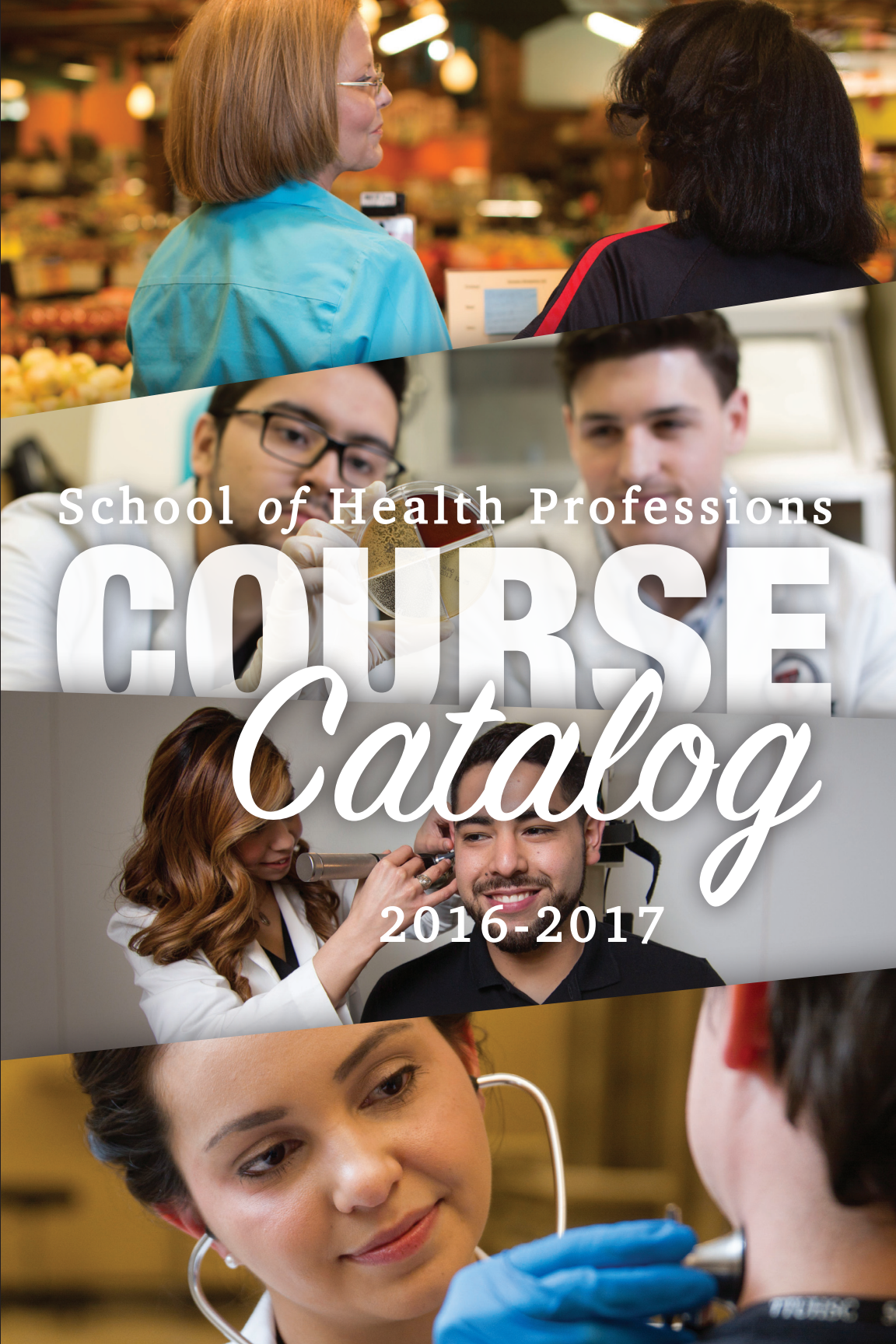

School *of* Health Professions

COURSE *Catalog*

2016-2017

Message from the Dean

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

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 nineteen 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!

Publication Policy

The programs, policies, statements, fees and/or courses contained in this document are subject to continuous review and evaluation. The School of Health Professions reserves the right to make changes at any time without notice. This publication is therefore intended for information purposes only. Matriculation information particular to the individual programs within the School of Health Professions is contained in departmental handbooks issued to admitted students upon enrollment. Students should consult these publications for detailed information regarding policies, procedures and resources.

Equal Opportunity Statement

The School of Health Professions is committed to a policy of equal opportunity for all, and will not discriminate on the basis of race, color, sex, age, religion, national origin, handicap, or disability.

Admission Inquiries

All inquiries concerning admission to the School of Health Professions should be addressed to:

Texas Tech University Health Sciences Center
School of Health Professions
3601 4th Street, STOP 6294
Lubbock, TX 79430
(p) 806.743.3220
(f) 806.743.2994
www.ttuhsc.edu/shp

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General Information

Administration

Board of Regents

Term Expires May 31, 2017
Jeremy Stewart ..... *Student Regent*

Term Expires January 31, 2017
Larry K. Anders ..... *Dallas*
Debbie Montford, Vice Chairwoman ..... *San Antonio*
John D. Steinmetz ..... *Lubbock*

Term Expires January 31, 2019
John Esparza ..... *Austin*
L. Frederick "Rick" Francis ..... *El Paso*
Tim Lancaster ..... *Abilene*

Term Expires January 31, 2021
Mickey L. Long, Chairman ..... *Midland*
Ronnie Hammonds ..... *Houston*
Christopher M. Huckabee ..... *Fort Worth*

Health Sciences Center

Robert L. Duncan ..... *Chancellor*
Tedd Mitchell ..... *President*
Elmo Cavin ..... *Executive Vice President for Finance and Administration*

School of Health Professions

Lori Rice-Spearman, Ph.D. ..... *Dean*
Hal S. Larsen, Ph.D. ..... *Executive Associate Dean*
Rajinder Koul, Ph.D. ..... *Vice President for Research*
Chair, Department of Speech, Language, and Hearing Sciences
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 and Student Affairs*
Dawndra Sechrist, Ph.D. ..... *Assistant Dean for Learning Outcomes and Assessments*
Wade Redman, Ph.D. ..... *Chair, Department of Laboratory Sciences and Primary Care*
Rajinder Koul, Ph.D. ..... *Chair, Department of Speech, Language, and Hearing Sciences*
Evans H. Spears, Ph.D. ..... *Chair, Department of Clinical Counseling and Mental Health*
Program Director, Master of Rehabilitation Counseling
Michael Hooten, Ed.D. ..... *Regional Dean, Amarillo*
Neeraj Kumar, Ph.D ..... *Regional Dean, Odessa*
Micheal West ..... *Assistant Dean for Finance and Administration*
Fabian Blanco ..... *Director of I.T.*

About Our School

TTUHSC Mission

The mission of the Texas Tech University Health Sciences Center is to improve the health of people by providing high quality educational opportunities to students and health care professionals, advancing knowledge through scholarship and research, and providing patient care and service.

The Texas Tech University Health Sciences Center fulfills its higher education mission by achieving six strategic goals:

1. Train competent health professionals and scientists
2. Increase externally funded, peer-reviewed research, especially NIH-funded research, and research focused on aging, cancer, and rural health
3. Improve access to quality health care for the TTUHSC's target populations
4. Prepare health professions students for an increasingly diverse workforce and patient population
5. Provide leadership in the development of partnerships and collaborations to improve community health
6. Operate the TTUHSC as an efficient and effective institution

SHP Mission

The mission of the TTUHSC School of Health Professions is to provide a high quality, inclusive and diverse, student-centered learning environment for graduate and undergraduate education in the health professions; advance knowledge through scholarship and research; and provide clinical services that improve health and quality of life in Texas and the nation.

As part of a state-supported university system, we serve the people of Texas, with particular emphasis on developing regional solutions to meet the educational and clinical needs of rural communities of West Texas.

SHP Vision

To earn regional and national recognition for excellence in graduate and undergraduate Health Professions education, research and clinical services.

We will progress toward achieving this vision by:

7. Achieving high levels of excellence in teaching, research and clinical service while fostering the professional and personal competence, growth and success of our students, faculty and staff.
8. Providing an environment that values, supports and rewards research and other scholarly activities.
9. Contributing to the improvement of health status and the reduction of health disparities in the communities we serve.
10. Expanding the cultural and ethnic diversity of our student body, faculty and staff.
11. Remaining responsive to the evolving needs of the students, patients and communities we serve.

