in Health Professions	3

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.

STATISTICS COURSES

D.P.T., Master's, and B.S.P.T. graduates are required to successfully complete all.

Course		Credit Hours
HPPT 7406	Advanced Statistics in Health Professions	3

CLINICAL DISSERTATION

D.P.T., Master's, and B.S.P.T. 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
HPPT 7301	Seminar in Clinical Research Design	3

During post-professional studies, students are required to adhere to all program policies and academic and behavioral guidelines as stated in the Physical Therapy Doctoral Student Policy Manual. 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 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 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 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 Radiological Anatomy (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 6322 Advanced Clinical Practice for Elbow & Forearm (3:3:3.5,H) This course presents the examination and treatment of afflictions in the elbow/forearm 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 6323 Advanced Clinical Practice for the Wrist & Hand (3:3:3.5,H) This course presents the examination and treatment of afflictions in the wrist/hand 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 Carpal Tunnel Syndrome), and soft tissue afflictions (including tendinitis and tenosynovitis). 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,H) 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 6327 Advanced Clinical Practice for the Upper Cervical Spine (3:3:3.5,H) This course presents the examination and treatment of afflictions in the Upper Cervical 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, chondropathy/chondromalacia, instability, degeneration, cervicogenic headache, vascular afflictions, and soft tissue afflictions. Case studies will be discussed and mock clinic sessions will be conducted.

HPPT 6328 Advanced Clinical Practice for the Lower Cervical Spine (3:3:3.5,H) This course presents the examination and treatment of afflictions in the Cervical Disc Segments (CDS). 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 acute cervical spine afflictions; recurrent afflictions that include instability, stenosis/spondylosis, and soft tissue afflictions; and chronic cervical pain. Case studies will be discussed and mock clinic sessions will be conducted.

HPPT 6329 Advanced Clinical Practice for the CTJ & TOS (3:3:3.5,H) This course presents the examination and treatment of afflictions in the Cervico-Thoracic Junction (CTJ). 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 acute upper thoracic afflictions, recurrent upper thoracic afflictions, instability, Thoracic Outlet Syndrome (TOS), soft tissue afflictions, and chronic upper thoracic pain. Case studies will be discussed and mock clinic sessions will be conducted.

HPPT 6330 Advanced Clinical Practice for the Thoracic Spine & Ribs (3:3:3.5,H) This course presents the examination and treatment of afflictions in the Thoracic Spine and ribs. 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 acute thoracic spine afflictions, recurrent thoracic spine afflictions, instability, arthrosis/arthritis, soft tissue afflictions and chronic thoracic pain. Case studies will be discussed and mock clinic sessions will be conducted.

HPPT 6331 Advanced Clinical Practice for Acute Lumbosacral Pain (3:3:3.5,H) This course presents the examination and treatment of acute lumbar spine afflictions and afflictions of the SIJ. 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, treatment to acute discogenic afflictions, and joint-specific treatment measures to the sacroiliac joint. This course includes management approaches to acute discogenic afflictions, as well as SIJ pain, hypomobilities and hypermobilities. Case studies will be discussed and mock clinic sessions will be conducted.

HPPT 6332 Advanced Clinical Practice for Recurrent and Chronic Lumbosacral Pain (3:3:3.5,H) This course presents the examination and treatment of recurrent and chronic afflictions in the lumbar spine. 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 instability, stenosis/spondylosis, arthritis/arthrosis, chondropathy/chondromalacia, soft tissue afflictions and chronic lumbosacral pain. Case studies will be discussed and mock clinic sessions will be conducted.

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,H) 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 7104 Clinical Project Presentation (1:0:3,H) 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 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 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 7404 Educational Evaluation in Health Professions (4:3:3,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.

HPPT 7406 Advanced Statistics in Health Professions (4:3:3,H) This course will familiarize the student with various tools used in parametric and non-parametric statistical analyses. Parametric tools will include Pearson r correlation, regression, t-test, analysis of variance, and selected multivariate designs. Non-parametric tools will include one, two, and k-sample designs; as well as Spearman, phi, and point biserial correlation coefficients. The course will include single-subject design, sequential clinical trials, and survey methodology. Emphasis will be placed on research findings that evaluate specific clinical populations.

Doctor of Philosophy in Rehabilitation Science (PhD RS)

Program Description

Rehabilitation Science is an interdisciplinary field of study that investigates theories and practices that contribute to improving the quality of life of individuals who have functional limitations caused by health conditions that affect communication and/or movement. The program is designed to prepare students with the knowledge and abilities to perform in academic, research, and industrial positions. In addition, the program prepares students to meet demands at local, state, regional, and national levels for doctoral level scholars.

The program offers concentrations in Communication Sciences and Disorders (CSD) and Movement Sciences and Disorders (MSD). Students in the CSD concentration can choose specializations in audiology/hearing science or speech-language pathology/speech science. Students in the MSD concentration select academic and research emphases to develop customized areas of expertise.This PhD program is offered only in Lubbock, Texas, and is not a distance education program. Students who do not live in Lubbock are expected to travel to Lubbock when necessary/required.

Admission to the Program

Applications for admission should be submitted by February 1 for the Summer semester, March 15 for the Fall semester, and October 15 for the Spring semester.

Admission to the Doctor of Philosophy in Rehabilitation Science program is competitive and is based in part on the candidate's academic record, professional experiences, goals, interests, GRE scores, and potential to substantively contribute to the field of rehabilitation science. The following is required for an individual to be considered for the PhD RS program:

A graduate degree in a rehabilitation science or related discipline is required. Up to 24 credit hours may be transferred from another graduate program in a rehabilitation science discipline and up to 12 hours may be transferred from a graduate program in a related discipline.