SHP Organizational Philosophy

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

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

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

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

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

SHP Milestones

1981 67th Texas Legislature approves funding for School

1983 First students accepted

1985 Full Accreditation received for programs in Physical Therapy, Occupational Therapy, Medical Technology

1991 Emergency Medical Services program added

1993 Department of Communication Disorders transferred from TTU, where it had existed since 1928

1994 Expansion of PT and OT programs to Amarillo and Odessa with extensive reliance on HealthNet

Expansion of PT program from B.S. to M.P.T.

1999 Addition of Physician Assistant Program at Midland

Expansion of OT program from B.S. to M.O.T.

Approval of B.S., Emergency Medical System Management Program

2000 Addition of Master of Athletic Training Program

Addition of Masters of Vocational Rehabilitation Program

Addition of B.S. in Emergency Medical Systems Management

Expansion of Physician Assistant Program from B.S. to M.P.A.S.

Relocation of Department of Communication Disorders to TTUHSC facilities

Relocation of School Of Allied Health-Odessa to permanent facilities at TTUHSC-Odessa

Approval of Clinical Doctorate in Audiology (Au.D.)

2001 Relocation of School Of Allied Health-Amarillo to permanent facility

Completion of Physician Assistant Program permanent facility

Approval of Center for Brain Mapping and Cortical Studies

2002 Approval/addition of “first-in-nation” M.S., Molecular Pathology (M.S., M.P.)

Approval/addition of M.S. in Rehabilitation Sciences (M.S., R.S.)

Approval/addition of B.S. in Clinical Support Services Management (B.S., C.S.S.M.)

Approval/addition of the ScD in PT Program

Approval of Center for Rehabilitation Assessment

2003 Approval of School name change to "Allied Health Sciences"

Department name changes from Department of Clinical Laboratory Science to Department of Laboratory Sciences and Primary Care, Department of Communication Science & Disorders to Department of Speech, Language, and Hearing Sciences

2004 Approval/addition of Ph.D., Communication Sciences and Disorders

Approval/addition of B.S., Health Science

Approval of program name changes; Vocational Rehabilitation to Rehabilitation Counseling; CSSM to Clinical Services Management (C.S.M); MSRS to Clinical Practice Management (C.P.M.)

2005 Approval/addition of Department of Clinic Administration and Rehabilitation Counseling

2007 Expansion of Physical Therapy From masters (M.P.T.) to clinical entry-level doctorate (D.P.T.)

CSM program expands to provide a specialty track in Long Term Care Administration with approval from the Texas Department of Aging and Disabilities.

2008 THECB grants School Of Allied Health Sciences "planning authority" for Ph.D. in Rehabilitation Science.

The Doctorate of Physical Therapy (D.P.T.) is implemented with enrollment of its first cohort of students.

2009 Approval/addition of Ph.D. Rehabilitation Sciences

Approval/addition of Transitional Doctor of Physical Therapy Pathway (tD.P.T.)

Approval/addition of Clinical Laboratory Science Second Degree and Certificate Programs

2010 Physician Assistant facility expansion is completed

Enrollment for the Physician Assistant program is increased from 45 to 60 students per cohort

First NIH grant obtained by School Of Allied Health Sciences Faculty

Approval of Center name change to "Center for Speech, Language, and Hearing Research"

2011 Major renovation of clinical and research space

Relocation of School Of Allied Health Sciences faculty to 3C lab and office space

Opened the Health Promotion Research Laboratory on the Amarillo campus

2012 Fall enrollment exceeds 1,300 for first time in school history

Paul P. Brooke, Jr., Ph.D., FACHE, Professor & Dean retired after serving for 14 years Robin Satterwhite, MBA, EdD, FACHE was hired as the fifth Dean of the School Of Allied Health Sciences

2014 Approval/addition of Respiratory Care, Medical Imaging and Emergency Medical Services concentration area to the Bachelor of Science in Health Sciences program

2015 Board of Regents approved school name change from School of Allied Health Sciences to School of Health Professions

2016 Lori Rice-Spearman, Ph.D., hired as the sixth Dean of the School of Health Professions

Department name and structural changes from Department of Clinic Administration & Rehabilitation Counseling to Department of Healthcare Management and Leadership

Approval/addition of Department of Clinical Counseling and Mental Health

Program name changes from BS in Helath Sciences and the BS in Clinical Services Mangement to Bachelor of Science in Healthcare Management; MS in Clinical Practice Management to the Master of Science in Healthcare Administration

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
- Bachelor of Science (B.S.)
  - Clinical Laboratory Science
  - Clinical Services Management/Healthcare Management
  - Health Sciences
  - Speech, Language, and Hearing Sciences
- Post-Baccalaureate
  - Clinical Laboratory Science
  - Speech, Language, and Hearing Sciences
- Master of Athletic Training (M.A.T.)
- Master of Occupational Therapy (M.O.T.)
- Master of Physician Assistant Studies (M.P.A.S.)
- Master of Rehabilitation Counseling (M.R.C.)
- Master of Science (M.S.)
  - Clinical Practice Management/Healthcare Administration
  - Molecular Pathology
  - Speech-Language Pathology
- Doctor of Audiology (Au.D.)
- Doctor of Philosophy (Ph.D.)
  - Communication Sciences and Disorders
  - Rehabilitation Sciences
- Doctor of Physical Therapy (D.P.T.)

- Transitional Doctor of Physical Therapy (tD.P.T)
- Doctor of Science in Physical Therapy (Sc.D.)

Q: How can I apply for admission to the School of Health Professions?
A: The online application may be accessed via the TTUHSC School of Health Professions web site: *www.ttuhsc.edu/shp*

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
806-743-3220, fax 806-743-2994
www.ttuhsc.edu/shp health.professions@ttuhsc.edu

Q: How is the School of Health Professions organized?
A: Our 19 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 (M.P.A.S.)
- Department of Speech, Language, and Hearing Sciences
  - Programs in Speech, Language, and Hearing Sciences (B.S.)
  - Program in Speech-Language Pathology (M.S.)
  - Program in Audiology (Au.D.)
  - Program in Communication Sciences and Disorders (Ph.D.)
- Department of Rehabilitation Sciences
  - Program in Athletic Training (M.A.T)
  - Program in Occupational Therapy (M.O.T.)
  - Programs in Physical Therapy (D.P.T., tD.P.T., Sc.D.)
  - Program in Rehabilitation Sciences (Ph.D.)
- Department of Healthcare Management and Leadership
  - Program in Clinical Services Management/Healthcare Management (B.S.)
  - Program in Clinical Practice Management/Healthcare Administration (M.S.)
- Department of Clinical Counseling and Mental Health
  - Program in Rehabilitation Counseling (MRC)

Accreditation

The Texas Tech University Health Sciences Center is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award baccalaureate, masters, doctoral, and professional degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097, or call 404-679-4500 for questions about the accreditation of the Texas Tech University Health Sciences Center. The Commission should be contacted only if there is evidence that appears to support the institution's significant non-compliance with a requirement or standard.

A member of the Texas Tech University System, TTUHSC has been accredited by the Southern Association of Colleges and Schools Commission on Colleges as a separate institution from Texas Tech University since 2004. TTUHSC received its reaffirmation of accreditation from SACSCOC in 2009 and will be seeking reaffirmation again in 2019.

2016-2017 Academic Calendar for TTUHSC SHP

Fall 2016

Orientation (CLS, SLHS, SLP, AuD, PhD RS, PhD CSD)	August 23
First day of class	August 24
Last day of class	December 2
Last day of the semester	December 9
Final grades due for Graduates by 12:00 noon	December 7
All Final grades posted by 5:00 p.m.	December 12
First day of finals	December 5
MOT 2: First day of class	August 24
MOT: Finals begin	December 2
MOT: Finals end	December 7
Advance registration for next term begins for currently enrolled students	November 1
Last Day for PhD candidates to defend dissertations	October 21
Job Fair	October 18

PAYMENT AND REFUNDS

Drop for Non-Payment of Tuition and Fees	September 9
Last day to withdraw from the University and receive a partial refund	September 21

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

Last day to register or withdraw from the University without a penalty	August 23
Add-drop Period (Registrar's Office only)	Aug 24-Sept 9
Last day to add/drop	September 9
Last day to drop with an Automatic "W"	October 5
Last day to drop a course or withdraw from the University	November 28

DEADLINES RELATED TO GRADUATION

Detailed information: http://www.ttuhsc.edu/shp/	
Final grades due for Graduates by 12:00 noon	December 7
Official Health Sciences Center Diploma Date	December 10

CLINICAL/PRECEPTORSHIP/CLERKSHIP

MAT 1: Clinical Experience begins	August 8
MAT 2: Clinical Experience begins	August 1
MOT Fieldwork II: 2 begins	September 12
MOT Fieldwork II: 2 ends	December 2
DPT: Clinical Internship 2 begins	August 22
DPT: Clinical Internship 2 ends	October 14
DPT: Clinical Internship 3 begins	October 17
DPT: Clinical Internship 3 ends	December 9

PA: Clerkship I begins	August 8
PA: Clerkship I ends	September 16
PA: Clerkship 2 begins	September 19
PA: Clerkship 2 ends	October 28
PA: Clerkship 3 begins	October 31
PA: Clerkship 3 ends	December 9

HOLIDAYS AND VACATION DAYS

Labor Day (University Holiday)	September 5
Thanksgiving (University Holiday)	November 24-25

Spring 2017

First day of class	January 17
Last day of class	May 5
Last day of the semester	May 12
Final grades due for Graduates by 12:00 noon	May 10
All Final grades posted by 5:00 p.m.	May 15
First day of finals	May 8
MOT 2: First day of class	January 23
MOT: Finals begin	May 5
MOT: Finals end	May 11
DPT: Graduate Seminar Week	May 8-May 12
Advance registration for next term begins for currently enrolled students	April 3
Last Day for PhD candidates to defend dissertations	March 31

PAYMENT AND REFUNDS

Drop for Non-Payment of Tuition and Fees	February 1
Last day to withdraw from the University and receive a partial refund	February 13

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

Last day to register or withdraw from the University without a penalty	January 16
Add-drop Period (Registrar's Office only)	Jan 17-Feb 1
Last day to add/drop	February 1
Last day to drop with an Automatic "W"	February 27
Last day to drop a course or withdraw from the University	May 1

DEADLINES RELATED TO GRADUATION

Detailed information: http://www.ttuhsc.edu/shp/	
Final grades due for Graduates by 12:00 noon	May 10
Official Health Sciences Center Diploma Date	May 13
TTUHSC SHP Commencement	May 13

CLINICAL/PRECEPTORSHIP/CLERKSHIP

MAT 1: Clinical Experience begins	January 17
MAT 2: Clinical Experience begins	January 17

MOT 2 Fieldwork I: 3 begins	January 9
MOT 2 Fieldwork I: 3 ends	January 20
DPT: Clinical Internship 4 begins	January 9
DPT: Clinical Internship 4 end	March 3
DPT: Clinical Internship 5 begins	March 13
DPT: Clinical Internship 5 ends	May 4
PA: Clerkship 4 begins	January 9
PA: Clerkship 4 ends	February 17
PA: Clerkship 5 begins	February 20
PA: Clerkship 5 ends	March 31
PA: Clerkship 6 begins	April 3
PA: Clerkship 6 ends	May 12
MP: Preceptorship begins	March 20
MP: Preceptorship ends	May 10
CLS Traditional: Preceptorship begins	January 3
CLS Traditional: Preceptorship ends	May 5

HOLIDAYS AND VACATION DAYS

Martin Luther King Jr. Day (University Holiday)	January 16
Spring Break	March 11-19

Full Summer 2017

Orientation (PA, PT, OT, AT, SLP, MP, PhD RS and PhD CSD)	May 30
First day of class	May 30
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 21
First day of finals	August 10
MOT 2: First day of class	May 30
MOT: Finals begin	August 10
MOT: Finals end	August 11
MOT 2, DPT 1 and DPT 3: Final exams end	August 4
MAT 2: Last day of class	June 28
MAT 2: Final exams	June 29-30
MAT 1: Last day of class	August 2
MAT 1: Final exams	August 3-4
Advance registration for next term begins for currently enrolled students	June 1
Last Day for PhD candidates to defend dissertations	June 26

PAYMENT AND REFUNDS

Drop for Non-Payment of Tuition and Fees	June 14
Last day to withdraw from the University and receive a partial refund	June 19

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

Last day to register or withdraw from the University without a penalty	May 29
Add-drop Period (Registrar's Office only)	May 30-June 14
Last day to add/drop	June 14
Last day to drop with an Automatic "W"	June 29
Last day to drop a course or withdraw from the University	August 3

DEADLINES RELATED TO GRADUATION

Detailed information: http://www.ttuhsc.edu/shp/	
Final grades due for Graduates by 12:00 noon	August 14
Official Health Sciences Center Diploma Date	August 19

CLINICAL/PRECEPTORSHIP/CLERKSHIP

MOT Fieldwork II: 1 begins	May 29
MOT Fieldwork II: 1 ends	August 18
DPT: Clinical Internship 1 begins	July 17
DPT: Clinical Internship 1 ends	August 11
PA: Clerkship 7 begins	May 15
PA: Clerkship 7 ends	June 23
PA: Clerkship 8 begins	June 26
PA: Clerkship 8 ends	August 4
CLS Online: Preceptorship begins	May 22
CLS Online: Preceptorship ends	August 18

HOLIDAYS AND VACATION DAYS

Memorial Day (University Holiday)	May 29
Independence Day Holiday	July 4

Summer I 2017

First day of class	May 30
Last day of class	June 29
Last day of the semester	July 7
Final grades due for Graduates by 12:00 noon	July 10
All Final grades posted by 5:00 p.m.	July 10
First day of finals	June 30
Advance registration for next term begins for currently enrolled students	June 1
Last Day for PhD candidates to defend dissertations	June 26

PAYMENT AND REFUNDS

Drop for Non-Payment of Tuition and Fees	June 2
Last day to withdraw from the University and receive a partial refund	June 19

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

Last day to register or withdraw from the University without a penalty	May 29
Add-drop Period (Registrar's Office only)	May 30-June 2

Last day to add/drop	June 2
Last day to drop with an Automatic "W"	June 13
Last day to drop a course or withdraw from the University	June 27

HOLIDAYS AND VACATION DAYS

Memorial Day (University Holiday)	May 29

Summer II 2017

First day of class	July 12
Last day of class	August 11
Last day of the semester	August 18
Final grades due for Graduates by 12:00 noon	August 16
All Final grades posted by 5:00 p.m.	August 21
First day of finals	August 14
Advance registration for next term begins for currently enrolled students	June 1
Last Day for PhD candidates to defend dissertations	June 26

PAYMENT AND REFUNDS

Drop for Non-Payment of Tuition and Fees	July 17
Last day to withdraw from the University and receive a partial refund	August 1

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

Last day to register or withdraw from the University without a penalty	July 11
Add-drop Period (Registrar's Office only)	July 12-17
Last day to add/drop	July 17
Last day to drop with an Automatic "W"	July 25
Last day to drop a course or withdraw from the University	August 9

DEADLINES RELATED TO GRADUATION

Detailed information: http://www.ttuhsc.edu/shp/	
Final grades due for Graduates by 12:00 noon	August 16
Official Health Sciences Center Diploma Date	August 19

HOLIDAYS AND VACATION DAYS

Independence Day Holiday	July 4

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. [1] "

These courses or their equivalents may be taken at any regionally accredited college or university and should be completed with a grade of "C" or higher before enrolling at TTUHSC. **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	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 - 15 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)	
*GOVT 2301 American Government I	3 hours
*GOVT 2302 American Government II	3 hours
Any psychology, sociology, or anthropology course	3 hours
Core Curriculum Electives	
Chosen from the fields of study 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.*

1 http://www.thecb.state.tx.us/AAR/UndergraduateEd/fos_assumpdef.cfm

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.

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 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 will be given the opportunity to receive credit by examination in courses where proficiency may be determined by examination. Students may demonstrate proficiency in certain subject areas through various programs. A grade of Pass (P) will be given on the examination, but the grade will not be considered in determining grade-point averages. Course credit earned by examination is recorded by the TTUHSC Registrar on the student's transcript. Course credit by examination may not be used to satisfy the 30-hour minimum residence credit requirement for graduation. Credit by examination must be completed before the course begins or within the first twelve class days of the course. Credit by examination does not waive tuition and fees for the course.

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

1. Specified College Board (CB) Achievement Tests
2. Specified subject examinations of the CB College Level Examination Program (CLEP)
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.