- Official transcripts that reflect the earned degree and a minimum GPA of 3.0 out of 4.0 or higher for all degrees
- Competitive GRE scores (official copy with verbal, quantitative, and writing scores)
- Three letters of recommendation
- A letter of intent describing research interests, career goals, and relevant experiences
- A sample of research writing
- A current résumé or curriculum vitae

Qualified applicants will be interviewed by at least one member of the PhD admissions committee prior to a formal decision about acceptance into the program.

Ph.D. RS Curriculum

The PhD RS program requires the completion of 86 credit hours, including a 38 hour core curriculum that is required of all students and a 36 hour concentration in Communication Sciences and Disorders or in Movement Sciences and Disorders, plus 12 hours of doctoral dissertation.

REHABILITATION SCIENCE CORE (38 hours)

HPPH 7301	Foundations of Rehabilitation Science

TEACHING (8 hours)

HPPH 7311 Curriculum Design & Teaching

HPPH 7412 Educational Evaluation

HPPH 7113 Teaching Apprenticeship

RESEARCH DESIGN & STATISTICS (9 hours)

HPPH 7321 Research Design & Statistics

HPPH 7322 Intermediate Statistics

HPPH 7323 Selected Topics in Statistics

or other approved statistics course

TECHNICAL WRITING (6 hours)

HPPH 7331 Writing for Publication

HPPH 7332 Writing for Grants

or other approved technical writing course

RESEARCH METHODS (6 hours)

Students will select from the following courses:

HPPH 7341 Methods in Hearing Sciences & Audiology Research I

HPPH 7342 Methods in Hearing Sciences & Audiology Research II

HPPH 7343 Methods in Speech Sciences & Speech-Language Pathology Research I

HPPH 7344 Methods in Speech Sciences & Speech-Language Pathology Research II

HPPH 7345 Methods in Clinical Anatomy Research

HPPH 7346 Methods in Clinical Behavior Research

HPPH 7347 Methods in Clinical Biomechanics Research

HPPH 7348 Methods in Clinical Musculoskeletal Rehabilitation Research

HPPH 7349 Methods in Clinical Postural Control Research

or other approved research methods course

RESEARCH (6 hours)

HPPH 7099 Research

CONCENTRATION (36 hours)

Communication Sciences & Disorders

Students in the Communication Sciences & Disorders concentration will take prescribed courses based on an area of specialization (24 hours) related to one of the following areas:

- Audiology
- Hearing Science
- Speech-Language Pathology
- Speech Science

and elective courses (12 hours) that will be approved in consultation with the faculty advisor and planning committee.

Movement Sciences & Disorders

Students in the Movement Sciences & Disorders concentration will take the following prescribed courses (24 hours):

HPPH 7581 Gross Anatomy

HPPH 7482 Pathophysiology

HPPH 7383 Biomechanics

HPPH 7384 Neuroscience

HPPH 7385 Motor Control in Orthopaedics

HPPH 7386 Computer Methods in Rehabilitation Science Research

three research seminar courses from the following:

HPPH 7191 Seminar in Clinical Anatomy Research

HPPH 7192 Seminar in Clinical Behavior Research

HPPH 7193 Seminar in Clinical Biomechanics Research

HPPH 7194 Seminar in Clinical Postural Control Research

HPPH 7195 Seminar in Clinical Musculoskeletal Rehabilitation Research

and elective courses (12 hours) that will be approved in consultation with the faculty advisor and planning committee.

Doctoral Dissertation (12 hours)

HPPH 8000 and 8001 Doctoral Dissertation

Additional Requirements for Graduation

- Successful completion of a supervised research project concurrent with HPPH 7099 Research
- Successful completion of a comprehensive qualifying examination for admission to candidacy after the completion of coursework and the supervised research project

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.

HPPH 7020 Special Topics (1-3:0:1-3,F) Selected topics of interest in rehabilitation science.

HPPH 7099 Research (1-9:0:1-9,F) Students will participate in rehabilitation science research while under faculty supervision.

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 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 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 (3:3:0,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 7321 Research Design & Statistics (3:3:0,F) Introductory concepts of research design and statistics for rehabilitation scientists.

HPPH 7322 Intermediate Statistics (3:3:0,F) Intermediate concepts of statistics for rehabilitation scientists. Prerequisite: HPPH 7321 or approval.

HPPH 7323 Selected Topics in Statistics (3:3:0,F) Selected topics in statistics for rehabilitation scientists. Prerequisite: HPPH 7322 or approval.

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.

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.

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 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 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 (3:3:0,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 Methods in Rehabilitation Science Research (3:3:0,F) This course provides an introduction to problem solving and custom program development in MATLAB for rehabilitation science research.

HPPH 7412 Educational Evaluation (4:4:0,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 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.

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, case worker). Graduates can also pursue advanced education in fields such as speech-language pathology, audiology, education, or healthcare administration.

Essential Functions

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 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 BS SLHS program begins in August of each year, and the application deadline is March 1 of each year for the following fall class. Admission decisions are made by May 1. 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 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

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.

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.

Note: For the Natural Sciences requirement, our department requires one Life Science course (animal biology, human anatomy and physiology, or genetics) and one Physical Science course (physics or chemistry).

For the Core Component/Area Option courses, our department requires 6 additional credit hours in the Social & Behavioral Science/Individual or Group Behavior category.