Tests on courses in the credit-by-examination program which are prerequisites for higher level courses must be completed and scored before registering for advanced courses. Students may not receive credit by examination for a course if they have already passed a more advanced course in the same subject area. The deadline for registering to take the CB Achievement and CLEP examinations either at Texas Tech University or at a national testing center is typically 4-6 weeks before the scheduled test date. Generally, test results or scores are mailed 4-5 weeks after the test date. Information regarding test dates and fees for national standardized examinations are available from the Testing and Evaluation Division at Texas Tech University. It is the student's responsibility to request that his or her CB test scores be sent to the School of Health Professions. Information concerning each of the testing programs follows.

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 Exams. 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 450002, Lubbock, Texas 79409-5002, 806.742.3671

Credit for CB Advanced Placement Program Examinations (AP)

The Advanced Placement Program Examination is the final examination for a standardized course offered in a limited number of secondary schools under the auspices of the CB Advanced Placement Program. 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 CB College Level Examination Program Examinations (CLEP)

Under the College Level Examination Program, the School of Health Professions will award credit only for specified 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 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, several times each 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 (Box 1821, Princeton, NJ 08540), or the Testing and Evaluation Division of Texas Tech University.

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 recieve 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.

Recommendations For Laptop Computers

Processor:	Intel or AMD processor, 2.0 GHz or greater
Operating System:	Windows 7 or later; Mac OSX10.8 or higher
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)

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 the 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 *http://www.ttuhsc.edu/studentservices/Student_Grievances.aspx*.The TTUHSC Institutional Student Handbook may be obtained from the Office of Student Services, 2C400, Student Services, 806.743.2300, or online at *http://www.ttuhsc.edu/studentservices/documents/HSC_Institutional_Student_Handbook.pdf*; Departmental handbooks may be obtained online at *http://www.ttuhsc.edu/shp/current/handbooks.aspx.*

Campus Clarity 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, Campus Clarity and eCheckUp. Campus Clarity emphasizes Title IX education and requirements, *http://www.ttuhsc.edu/title-ix* eCheckUp provides information on alcohol and substance abuse. Completing these trainings are crit-ical 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.

Interprofessional Education

All TTUHSC students, regardless of school affiliation, will be required to complete a non-credit, online course in interprofessional education. Implementation of this requirement will vary across schools and degree programs. Students should consult their academic/program advisor and/or school catalog for additional information.

IPHP 1001/1002/1003/1004 Foundations for Interprofessional Collaborative Practice: An introduction to broad concepts related to four interprofessional core competencies for healthcare providers. Online modules include: (a) roles/responsibilites, (b) interprofessional communication, (c) teams/teamwork, and (d) values/ethics for interprofessional practice. No textbook is required. This course is typically within the first year of enrollment in the SHP.

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, *www.ttuhsc.edu/studentservices*.

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, *www.ttuhsc.edu/studentservices/studenthealth.aspx.*

Student Hospitalization Insurance Coverage

Students are recommended 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 *www.ttuhsc.myahpcare.com.*

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 neccesary 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 and 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 *www.ttuhsc.edu/studentservices/ada/default.aspx.*

TTUHSC SHP International Student Travel

Eligibility: Students must be eligible to participate in the international program at the time of travel. Students must be enrolled in School of Health Professions' courses the semester of travel. Eligibility requirements include, but are not limited to, the student's professional conduct and academic standing. If a student has failed a course in the semester immediately prior to travel; is failing a course during the semester of travel; or is on probation for any reason, the student will not be allowed to travel as a part of the TTUHSC team. 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 cancelling 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 recieve 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 regard-

ing 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 Texas 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 56 officers and 38 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 Records

The School of Health Professions conforms to the guidelines set forth in the Family Educational Rights and Privacy Act of 1974, and the Texas Open Records Act. Students may limit public availability of personal and demographic information by making this request to the TTUHSC Office of the Registrar.

Student Debts

The School of Health Professions and TTUHSC will not be responsible for debts incurred by students or student organizations, nor will the School or TTUHSC assume the roles of collecting student debts or serve as arbitrator between students and creditors.

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:

Traditional Programs

AthleticTraining
- Admission ..... February 1

Audiology
- Early Admission ..... November 1
- Traditional Admission ..... February 1

Clinical Laboratory Science
- Admission ..... March 1

Communication Sciences and Disorders (Ph.D.)
- Summer Semester ..... February 28
- Fall Semester ..... April 30
- Spring Semester ..... October 15

Molecular Pathology
- Admission ..... February 1

Occupational Therapy
- Admission ..... November 15

Physician Assistant

Admission ..... December 1

Physical Therapy (D.P.T.)

Admission ..... October 1

Rehabilitation Sciences (Ph.D.)

Summer Semester ..... February 1
Fall Semester ..... March 15
Spring Semester ..... October 15

Speech, Language, and Hearing Sciences (B.S. and Second Degree)

Admission ..... March 1

Speech-Language Pathology

Admission ..... January 15

Distance Programs

Clinical Laboratory Science (Second Degree and Certificate Programs)

Admission ..... June 1

Clinical Practice Management/Healthcare Administration

Summer Semester ..... May 1
Fall Semester ..... August 1
Spring Semester ..... December 1

Clinical Services Management/Healthcare Management

Summer Semester ..... May 1
Fall Semester ..... August 1
Spring Semester ..... December 1

Physical Therapy (Sc.D.)

Summer Semester ..... March 15
Fall Semester ..... June 1

Transitional Doctor of Physical Therapy

Summer Semester ..... April 1
Fall Semester ..... July 1
Spring Semester ..... November 1

Rehabilitation Counseling

Fall Semester ..... June 1
Spring Semester ..... October 1

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/shp/admissions/application.aspx*.

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

For the TTUHSC School of Health Professions to offer online courses in a state other than Texas, TTUHSC must first comply with that state's requirements. These requirements differ from state-to-state, with requirements being more rigorous and expensive in some states than others. TTUHSC SHP is currently working to gain authorization to offer online courses in all states. If you have any questions, please contact the Office of Admissions and Student Affairs (806-743-3220, health.professions@ttuhsc.edu) for additional information.

TTUHSC SHP online courses are NOT AUTHORIZED at this time in the following states:

Kentucky or North Carolina

TTUHSC SHP online courses for programs with clinicals are NOT AUTHORIZED at this time in the following states:

Florida or Massachusetts

TTUHSC SHP online courses for degrees leading to a new license are NOT AUTHORIZED at this time in the following states:

New York

TTUHSC SHP online courses are AUTHORIZED at this time in all states not listed above.

TTUHSC has been approved by Texas 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.

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. School of Health Professions departments may also waive required courses based on experiential learning.

TSI Requirements

All students are responsible for complying with the Texas Success Initiative (TSI). State regulations require proof that all students involved in higher education must be college ready in reading, writing, and mathematics. A student may demonstrate college readiness by earning passing scores on the TSI Assessment Test. Students may by exempt or designated as college ready if they have specific ACT, SAT, or TAKS test scores or have earned The TSI Assessment Test is available through Academic Testing Services, 214 West Hall, 806.742.3671. Students will need to present their driver's license or passport for identification purposes. Once tested, students must submit their test scores to the TSI Compliance Office, 116 West Hall

Students with questions about their status with respect to the Texas Success Initiative should contact the TSI Compliance Office at 806.742.3661. Students who have tested but not obtained the minimum scores in one or more sections of the TSI Assessment Test measurements are required to obtain TSI advising through the TSI Developmental Education Office, 78 Holden Hall, 806.742.3242. To ask questions about your status with respect to the Texas Success Initiative, contact the TTUHSC School of Health Professions Admissions Office at 806.743.3220.

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/shp.*

- Complete all admission materials and mail to the Texas Tech University Health Sciences Center, Office of the Registrar at 3601 4th Street, Mail Stop 8310, Lubbock, Texas, 79430.

- Have 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 student'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.

- Have documentation of successful completion of the TSI sent to the Texas Tech University Health Sciences Center, Office of the Registrar, if it is not included with transcripts.

- It is the student'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 ($40) is required for the application to be complete. Application fees cannot be waived. 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/shp/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 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 statement 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 $40 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 gauranteed; 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

Students must be enrolled at Texas Tech University Health Sciences Center in the term in which they plan to graduate. Students planning to graduate must complete an Intent to Graduate form. A student may not have more than 6 hours remaining after the spring commencement date to be eligible to submit an Intent to Graduate form 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 $190 per semester credit hour. Non-resident and foreign students will be charged tuition at a rate of $598 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	$2,850.00
Resident Graduate	$3,600.00
Non-resident Undergraduate	$8,970.00
Non-resident Graduate	$9,720.00
Student Services Fee	$132.00
Placement Guarantee Fee (All 1st year students, non-refundable)	$100.00
Student Malpractice Insurance Fee ($61 for PA students)	$14.50
Data Management Fee (PT, AT, CLS & MP)	$100.00
Microscope Usage Fee (CLS Juniors and Seniors annually)	$50.00
CLS Preceptorship Fee	$100.00
MP Preceptorship Fee	$350.00
Calibration Fee (Dept. of SLHS only)	$50.00-$100.00
Medical Services Fee	$70.00
Screening and Immunization Fee - (Fall only)	$50.00
Recreation Center Fee	$75.00
Identification Card Fee	$6.00
Informational Technology Fee	$150.00
Student Athletic Fee	$57.20
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)	$210.00
Graduation Fee	$45.00

Total Tuition and Fees for Semester (estimate)

Resident Undergraduate $3,788.70
Resident Graduate $4,388.70
Non-resident Undergraduate $9,908.70
Non-resident Graduate $10,508.70

Summer Session

Duration of 10 weeks or longer
Full-time student enrolled in 7 hours

Tuition

Resident Undergraduate $1,330.00
Resident Graduate $1,680.00
Non-resident Undergraduate $4,186.00
Non-resident Graduate $4,536.00

SHP Anatomy Fee (AT, OT, PA & PT only) $300.00
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 $70.00
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) $210.00

Total Tuition and Fees for Summer Semester (estimate)

Resident Undergraduate $2,217.00
Resident Graduate $2,567.00
Non-resident Undergraduate $5,073.00
Non-resident Graduate $5,423.00

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

Distance Learning Tuition and 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) Clinical Services Management/Healthcare Management

Out-of-state students enrolled in a distance learning program pay a fee of $405 per credit hour, which is $1,215 per three hour course. A Record Processing Fee of $15 will also be assessed each semester. Texas residents pay tuition at a rate of $190 per semester credit hour, which is $570 per three hour course, and appropriate fees.

Clinical Practice Management/Healthcare Administration

Out-of-state students enrolled in a distance learning program pay a fee of $465 per credit hour, which is $1,395 per three hour course. A Record Processing Fee of $15 will also be assessed each

semester. Texas residents pay tuition of $240 per credit hour, which is $720 per three hour course, and appropriate fees.

Rehabilitation Counseling

Out-of-state students enrolled in a distance learning program pay a fee of $480 per credit hour, which is $1,440 per three hour course. A Record Processing Fee of $15 will also be assessed each semester. Texas residents pay tuition of $240 per credit hour, which is $720 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 $580 per credit hour, which is $1,740 per three hour course. A Record Processing Fee of $15 will also be assessed each semester. Texas residents pay tuition of $240 per credit hour, which is $720 per three hour course, and appropriate fees.

Refund of Tuition and 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
Summer - More than 5 wks but less than 10 wks in duration	- 1st class day through 4th class day	100%
	- After the 4th day of class	None
Fall, Spring or Summer - Duration of 10 wks or longer	- 1st class day through 12th class day	100%
	- After the 12th day of class	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
Summer - More than 5 wks but less than 10 wks in duration	- Before 1st class day	100%
	- 1st, 2nd, or 3rd class day	80%
	- 4th, 5th, or 6th class day	50%
	- 7th class day or later	None
Fall, Spring or Summer - Duration of 10 wks or longer	- Before 1st class day	100%
	- 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

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.

a. 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.

b. 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 w*ww.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 and 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 on-line 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
www.ttuhsc.edu/financialaid

Scholarships

The School of Health Professions has many scholarschips 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 recieves 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 neccesary to waive out-of-state tuition for non-resident recipients.

Department of Laboratory Sciences and Primary Care

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, Montana, Nevada, New York, North Dakota, Puerto Rico, Rhode Island, Tennessee, and West Virginia). Since each state has its own set of rules and guidelines, you must contact the licensure agency in each state for information about these requirements which can be found at http://www.ascp.org/Board-of-Certification/Verification-of-Certification#tabs-2

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**:

   a) The student **must** have adequate gross mobility in order to maneuver in a timely and safe fashion throughout the department.

   b) 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.

   c) 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.

Laptop Requirement

The Clinical Laboratory Science Program has the requirement that all incoming students must have a laptop computer. (*See general computer requirements in the General Information tab)

Admission to the CLS Traditional 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:

» 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 prerequisite course is required. GPA calculations are based on required courses. Provisional admission may be offered to applicants with a GPA of less than 2.5. Such applications will be reviewed on an individual basis.

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.

Standard Option Prerequisites

Required Course	Semester Hours
English I & II	6
History I & II	6
Government/Political Science I & II	6
College Algebra or higher	3
Social Behavioral Science	3
Language, Philosophy, and Culture	3
Creative Arts	3
Chemistry I & II w/ lab	8
Biology I & II w/ lab OR Anatomy & Physiology I & II w/ lab	8
Intro to Organic Chemistry w/ lab or Organic Chemistry I w/ lab	4
Microbiology w/ lab	4
**Science Elective	3-4
	Total hours = 57-58

*** Science elective must come from the Life and Physical Sciences of the Core Curriculum in the TTU catalog or Genetic course.*

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 and science GPA (as calculated by CASPA)
- GRE

**For additional requirements for the Pre-Med and Pre-PA options, please visit our website (www.ttuhsc.edu/shp) 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.

**Texas Common Core: prerequisite courses apply toward meeting the Texas Core requirements. Students must have all Texas Core courses completed prior to program entry to the Bachelor of Science in Clinical Laboratory Science degree program. Completion of the Texas Core Curriculum (42 semester credit hours) must be with a grade of "C" or better. (See page 13)*

CLS Traditional 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 Semester Courses		**Credit Hours**
HPCS 3310	Urinalysis and Body Fluids	3
HPCS 4300	Applied Research and 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	Clincal Preceptorship III	8
		Total hours = 16

Total Hours Required (Standard Option)

Prerequisites	58
Professional Curriculum	74
Total hours: 132	

Total Hours Required (Pre-Med Option)

Prerequisites	69
Professional Curriculum	74
Total hours: 143	

Total Hours Required (Pre-PA Option)

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 Traditional Program Course Descriptions

HPCS 3110 Professional Issues in CLS (1:1:0,H) An overview and introduction to the profession. No textbook is required.

HPCS 3310 Urinalysis and Body Fluids I (3:3:3,F) Analysis of the physical, chemical, and microscopic parameters of urine and body fluids. Special emphasis is placed on understanding kidney function and pathology. ISBN: 978-0803639201

HPCS 3400 Clinical Chemistry I (4:3:6,F) An introduction to the basic principles, methodologies, and physiology of clinical chemistry. ISBN: 978-1455741656

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. ISBN: 978-0323089890

HPCS 3450 Clinical Chemistry II (4:3:6,F) Prerequisite: HPCS 3400. The qualitative and quantitative chemical analysis of blood and other body fluids. Correlation of test results to health and disease states. ISBN: 978-1455741656

HPCS 3455 Principles of Immunology (4:3:4,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. ISBN: 978-0323085182

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. ISBN: 978-0323089890

HPCS 3465 Immunohematology (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. ISBN: 978-0803626829

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. ISBN: 978-0133076011; ISBN: 978-1455708307

HPCS 4105 Senior Seminar (1:0:1;0) A comprehensive review of topics in clinical laboratory science. ISBN: 978-0891895879; ISBN: 978-0781782029

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. No textbook is required.