Additional Prerequisite Courses (21 minimum hours)	Semester Hours
Technical Writing	3
Statistics	3
Social & Behavioral Science Elective	3
Multicultural	3
General Electives	Variable hours
	Min. Total = 63 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
		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 Speech & Language Disorders	4
HPSH 4310	Special Topics (pre-SLP)	3
or		
HPSH 4446	Diagnostic Audiology (pre-AuD)	4
		Total Hours = 14-15

Spring Semester		Credit Hours
HPSH 4280/90	Clinical Observation: SLP/Audiology	2
HPSH 4344	Multicultural Issues	3
HPSH 4410	Basic Sign Language for the Health Professions	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 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,F) 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,F) 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 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 Multicultural Issues in Communication 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 4410 Basic Sign Language for the Health Professions (4:4:0,F) An intensive, introductory course in American Sign Language. Issues related to deaf culture and the use of signs in healthcare settings will be discussed.

HPSH 4426 Neural Bases of Speech, Language and Hearing (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 including neuroanatomy, neurophysiology, and neuropathologies of speech and language.

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.

HPSH 4446 Diagnostic Audiology (4:3:1,F) This course will present advanced diagnostic techniques for children and adults including those from diverse populations or with special needs.

Second Degree Bachelor of Science in Speech, Language, and Hearing Sciences

Admission to the Second Degree SLHS Program

Students begin in the Fall semester. This is a three-semester (fall, spring & summer) second degree tract in speech, language, and hearing sciences for students that have already completed a four-year degree from an accredited university. Students will enroll in full-time coursework at the TTUHSC Lubbock campus, and will physically attend classes and participate in clinic. Students who successfully complete the 35 credit hours in the program will earn a second bachelor's degree and be prepared to begin a graduate program in speech-language pathology at TTUHSC or any graduate program in the United States to which they are accepted, and/or they will be equipped to work as a licensed Speech-Language Pathology Assistant (SLP-A) in the state of Texas.

Application Process

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 Common core curriculum requirements. Information on the Texas Common 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 Common Core Curriculum. Information on the Texas Common 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 Speech & Language Disorders	4
		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 4280/90	Clinical Observation: SLP/Audiology	2
		Total Hours = 16

Summer Semester		Credit Hours
HPSH 4280/90	Clinical Observation: SLP/Audiology	2
		Total Hours = 2

Second Degree SLHS CURRICULUM	Total Hours = 35

Second Degree Bachelor of Science in Speech, Language, and Hearing Sciences Course Descriptions

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,F) 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,F) 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 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 4426 Neural Bases of Speech, Language and Hearing (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 including neuroanatomy, neurophysiology, and neuropathologies of speech and language.

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 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.

Essential Functions

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. **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 effectively at a level which will support competent professional practice. Communicate professionally on papers required as part of coursework and during clinical work (i.e., clinical interactions and documentation). 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 and clinical placements.

Admission to the Program

The SLP program begins in August of each year and the application deadline is January 15 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 online 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 perentile 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 licensing 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
		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 = 8-11

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 5201	Clinical Instrumentation & Technology for Communication Disorders	2
HPSH 5243	Aural Rehabilitation	2
HPSH 5143	Aural Rehabilitation Lab	1
HPSH 5440	Voice & Fluency Disorders	4
HPSH 5384	Graduate Clinical Practicum IV: SLP	3
HPSH 5110	Capstone Course	1
Or		
HPSH 6000	Master's Thesis (optional)	1-3
		Total Hours = 13-16

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 5366	Augmentative & Alternative Communication	3
HPSH 6000	Master's Thesis (optional)	1-3
		Total Hours = 11-13

Master of Science in Speech Language Pathology (SLP) Course Descriptions

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 5143 Aural Rehabilitation Lab (1:0:1,F) This laboratory course will allow students the opportunity to obtain hands-on experiences in aural rehabilitation. Course will include hands-on experience related to the use, management, and troubleshooting of hearing aids and FM systems. Cochlear implants, vibrotactile devices, and assistive listening devices will also be introduced.

HPSH 5201 Clinical Instrumentation and Technology for Communication (2:2:0,F) This course is designed to introduce students to various types of clinical instrumentation and technology used in the provision of speech-language assessment and treatment. Lecture will review basic concepts of acoustic phonetics and lab will include hands-on experience in the use of current and emerging technology.

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 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,F) The study of aural habilitation and rehabilitation procedures, intervention techniques, and the use of amplification for hearing-impaired children and adults. Psychosocial issues of hearing loss will be discussed in relation to the hearing impairment as well as the cultural history of the patient.

HPSH 5310 Special Topics in Speech Pathology (3:0:3,F) Directed study for non-thesis candidates. May be repeated for credit.

HPSH 5320 Research Priniciples 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 (4:3:1,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 5440 Fluency & Voice Disorders (4:4:0,F) This course provides an introduction to clinical issues of assessment and treatment of stuttering (fluency) and voice disorders in children and adults.

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.

Doctor of Audiology (AuD)

This program is accredited by the Council on Academic Accreditation (CAA) in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association (ASHA).

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 avail- able. 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 commonly hold elected positions at the national level of the Student Academy of Audiology. This opportunity allows students to be introduced to activities that will advance the profession of audiology in terms of education and advocacy for the profession and patients.

Essential Functions

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. **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 effectively at a level which will support competent professional practice. Communicate professionally on papers required as part of coursework and during clinical work (i.e., clinical interactions and documentation). 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 and clinical placements.