HPCS 4300 Applied Statistics and Research (3:3:0,H) 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. ISBN: 978-0199946648; ISBN: 10-0199946647

HPCS 4405 Molecular Diagnostics (4:1:3,F) Introduction to basic genetics and genetic testing techniques used in molecular and forensic pathology. ISBN: 978-0803626775

HPCS 4420 Laboratory Management (4:4:0,H) An introduction to management with emphasis upon management issues and concerns specific to the clinical laboratory. ISBN:978-0943903125

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. ISBN: 978-0323089890; ISBN: 978-0803625433: ISBN: 978-0803600362

HPCS 4480 Hematology II (4:3:4,F) Prerequisite: HPCS 3470. The study of blood cells and their abnormalities with emphasis on disease processes. ISBN: 978-1455708307: ISBN: 978-0133076011

HPCS 4640 Clinical Preceptorship I (6:6:0,H) A course designed for the senior student to begin preparation for supervised clinical practicum in an affiliated clinical laboratory. ISBN: 978-0781782029; ISBN: 978-0135126486

HPCS 4741 Clinical Preceptorship II (7:7:40,F) An intermediate supervised clinical practicum in an affiliated clinical laboratory. ISBN: 978-0135126486

HPCS 4842 Clinical Preceptorship III (8:8:40,F) An advanced supervised clinical practicum in an affiliated clinical laboratory. ISBN: 978-0135126486

HPCS 3015 Special Problems in CLS (V 1-3;H) Variable hour Independent Study class which will address a special topic in Clinical Laboratory Science.

Admission to the CLS Second Degree 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	12
Biology I & II or A&P I and II, and other approved science elective	
Basic Chemistry w/ laboratory	8
General Chemistry I & II	
Organic Chemistry w/ laboratory	4
Microbiology w/ laboratory	4
Statistics	3

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

*Applicants must have a bachelor's degree to include Texas Common Core completion

**Texas Common Core: prerequisite courses apply toward meeting the Texas Core requirements. Students must have all Texas Core courses completed prior to program entry to the Bachelor of Science in Clinical Laboratory Science degree program. Completion of the Texas Core Curriculum (42 semester credit hours) must be with a grade of "C" or better. (See page 13)*

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 Core Curriculum:

Prerequisites listed above plus the following:

Required Course	Semester Hours
Communication - 6 credit hours	
* English 1301 Composition I	3
* English 1302 Composition II	3
Mathematics - 3 credit hours	

College Algebra or higher level	3
Creative Arts - 3 credit hours	
Any art, music, drama, or theatre arts course	3
Language, Philosophy, and Culture - 3 credit hours	
Any literature, philosophy, modern or classical language/literature, or cultural studies course	3
Social and Behavioral Sciences - 15 credit hours	
*HIST 1301 United States History I	3
*HIST 1302 United States History II	3
(Students may substitute 3 credit hours of Texas History for 3 credits of United States History)	
*GOVT 2301 American Government I	3
*GOVT 2302 American Government II	3
Any psychology, sociology, or anthropology course	3

**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.*

Admission to the CLS Certificate 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	12
Biology I & II or A&P I and II, and other approved science elective	
Basic Chemistry w/ laboratory	8
General Chemistry I & II	
Organic Chemistry w/ laboratory	4
Microbiology w/ laboratory	4
Statistics	3

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

Second Degree & Certificate CLS Curriculum

Fall Semester Course	**Credit Hours**

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 4147	Clinical Immunology	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
		Total hours = 35

Second Degree & Certificate CLS Course Descriptions

HPCS 4144 Analysis of Body Fluids (1:1:0,0) 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. ISBN: 978-0781782029

HPCS 4145 Principles of Molecular Diagnostics (1:1:0,0) An introduction to the basic principles of genetics and the practice of genetic testing techniques with an emphasis on human genetic disease. ISBN:10:0-8036-2677-0; ISBN: 13:978-0-8036-2677-5, ISBN: 978-0781782029

HPCS 4146 Advanced Microbiology (1:1:0,0) 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. ISBN: 0-8036-07881; ISBN: 978-0781782029; ISBN: 0-803600364; ISBN: 14: 978-0-323-08989-0

HPCS 4147 Clinical Immunology (1:1:0,0) 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. ISBN: 978-0323085182; ISBN: 978-0803646070

HPCS 4149 Principles of Laboratory Management (1:1:0,0) An introduction to management with emphasis upon management issues and concerns specific to the clinical laboratory. ISBN: 978-0130495389

HPCS 4153 Seminar (1:1:0,0) A comprehensive review of topics in clinical laboratory science. ISBN: 978-0891895879

HPCS 4242 Advanced Hematology (2:2:0,0) Prerequisite: HPCS 4341. A concise review of hematological disorders. The diagnostic implications and laboratory diagnosis of anemias, polycythemias, leukemias and, lymphomas is included. ISBN: 978-1455708307; ISBN: 978-0781782029

HPCS 4341 Foundations of Hemostasis (3:3:0,0) A concise review of the process of coagulation, platelet hemostasis, and the structure and related function of red and white blood cells. ISBN: 978-1455708307; ISBN: 978-0781782029

HPCS 4343 Foundations of Clinical Chemistry (3:3:0,0) An introduction to the principles and practice of clinical chemistry. Correlation of chemistry test results to health and disease states is included. ISBN: 978-0781782029

HPCS 4345 Foundations of Clinical Microbiology (3:3:0,0) 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. ISBN: 978-03230-89890; ISBN: 978-0781782029; ISBN: 978-032-3047807

HPCS 4348 Foundations of Immunohematology (3:3:0,0) 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. ISBN: 978-0803612488; ISBN: 978-0781782029; ISBN: 13:97-0-803-626829

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. ISBN: 13: 978-0-8036-1699-8

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. No textbook is required.

HPCS 4752 Clinical Preceptorship (7:0:40,H) Prerequisites: HPCS 4341, 4242, 4144, 4147, 4348, 4345, 4146, 4450, 4451, 4343, 4145. An advanced supervised clinical practicum in an affiliated clinical laboratory. ISBN: 978-0135126486

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 of Clinical Pathology Board of Certification (BOC) has developed a national certification examination for the Certified Laboratory Technologist in Molecular Biology.

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**:

   a) The student **must** have adequate gross mobility in order to maneuver in a timely and safe fashion throughout the department.

   b) 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.

   c) 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.

Laptop Requirements

The Molecular Pathology Program has the requirement that all incoming students must have a laptop computer. (*See general computer requirements in the General Information tab)

Admission to the Program

The program begins in the summer of each year. To qualify for admission to the program, applicants must have completed or plan to complete a Bachelor's degree in a science discipline with all prerequisite courses from an accredited U.S. institution prior to enrollment.

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 3.0 or above (on a 4.0 scale) is necessary to qualify for admissions. Provisional admission may be offered to applicants with a GPA of less than 3.0. Such applications will be reviewed on an individual basis.

» Graduate of a NAACLS accredited Clinical Laboratory Sciences Program (cumulative 3.0 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 coures 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

MP 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 and 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 the Molecular Laboratory	3
HPMP 5342	Clinical Preceptorship	3
HPMP 5408	Applied Molecular Techniques II	4
HPMP 5441	Graduate Research II	4
		Total hours: 15

Course Descriptions

HPMP 5100 Issues in Molecular Pathology (1:2:0,F) Presentation of current topics regarding the biomedical application of genetic information. Ethical issues and professionalism will also be discussed. No textbook is required.

HPMP 5102 Graduate Seminar (1:1:0,H) Career preparation and independent study and prep for external certification in Molecular Pathology. ISBN: 978-0803626775

HPMP 5301 Management of the Molecular Laboratory (3:3:0,0) 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. ISBN: 978-0-8036-2677-5; ISBN: 0-8036-2677-0

HPMP 5309 Human Molecular Genetics (3:3:0,0) 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. ISBN: 978-1588903365; ISBN: 978-0323053730

HPMP 5341 Graduate Research I (3:3:0, H) Prerequisite: HPMP 5400 Independent research projects with mentor. Topics include application of molecular techniques in the design and creation of clinical procedures, writing a scientific article, critical evaluation of scientific literature, and peer review. Writing intensive. No textbook is required.

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. No textbook is required

HPMP 5400 Research Design and Statistical Analysis (4:4:4,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. Writing Intensive. ISBN: 10-0-13-171640-9; ISBN: 978-0123756909. Lab notebook required: LIR{E-096-OLR-A, bookfactory.com

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. ISBN: 978-0815344322

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. ISBN: 978-0-7817-5317-3; ISBN: 978-0781782029

HPMP 5408 Applied Molecular Techniques II (4:4:16,F) Prerequisite: HPMP 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. ISBN: 978-1-1460-3737-8; ISBN: 978-0803626775

HPMP 5441 Graduate Research II (4:4:0,H) Prerequisite: HPMP 5341. Advanced independent research projects. Topics include a hypothesis-driven primary research project in molecular diagnostics and biomedical science. Project comprises of assay design and validation, and culminates in a public research presentation. Writing intensive. No textbook is required.