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 online 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)
- 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

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 7446	Diagnostic Audiology	4
		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 7225	Evidence-Based Practices in Audiology	2
HPSH 7243	Clinical Applications of Aural Rehabilitation	2
HPSH 7364	Auditory Electrophysiology	3
HPSH 7164	Auditory Electrophysiology Lab	1
HPSH 7396	Clinical Externship	3

Total Hours = 13

Summer Semester		Credit Hours
HPSH 7397	Clinical Externship	3

Total Hours = 3

THIRD YEAR

Fall Semester		Credit Hours
HPSH 7017	Audiology Clinical Research III	1
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 7260	Hearing Conservation & Instrumentation	2
HPSH 7322	Auditory Processing Disorders	3
HPSH 7357	Advanced Amplification	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 5320 Research Priniciples 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 7003 Clinical Research 2 (1:0:2,F) Clinical research course resulting in culmination and presentation of student clinical research project

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 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 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,F) 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 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.

HPSH 7446 Diagnostic Audiology (4:3:1,F) This course will present advanced diagnostic techniques for children and adults including those from diverse populations or with special needs.

School of Health Professions Faculty

Full Time

Last Name	First Name	Title	Degrees
Alexander	Belinda	Assistant Professor;	MOT, Texas Woman's University, 1991; BS, Texas Tech University, 1989
Allen	Brad	Assistant Director, Doctor of Science in Physical Therapy Program; Assistant Professor;	ScD, Texas Tech University Health Sciences Center, 2010; BS, Texas Tech University Health Sciences Center, 1993
Alvarez	Manuel		Other, Central Michigan University, 2009; MPA, West Virginia University, 1979; BA, West Virginia University, 1973
Anderson	Cayte		PhD, University of Wisconsin-Madison, 2011
Apte	Gail		Other, Texas Tech Allied Health, 2006; Other, Mayo School Hlth Sciences, 1981; BA, San Francisco State University, 1979
Aranha	Karen	Assistant Professor;	PhD, Texas Tech University, 2012; MS, Texas Tech University, 2006; BS, Texas Tech University Health Sciences Center, 1993; BS, Mount Carmel College, 1983
Arnold	Cindy		
Ballachanda	Bopanna	Adjunct Instructor;	PhD, The University of Texas at Dallas, 1988; MS, The University of Texas at Dallas, 1983; BS, University of Mysore, 1973
Barker	Matt		
Barnhart	Jeff		MS, Texas Tech University Health Sciences Center, 2013; BA, Ottawa University, 2007
Bassett	Cameron		DPT, Texas Tech University Health Sciences Center, 2016
Basu	Rashmita		PhD, Washington State University, 2009
Beauvais	Bradley		PhD, Pennsylvania State University, 2007; MBA, Colorado State University, 2003
Bekemeier	Karsten	Policy Consultant;	PhD, Michigan State University, 2009; MA, Michigan State University, 1998
Bell	Ashley	Director of Didactic Education; Assistant Professor;	Other, Wake Forest University School of Medicine, 2011; BS, University of Houston, 2003
Bennett	Katie	Laboratory Director; Laboratory Director; Associate Professor;	PhD, Texas Tech University Health Sciences Center, 2009; BS, West Texas A&M University, 2000

Beseril	Julian	Instructor;	MS, Trinity University, 2006; BBA, University of Texas at the Permian Basin, 1994
Bizzell	Susan		, Indiana University, 1996; BA, Indiana University , 1992
Bogschutz	Renee	Employee Supervisor; Clinical Coordinator for the Speech-Language Pathology Program ; Coordinator; Assistant Professor;	PhD, University of Iowa, 2000; MS, Eastern New Mexico University, 1995; BS, Eastern New Mexico University, 1993
Brake	Rika	Recurrent Faculty;	MOT, Texas Tech University Health Sciences Center, 2006
Brashear	Jessica	Assistant Professor;	MS, Texas Tech University Health Sciences Center, 2010; BS, Texas Tech University Health Sciences Center, 2009
Brismee	Jean-Michel	; Professor;	ScD, Texas Tech University Health Sciences Center, 2003; MS, Texas Tech University, 1996; BSPT, Catholic University Of Louvain-la-Neuve, 1985; APE, Catholic Univ of Louvain-la-Neuve, 1982; BS, Catholic University Of Louvain-la-Neuve, 1982
Brooks	Toby	Associate Professor; Clinical Education Coordinator;	PhD, University of Arizona, 2001; MA, The University of Arizona, 2000; ND, Southeastern Illinois College, 1998; BS, Southern Illinois University Carbondale, 1998; ND, Anderson University, 1995; AS, Southeastern Illinois College, 1995
Brunet	Joan	Assistant Director, Doctor of Physical Therapy Program, Amarillo Campus; Assistant Professor;	DPT, A. T. Still University, 2010; MS, West Texas A&M University, 2002; BSPT, University of Texas Southwestern Medical Center at Dallas, 1991; BS, West Texas A&M University, 1990
Burgess	Nathan	Assistant Director, Doctor of Physical Therapy Program ; Assistant Professor;	ScD, Texas Tech University Health Sciences Center, 2018; MPT, Texas Tech University Health Sciences Center, 2004; BS, Wayland Baptist University, 2001
Burrow	Trevor		MS, Texas Tech University Health Sciences Center, 2015; BS, Wayland Baptist University, 2014
Carter	Tammy	Director, Clinical Laboratory Science Program ; Assistant Professor;	PhD, Texas Tech University Health Sciences Center, 2013; BS, Texas Tech University Health Sciences Center, 2000
Cavanaugh	James		
Chapa	Alison		BSOT, Texas Tech University Health Sciences Center, 1996
Chen	Yo Rong	Instructor;	MAT, Texas Tech University Health Science Center , 2016; MS, National Taiwan Sports University,