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. ISBN: 978-0803626775; ISBN: 978-1-4160-3737-8

HPMP 5098 Special Topics in Diagnostic Molecular Science (V.1-6, H) Prerequisite: Permission of the Program Director. This course involves an independent project designed to meet the individual stu-

dent's needs and/or interests. This may include, but is not limited to, a research project, or course/skill review. Textbook may be required.

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 compoliance 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

Physician Assistants are academically and clinically prepared to practice medicine on healthcare teams with physicians and other providers. The PA, working with physician supervision, makes autonomous medical decisions and provides a broad range of diagnostic and theraperutic services.

The PA is trained to take medical histories, perform physical examinations, order and interpret diagnostic tests, formulate a working diagnosis, and implement a treatment/management plan. The clinical role of the PA includes primary and specialty care in medical and surgical practice settings in both urban and rural areas. PA practice is centered on patient care and patient advocacy. Patient education and counseling are important aspects of daily PA activity but the PA may also be involved in research or administrative duties.

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.

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 pos-

sess 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.

Laptop Requirements

The Master of Physician Assistant Studies (PA) Program has the requirement that all incoming students must have a laptop computer. (*See general computer requirements in the General Information tab)

Admission to the Program

The PA Program begins in late May each year. The application for the 2016-2017 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 by December 1. Additonal information is available on the program website at: *http://www.ttuhsc.edu/shp/mpa*

Application Process

Applicants must complete both a CASPA application and supplemental application. The CASPA application can be accessed through the following link: *https://caspa.liasoncas.com* The supplemental application can be accessed through the following link: *http://www.ttuhsc.edu/shp/admissions/application.aspx*

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 MPA 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 prerequsite 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. 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, essays, letters of recommendation, and interviews are all strongly considered in the admissions process.

Prerequisite Course Requirements

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

** 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 the US or Canada will not apply to the required prerequisite courses. Prerequisite courses completed in the last 7 years are preferred. AP and CLEP credit will not be accepted for any science prerequisite courses.*

PA Curriculum

FIRST YEAR

First Summer Semester Courses		**Credit Hours**
HPPA 5191	Professional Development I	1
HPPA 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 5302	Pathology	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 = 20

First Spring Semester Courses		**Credit Hours**
HPPA 5193	Professional Development III	1
HPPA 5304	Clinical Medicine II	3
HPPA 5309	Pediatrics	3
HPPA 5313	Clinical Medicine IV	3
HPPA 5403	Clinical Medicine I	4
HPPA 5411	Cardiology	4
HPPA 5412	Clinical Medicine III	4

Total Hours = 22

SECOND YEAR

Second Summer Semester Courses		**Credit Hours**
HPPA 5194	Professional Development IV	1
HPPA 5310	Medical Interviewing	3
HPPA 6301	Clinical Medicine VI	3
HPPA 6302	Medical Spanish	3
HPPA 6501	Clinical Medicine V	5

Total Hours = 15

Second Fall, Second Spring, and Third Summer Semester 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

Course Descriptions

HPPA 5191 Professional Development I (1:1:0,F) The 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. ISBN: 9780803618121; 9781455706570; 9781567934120

HPPA 5193 Professional Development III (1:1:0,F) The professional development sequence of courses spans the entire didactic program curriculum and is intended to provide a foundation for development of the PA role to care for diverse populations in the healthcare system. The third in this four course sequence includes an examination of alternative, integrative and preventive approaches to health care, and a focus on interprofessional practice, utilizing the IPHP 1002 Foundations for Interprofessional Collaborative Practice Education modules, this semester. ISBN: 9780803618121; 9781455706570; 9781567934120

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 and regulations, confidentiality, certification and licensure, and safety. ISBN: 9780803618121; 9781455706570; 9781567934120

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. ISBN: 978-0-323-08949-4

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. ISBN: 978-0071806008

HPPA 5304 Clinical Medicine II (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. ISBN: 978-0-07-179302-5; 1-6152-5123-5; 978-0-07-184509-0

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. ISBN: 978-1-4511-1314-3

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. ISBN: 978-1-4511-1314-3

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. ISBN: 978-0-07-179979-9

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 develop-

ing 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. ISBN: 97814551116045

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. ISBN: 978-0-7817-3279-6; 978-0-8036-1246-4

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. ISBN: 978-1451117028; 978-007184509-0

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 preventive medicine. The organizational and economic elements of a systems-based practice are examined focusing on cost-effective and efficient health care, case management, risk management, coding, billing, reimbursement, error prevention, patient safety, and quality improvement. ISBN: 9780803618121; 9781455706570; 9781567934120

HPPA 5403 Clinical Medicine I (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. ISBN: 978-1-4160-6109-0; 0071824863

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 lectures assimilate an approach to major organs systems and develop important concepts and principles necessary for understanding the integrated function of major organ systems of the human body. ISBN: 978-1-60913-427-3

HPPA 5411 Cardiology (4:3:1,H) 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 expereince and develop critical thinking skills. ISBN: 9781605477237; 0071824863

HPPA 5412 Clinical Medicine III (4:3:1,F) This lecture series examines the complex Orthopaedic 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 Orthopaedic and Rheumatology disease processes including acute, chronic, continuing, and rehabilitative care is explored. Case studies and patient education are incorporated into the teaching process. ISBN: 9781625524157; 978-1-60913-808-0

HPPA 5501 Human Anatomy (5:4:2,F) 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. ISBN: 13: 978-1-4160-5951-6; 978-1-4511-1945-9

HPPA 5502 Physical Examination (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. ISBN: 978-1-60913-762-5

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. ISBN: 10:0071806334

HPPA 6302 Medical Spanish (3:3:0,0) This lecture series is designed to introduce the non-Spanish-speaking healthcare provider to basic and essential medical Spanish terminology in order to elicit information necessary to obtain a comprehensive medical history and perform a physical examination. The content is provided through an online source that students must purchase through the provider's website.

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. ISBN: 978-0-781-7825-3-1

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. ISBN: 978-1-284-034646

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. ISBN: 978-0-7817-8495-5; 978-0-07-178184-8

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, comprehen-

sive 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. ISBN: 978-0071827348; 0071824863; "Physician Assistant's Prescribing Reference", Prescribing Reference Inc.

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. ISBN: 978-0071410250; 978-0717-4889-6; 978-1-605476759

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. ISBN: 978-0071439008 "Physician Assistant's Prescribing Reference", Prescribing Reference Inc.

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. ISBN: 978-0071827348

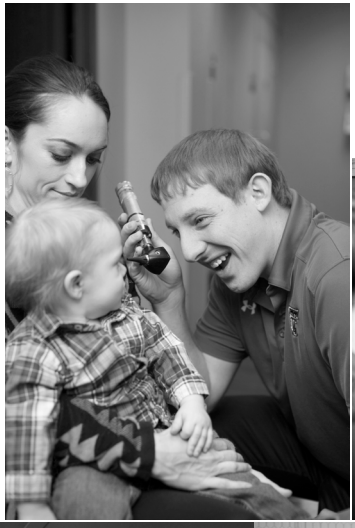
HPPA 6605 Emergency Medicine Clerkship (6:0:40.F) The Emergency Medicine clerkship will provide the PA student with experience in the emergency department with urgent and emergent medical problems and with trauma and surgical cases and is composed of one six week rotation. It includes the emergency approach to direct initial and comprehensive care for patients in the acute care setting. ISBN:978-0-0714-1025-0

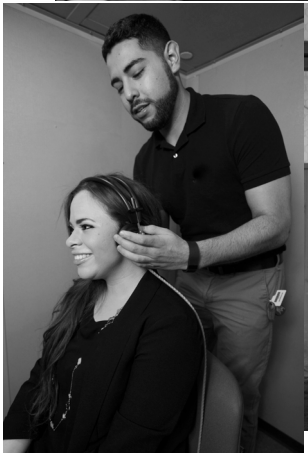
HPPA 6606 Selective Clerkship (6:0:40,F) The selective clinical clerkship provides the student with an oppurtunity to choose a clinical experience from the available fields of medicine offered by the program. The six-week rotation allows the student to create an additional knowledge base and to gain clinical experience in a medical sub-specialty or core competency area.