			2012; BS, National Taiwan Sports University, 2010
Cooper	Jason	Director of Clinical Education; Assistant Professor;	MPAS, Texas Tech University Health Sciences Center, 2006; AAS, Texas State Technical College, 1994; CERT, Texas State Technical Institute, 1991
Corwin	Melinda	Co-coordinator of Communication Sciences and Disorders Concentration, Ph.D. in Rehabilitation Science; Professor; Director, Speech, Language, and Hearing Sciences Undergraduate Programs;	PhD, Texas Tech University, 2006; MS, Texas Tech University, 1989; BS, Texas Tech University, 1987
Covington	Amber		MOT, Texas Woman's University, 2009
Cristy	Debra		BSPT, Texas Tech University Health Sciences Center, 1993
Crossland	Becca	Recurrent Faculty;	MOT, Texas Tech University Health Sciences Center, 2014
Custis	Dave	Assistant Professor;	MSN, University of Mary, 2011; BSN, Presentation College, 2009; Other, University of North Dakota, 1982; RN, St Luke's School of Nursing, 1980
Dame	Mark	Assistant Professor;	MHA, Indiana University, 1993; Other, Indiana University, 1989; BA, Indiana University, 1984
Davies	Andy		DPT, Texas Tech University Health Sciences Center, 2014; BS, Grand Canyon University, 2011
Davis	Melinda		BSPT, California State University , 1985
Davis-Pitre	Aletta		MPT, Texas Tech University Health Sciences Center, 2003
Dembowski	James	Associate Professor;	PhD, University of Wisconsin-Madison, 1998; MS, University of Texas at Dallas, 1988; BS, Northwestern University, 1975
Dendy	Douglas	Assistant Director of Clinical Education; Assistant Professor;	ScD, TTUHSC, 2016; BS, Lubbock Christian University, 2015; MPT, Texas Tech University Health Sciences Center, 1998
Diersing	Dean		MS, Texas Tech University, 2005; BS, Texas Tech University, 2003
Dixon-Lawson	Kimberly	Recurrent Faculty;	Other, University of Phoenix, 2009; MS, Jackson State University, 2000; BS, Jackson State University, 1998
Eaves	Taylor	Instructor;	MS, Texas Tech University Health Sciences Center, 2016; BS, Wayland Baptist University, 2013
Edwards	Deborah	Assistant Professor;	DPT, Texas Tech University Health Sciences Center, 2016; MPT, Texas Tech University Health Sciences Center, 2002; BS, Howard Payne

			University, 1998
Euring	Myshalae	Assistant Professor;	PhD, North Carolina Agricultural and Technical State University, 2017; MS, Winston-Salem State University, 2014; BA, North Carolina State University, 2000; BA, North Carolina State University, 2000
Frick	Kimberly		MPT, Texas Tech University Health Sciences Center, 1998
Geddie	Matthew	Assistant Professor;	PhD, Texas Tech University, 2011; MBA, Wayland Baptist University, 2002; BS, Texas Tech University Health Sciences Center, 1994
Gehring	Reid	Assistant Professor;	DPT, Texas Tech University Health Sciences Center, 2008; BS, Texas Tech University Health Sciences Center, 2006; AS, Amarillo College, 2004
Gilbert	Kerry	Director, Anatomy Research and Education; Director, Doctor of Physical Therapy Program;	ScD, Texas Tech University Health Sciences Center, 2004; MPT, Texas Tech University Health Sciences Center, 1997; BS, University of Texas, 1993
Gililland	Darrell		EdD, Texas A&M University, 2015; MSED, Northwest Missouri State University, 2000; Other, Hardin-Simmons University, 1998
Ginnity	John		MS, State University of New York Polytechnic Institute, 1995
Goodson	Yvette	Instructor; Laboratory Manager;	MHA, Texas Tech University Health Sciences Center, 2018; CERT, Texas Tech University, 1997; BS, Texas Tech University Health Sciences Center, 1995
Gordon	Jean		MBA, Nova Southeastern University, 2015; MSN, Kaplan University, 2010; DBA, Nova Southeastern University, 2001; DBA, Nova Southeastern University, 1999; MS, Nova Southeastern University, 1997; BSN, University of Miami, 1974
Gore	Lisa		MS, Texas Woman's University , 1995; BS, Texas Tech University , 1991
Granados	Sarai	Director of Clinical Operations, Clinical Instructor;	MS, Texas Tech University Health Sciences Center, 2004; BS, Texas Tech University Health Sciences Center, 2002
Guan	Jingjing	Assistant Professor;	PhD, University of Texas , 2017; MED, Beijing Normal University , 2012; BS, Fuzhou University , 2009
Guerra	Luis	Regional Medical Director ; Clinical Assistant Professor of Medicine;	MD, Ponce Medical School, 1986

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	Assistant Professor;	MS, Texas Tech University Health Sciences Center, 2005; BS, Texas Tech University Health Sciences Center, 2003
Hendrix	Ericka	Director; Associate Professor; Laboratory Manager and Technical Supervisor;	PhD, Texas Tech University, 2014; MS, Texas Tech University Health Sciences Center, 2003; BS, Texas Tech University, 1997
Hernandez	Cynthia		
Hernandez	Elisa	Instructor;	MSPA, Texas Tech University Health Sciences Center, 2007; BS, Univ Texas Pan American, 2000
Hicks	Candace	Associate Program Director, Co-coordinator of Communication Sciences and Disorders Concentration, PhD in Rehabilitation Science; Professor; Director-Center for Speech, Language, and Hearing Research; Program Director-Audiology;	PhD, Vanderbilt University, 2000; MS, Purdue University, 1995; BSE, Arkansas State University , 1992
Hildebrandt	Samye	Clinical Instructor;	MS, Texas Tech University Health Sciences Center, 2005; BS, Texas Tech University Health Sciences Center, 2003
Hinojos	Sissy	Instructor;	MPAS, Texas Tech University Health Sciences Center, 2012; M, University of Texas at Austin, 1992; B, Texas Tech University, 1986
Holland	Hesper	Clinical Instructor;	MS, Texas Tech University Health Sciences Center, 2003; BS, Texas Tech University Health Sciences Center, 2001
Hooper	Troy	Assistant Professor;	PhD, Texas Tech University Health Sciences Center, 2015; MPT, Texas Tech University Health Sciences Center, 2001; BS, Angelo State University, 1996
Hooten	Michael	; Asst VP Finance and Administration ;	EdD, Texas Tech University, 2005; MHA, Baylor University, 1990; BS, Texas Tech University, 1981
House	Morgan	Assistant Professor; Director;	MBA, Wayland Baptist University, 2003; BS, Wayland Baptist University, 2002
Hubbard	Joel		PhD, Texas Tech University , 1986; BS, Texas Tech University, 1976
Hunt	Sharon	Director, Master of Science in Healthcare Administration Program; Assistant Professor;	MBA, Wayland Baptist University, 2002; BBA, Texas Tech University, 1988
James	Roger	Professor; Director, PhD in	PhD, University of Oregon, 1996; MS, University of

		Rehabilitation Science Program; Director, Center for Rehabilitation Research;	Oregon, 1991; BS, Missouri State University, 1988
Johnson	Lindsay	Associate Dean for Admissions and Student Affairs;	MED, Texas Tech University, 2003; BS, Texas Tech University, 2001
Johnston	Sara	Assistant Professor;	PhD, University of Iowa, 2013; MS, University of Wisconsin-Madison, 2004
Joy	Sheila	Recurrent Faculty;	AAS, Amarillo College, 1997
Kapila	Jeegisha		Other, Drexel University, 2010; DPT, Drexel University, 2009; BSPT, Bhopal University, 2002
Kearns	Gary	Assistant Professor;	ScD, Texas Tech University Health Sciences Center, 2015; MPT, Texas Tech University Health Sciences Center, 2002
Kelly	Erica	Recurrent Faculty;	MAT, Texas Tech University Health Sciences Center, 2012; BSED, University of Virginia, 2010
Kerns	Sara		MAT, Texas Tech University Health Sciences Center, 2008; BS, Texas Tech University, 2005
Kim	Forest		PhD, University of Washington, 2009; MBA, University of Texas at San Antonio, 2003; MHA, Army-Baylor University Graduate Program in Health & Business Administration, 2003; MA, Chapman University, 2000
Kim	Jeong	Associate Professor;	PhD, University of Wisconsin-Madison, 2008; MS, University of Wisconsin-Madison, 2004
Knight	Jacqueline	Academic Instructor/Clinical Education Coordinator;	MS, Texas Tech University Health Sciences Center, 2011; BS, Texas Tech University Health Sciences Center, 1997; BSCS, Texas Tech University HSC, 1997
Kremer	Mary	Instructor;	ScD, Texas Tech University Health Sciences Center, 2013
Kroll	Tobias		PhD, University of Louisiana at Lafayette, 2014; Other, University of Münster, 2007
Kubala	Koy	Assistant Professor;	CERT, The University of Texas Medical Branch at Galveston, 2013; MS, Texas Tech University Health Sciences Center, 2007; BS, Texas Tech University Health Sciences Center, 2006
Kublawi	Marwan	Instructor;	ScD, Texas Tech University Health Sciences Center, 2014
Kumar	Neeraj	Assistant Director, Doctor of Physical Therapy, Odessa Campus; Regional Dean, Odessa; Assistant Professor;	DPT, Texas Tech University Health Sciences Center, 2016; PhD, University at Buffalo, State University of New York, 2009; Other, Guru Nanak Dev University, 1998; Other, Manipal Academy of

			Higher Education, 1996
La Fave	Dee	Instructor;	MS, Texas Tech University , 1988; BS, Texas Tech University , 1985
Larsen	Hal	Laboratory Director; Associate Dean; Laboratory Director; Professor;	PhD, University of Nebraska Medical Center, 1980; CERT, Utah Valley Hospital, 1974; MS, Brigham Young University, 1973; BS, Brigham Young University, 1970
Lee	Sue Ann	Associate Professor;	PhD, University of Texas, 2003; MA, The Ohio State University, 1998; BA, Ewha Womans University, 1990
Lewis	Nancy	Adjunct Faculty;	ScD, Texas Tech University Health Sciences Center, 2008; BS, University of Texas Medical Branch at Galveston, Texas, 1975; BS, Tarleton State University, 1973
Lierly	Micah	Assistant Professor;	DPT, Texas Tech University Health Sciences Center, 2014; BS, Cameron University, 2010; AA, Western Texas College, 2008
Lindemood	Jessica		MPAS, TTUHSC, 2010; BS, Texas Woman's University, 2006
Mahan	Carla	Clinical Instructor;	MS, Texas Tech University , 1987; BA, Sam Houston State University , 1979
Maiden	Rodney		PhD, University of Iowa, 2014
Melvin	Andre		CERT, University of Washington, 2014; PhD, University of South Carolina, 2012; MBA, Troy University, 2007
Miller	Misty	Director of Clinical Education, Doctor of Physical Therapy Program; Assistant Professor;	DPT, Texas Tech University Health Sciences Center, 2011; MPT, Texas Tech University Health Sciences Center, 1997
Mize	Ryan	Adjunct Professor; Teaching Assistant;	MS, Texas Tech University Health Sciences Center, 2012; BS, Texas Tech University Health Sciences Center, 2011
Moeller	Danna	Recurrent Faculty;	MS, Texas Tech University Health Sciences Center, 2004; BS, Louisiana State University Health Sciences Center at Shreveport, Louisiana, 1993
Munger	Larry	Assistant Professor;	PhD, Texas Tech University, 2010; MS, Arizona School of Health Sciences, 1997; BSE, University of Kansas, 1995
Murphy	Brandi		DAUD, Texas Tech University Health Sciences Center, 2015; BA, Texas Tech University, 2010
Panasci	Kate	Director, Transitional Doctor of Physical Therapy Program; Assistant Professor;	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; MPT, Texas Tech University Health Sciences Center, 2006; MS, Texas Tech University, 2002; BS, University of North Texas, 1998
Perry	Carolyn	Director of Clinical Education ;	MS, Texas Tech University, 1993; BS, Texas Tech University, 1991
Pinnow	Jeffery	Instructor;	MS, University of South Florida, 2017; MD, University of Minnesota , 2007
Porcaro	Joan	Instructor;	Other, University of Phoenix, 2007; BSN, Saint Xavier College, 1982
Posteraro	Robert	Professor; Assistant Program Director, MSHA Program TTUHSC-SHP; Associate Professor;	Other, Oregon Health & Science University, 2005; Other, Duke University Medical Center, 1988; Other, Yale-New Haven Hospital, 1979; MD, Yale University , 1973; BS, Fordham College, 1969
Potter-Brunet	Joan	Assistant Director, Doctor of Physical Therapy Program, Amarillo Campus; Assistant Professor;	DPT, A. T. Still University, 2010; MS, West Texas A&M University, 2002; BSPT, University of Texas Southwestern Medical Center at Dallas, 1991; BS, West Texas A&M University, 1990
Ramello	Natalie		M, Loyola University Chicago, 2010; MSW, Loyola University Chicago, 2009; JD, Loyola University Chicago , 2008
Redman	Wade	Associate Professor; Assistant Dean for Educational Technology; Chair, Department of Laboratory Sciences and Primary Care;	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 Professor;	PhD, Texas Tech University Health Sciences Center, 2009; AuD, Texas Tech University Health Sciences Center, 2005; Other, Hardin-Simmons University, 2001
Reznik	Mikala	Assistant Director of Clinical Education; Assistant Professor;	DPT, Hardin-Simmons University, 2008; MSPT, Southwest Texas State University, 2002; BS, Texas Christian University, 1998
Ricci	Laura		DPT, Texas Tech University Health Sciences Center, 2008; BS, Texas Tech University Health Sciences Center, 2006
Rice-Spearman	Lori	Dean;	PhD, Texas Tech University, 2010; MS, Texas Tech University, 1991; BS, Texas Tech Allied Health, 1986
Robohm-Leavitt	Christina	Regional Dean, Midland; Associate Professor; Director, Master of Physician Assistant Studies Program;	MS, University of Colorado , 1999; Other, University of Colorado Health Science Center, 1997; BS, University of Colorado , 1995
Sametz	Rebecca	Director, Master of Science in	PhD, Michigan State University, 2017; MA, Western

		Clinical Rehabilitation Counseling; Assistant Professor;	Michigan University, 2014; MA, Western Michigan University, 2014; BA, University of Kentucky, 2011
Samuels	Shenae	Program Director; Assistant Professor;	PhD, University of Florida, 2017; MPH, University of Florida, 2013; BS, University of Florida, 2010
Sancibrian	Sherry	Professor ; Director, Master of Science in Speech-Language Pathology Program;	MS, Texas Tech University, 1978; BS, Texas Tech University, 1976
Sargent	Elizabeth	Instructor;	ScD, Texas Tech University Health Sciences Center, 2015
Sawyer	Barbara		PhD, University of Texas Health Science Center at Dallas, 1988; BS, University of Texas Health Science Center at Dallas, 1977; Other, Stephen F. Austin State University, 1974
Sawyer	Steven	Distinguished Professor; Associate Dean for Faculty Development; Professor; Chair, Department of Rehabilitation Sciences;	MSPT, Texas Tech University Health Sciences Center, 1997; PhD, University of California , 1988; BS, University of California at Irvine, 1980
Schmidt	Ryan	Chair, Department of Healthcare Management and Leadership ;	Other, University of Florida , 2015; Other, 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	Director, Master of Science in Clinical Mental Health Counseling Program; Assistant Professor;	PhD, Michigan State University, 2012; MA, Michigan State University, 2003; BA, Michigan State University, 1980
Sechrist	Dawndra	Assistant Dean for Outcomes and Assessment; Associate Professor;	PhD, Texas Tech University, 2006; MA, Texas Womans University, 2001; BS, Texas Tech University Health Sciences Center, 1994; BS, Texas Tech University, 1990
Sizer	Phillip	Associate Dean for Research; Director, Doctor of Science in Physical Therapy Program ;	PhD, Texas Tech University, 2002; MED, Texas Tech University, 1993; BSPT, University of Texas Medical Branch at Galveston, 1985
Snead	Ray		ScD, University of Alabama at Birmingham, 2013; MBA, East Carolina University, 1985; BS, University of Virginia, 1974
Sneed	Susan	Clinical Instructor;	MS, Texas Tech University Health Sciences Center, 2014; BS, Texas Tech University Health Sciences Center, 2012
Sneed	Zachery	Director, Master of Science in Addiction Counseling Program;	PhD, Southern Illinois University, 2006; MS, University of North Texas, 2003; BS, University of

		Assistant Professor;	North Texas, 2001
Spears	Evans	Chair, Department of Clinical Counseling and Mental Health; Associate Professor;	PhD, University of Arizona, 2003; MA, University of Iowa, 1994; BA, Coe College, 1991
Spulick	Stephen		PhD, Georgia Southern University, 2015; MBA, University of Phoenix, 2007; BA, Fordham University, 1990
Steadman	Natalie		MAT, Texas Tech University HSC, 2002; BS, Texas Tech University, 1992; BS, Texas Tech University, 1990
Stelter	Laurie	Academic Fieldwork Coordinator; Assistant Professor;	MA, Texas Woman's University, 2004; BSOT, Texas Tech University Health Sciences Center, 1998
Stump	Matt	Instructor;	ScD, Texas Tech University Health Sciences Center, 2010
Swackhammer	Corey	Instructor;	BS, Texas Tech University Health Sciences Center, 2014; BS, Texas Tech University, 2012; AS, South Plains College, 2009
Taylor	Frank	Adjunct Faculty;	MA, Michigan State University, 1991; BS, Michigan State University, 1985
Taylor	Leslee	Associate Professor; Director, Master of Athletic Training Program;	PhD, Texas Tech University, 2001; MS, University of Arizona, 1995; BS, University of Kansas, 1993
Taylor	Megan	Assistant Professor;	Other, Texas Woman's University, 2018; MSOT, Washington University in St. Louis, 2003; BBA, Texas Tech University, 2001
Taylor	Mike	Associate Program Director; Physician Assistant;	MPAS, University of Nebraska Medical Center, 1997; Other, David Grant Medical Center, 1988; BS, University of Oklahoma, 1982
Tiongco	Cynthia	Assistant Professor;	BS, Texas Tech University Health Sciences Center, 2002; MOT, Texas Tech University Health Sciences Center, 2002
Townsend	Christopher		MA, Appalachian State University, 1998
Van Sickle	Angela	Assistant Professor;	PhD, Texas Tech University Health Sciences Center, 2015; MS, Texas Tech University, 1992; BA, University of Pittsburgh, 1989
Villegas	Elesea	Assistant Professor;	MPAS, Texas Tech University Health Sciences Center, 2015; BS, Angelo State University, 2012
Weigel	Fred		PhD, Auburn University, 2011; BS, Embry-Riddle Aeronautical University, 1996; AA, Brookdale Community College, 1988
West	Micheal	Assistant Dean for Finance and	BBA, Texas Tech University, 1996

		Administration;	
Whisner	Sandra	Director, Master of Occupational Therapy Program; Assistant Professor ;	PhD, Texas Woman's University, 2014; MA, Texas Womans University, 2003; BS, Texas Tech University Health Sciences Center, 1997; BBA, Texas Tech University, 1992
Whitaker	Melissa	Clinical Instructor;	MS, TTUHSC, 2004; BS, TTUHSC, 2002
Wilkinson	William	Adjunct Faculty;	MD, University of Texas Health Science Center at San Antonio, 1994; MS, University of North Texas, 1988; Other, West Texas State University, 1984
Williams	Courtney		DPT, Texas Tech University Health Sciences Center, 2016; BS, The University of Texas at Austin, 2012
Yoon	Yang-soo	Assistant Professor;	PhD, University of Illinois at Urbana – Champaign , 2008; MS, Texas A & M University - Kingsville, 1996; BE, Seoul National University of Science and Technology, 1993
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	Instructor;	MPAS, Texas Tech University Health Sciences Center, 2016; BAS, University of North Texas- College of Arts & Science, 2013; AAS, Richland Community, 2009
Alvarado	Adiel	Instructor;	Other, Central Michigan University, 2013; MHA, University of Phoenix, 2006; BS, University of Texas of The Permian Basin, 2004; AAS, , 2000
Connelly	Nicole		MPAS, Texas Tech University Health Sciences Center, 2015
Dalehite	Jess	Instructor;	MD, University of Texas Southwestern Medical School, 1982; BS, University of California, Irvine, 1977
Dragun	Michael	Instructor;	MD, University of California at Los Angeles Medical School, 1989; BS, University of California at Riverside, 1985
Flitton	Johnny	Instructor;	MS, Texas Tech University Health Sciences Center, 2006; AAS, Midland College, 2004
Fox	Taylor	Instructor;	BS, University of Texas Health Science Center at San Antonio, 2010; MPAS, University of Texas at San Antonio, 2010; BBA, Texas Tech University, 2001
Grigsby	Jeff	Instructor;	Other, Oregon State University, 2011; MS, University of Texas of the Permian

			Basin, 2007; OD, University of Houston, 1981
MacMurdo	Lee	Instructor;	MSN, Texas Tech University Health Sciences Center, 2002; BSN, Texas Tech University Health Sciences Center, 1998
Ott	Kayla	Instructor;	MPAS, University of North Texas Health Science Center, 2013; BA, University of Texas, 2010