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. ISBN: 978-1405105026; 978-1585623822

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. ISBN: 978-1-60831-421-8

Department of Speech, Language, and Hearing Sciences





Field of Speech, Language, & Hearing Sciences

A communication disorder is anything that interferes with speech, language, or hearing. People with communication disorders comprise the largest population of Americans with disabilities. One in six Americans has some kind of communication disorder. To meet the needs of these people, speech-language pathologists and audiologists utilize behavioral, cognitive, physiologic, and technological procedures to assess and treat speech, language, swallowing, hearing, and balance problems. Speech-language pathologists and audiologists employ an interdisciplinary approach to treatment and work closely with a full spectrum of professionals to treat the patient's communicative needs.

Graduates of professional programs must pass national examinations before earning certification. Both speech-language pathologists and audiologists are required by most states to earn a master's or doctoral degree from a program accredited by the American Speech-Language-Hearing Association (ASHA). In most states, a professional license is also required. For those interested in the scientific study of communication and its related disorders, a doctoral degree is generally required.

Department Description

The Department of Speech, Language, and Hearing Sciences is the oldest such program in the entire Southwestern United States. It began at Texas Tech in 1928, and today it educates approximately 150 undergraduate students and 120 graduate students per year. The department offers study in five degree programs: Bachelor of Science (B.S.) in Speech, Language, and Hearing Sciences; Post-Baccalaureate of Science (B.S.) in Speech, Language, and Hearing Sciences; Master of Science (M.S.) in Speech-Language Pathology; Doctor of Audiology (Au.D.); and Doctor of Philosophy (Ph.D.) in Communication Sciences and Disorders. Students may specialize in either speech-language pathology or audiology at the graduate level.

Special features of the department include several research laboratories, as follows:

- Adult Neurogenic Language Disorders Laboratory
- Auditory Processes Laboratory
- Augumentative and Alternative Communication Laboratory
- Applied and Clinical Linguistics Laboratory
- Behavioral Hearing Laboratory
- Child Phonology Laboratory
- Speech Science Laboratory
- Pediatric Audiometric Science Laboratory
- Pediatric Language Disorders Laboratory
- Signal Processing & Communications Laboratory
- Vestibular/ Auditory Integrated Biomedical Laboratory

For updated lab information please review the following link: *http://www.ttuhsc.edu/shp/CSLHR.aspx.*

The department sponsors chapters of the National Student Speech-Language-Hearing Association and the Student Academy of Audiology (SAA). Besides numerous community fund-raising events and scholarship drives, the student organizations conduct annual conferences which attract professionals from throughout the Southwest. Nationally and internationally recognized speakers spend time with students and other professionals discussing current topics in communication disorders and sciences.

The Speech-Language and Hearing Clinic serves as a primary clinical practice site for students in the department. Under direct faculty supervision, students provide clinical services to people in the local community, Texas Tech University and TTUHSC, as well as the entire West Texas and Eastern New Mexico areas. Additional practice sites are available through an externship program in hospitals, schools, long-term care facilities, rehabilitation institutes, private practices, and governmental offices.

Financial assistance may be available from the Office of Financial Aid at TTUHSC. The Department of Speech, Language, and Hearing Sciences also offers limited financial assistance to highly qualified

students on the basis of scholarship. Students interested in financial assistance through the department will have an oppurtunity to file their requests after they have been accepted to the program.

Bachelor of Science in Speech, Language, & 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 coursework 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.

Laptop Requirements

The Speech, Language, and Hearing Sciences (SLHS) Program has the requirement that all incoming students must have a laptop computer. (*See general computer requirements in the General Information tab)

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 3.0 on a 4.0 scale
- A grade of "C" or better in all prerequisite courses
- 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.

Required Course	Semester Hours
Communication	9
Technical Writing is required	
Math	6
Statistics is required	
Life and Physical Science	6-8
At least one course in biological/life science (e.g. biology, human genetics, human anatomy and physiology) and one in physical science (physics or chemistry) are required	
Language, Philosophy and Culture	3
Creative Arts	3
Social and Behavioral Science	12
Individual or Group Behavior (Recommended course: COMS 2350 Introduction to Communication Disorders)	
American History	6
Government/Political Science	6
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 = 15

Spring Semester		**Credit hours**
HPSH 3321	Speech Science	3
HPSH 3322	Hearing Science	3
HPSH 3324	Language Disorders	3
HPSH 3426	Articulation & Phonological Disorders	4
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

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
- A grade of "C" or better in all prerequisite courses
- Proof of appropriate immunizations against infectious diseases

Prerequisite Course Requirements

The following courses are required by American Speech-Language-Hearing Association (ASHA) and may be fulfilled as part of your Texas Common core curriculum requirements.

Required Course	Semester Hours
Physical Science (physics or chemistry)	3-4
Biological/Life Science (general biology or human anatomy & physiology)	3-4
Social and 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 as listed below.

Required Course	Semester Hours
Communication	6
Math	3
College Algebra or higher level	
Life and Physical Science	6
At least one course in biological/life science (e.g. biology, human genetics, human anatomy and physiology) and one in physical science (physics or chemistry) are required	
Language, Philosophy and Culture	3
Creative Arts	3
Social and Behavioral Science	3
Individual or Group Behavior	
American History	6
Government/Political Science	6
Component Area Option	6
	Total TCC: 42 hours

Second Degree 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 = 17

Spring Semester		**Credit hours**
HPSH 3321	Speech Science	3
OR		
HPSH 3322	Hearing Science	3
HPSH 3324	Language Disorders	3
HPSH 3426	Articulation & Phonological Disorders	4
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

Course Descriptions

HPSH 3219 Introduction to Audiology (2:0:2,F) A supervised observation of various audiometric procedures and patient types. Discussion of clinical protocols, assessment, and management for individuals with hearing disorders. No textbook required.

HPSH 3220 Introduction to Speech-Language Pathology (2:0:2,F) A supervised observation of clinical assessment and management of individuals with speech and language disorders. May be repeated for credit. ISBN: 978-1457666766

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. ISBN: 978-1-59857-286-5; 978-0-692-36929-6

HPSH 3321 Speech Science (3:3:0,F) An introduction to the production, perception, and processing of speech, including acoustic phonetics. ISBN: 978-1-59756-520-2

HPSH 3322 Hearing Science (3:3:0,F) An introduction to the physics of sound, acoustics, and psychoacoustics. ISBN: 978-9004236387

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. ISBN: 9780133810363

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. ISBN: 978-1-4354-9859-4

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. ISBN: 978-1-59756-520-2

HPSH 3426 Phonetics/Articulation and Phonological Disorders (4:3:1,F) The basic principles of assessment and treatment for children and adults with phonological and articulatory disorders. Includes lab for practice of advanced clinical transcription skills. ISBN: 978-0769300801

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. ISBN: 978-1-4496-7889-0

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. ISBN: 978-0-2-0553195-0

HPSH 4010 Independent Study (V:0:V,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 (2:0:2,F) A supervised clinical assisting experience. May be repeated for credit. No textbook required.

HPSH 4290 Clinical Observation: Audiology (2:0:2,F) A supervised clinical assisting experience. May be repeated for credit. No textbook required.

HPSH 4300 Senior Research Project (3:0:3;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. No textbook is required.

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. ISBN: 978-0-13-335203-0

HPSH 4320 Interpersonal Communication for Healthcare 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. No textbook required. AHSL 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. No textbook is required.

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. No textbook required.

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. ISBN: 978-1-58121-210-5; ISBN: 978-0674022522

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 neuel aspects of communication including neuroanatomy, neurophysiology, and neuropathologies of speech and language. ISBN: 978-1609138714

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. ISBN: 978-1285198057; 978-0-692-36929-6

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. ISBN: 978-1-5-8890542-0

Master of Science in Speech-Language Pathology (SLP)

This program is accredited by the Council on Academic Accreditation 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.

Laptop Requirements

The Speech-Language Pathology (SLP) Program has the requirement that all incoming students must have a laptop computer. (*See general computer requirements in the General Information tab)

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 percentile on the verbal, quantitative, and analytical subtests 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 (general biology or human anatomy & physiology)	3-4
Social and Behavioral Science	3
Statistics	3
	Total: 12-14 hours

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 State Board of Examiners in Speech-Language Pathology and Audiology. 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.

FIRST YEAR

Fall Semester		**Credit Hours**
HPSH 5100	Foundations	1
HPSH 5320	Research Design	3
HPSH 5381	Graduate Clinical Practicum I: SLP	3
HPSH 5424	Pediatric Language Assessment & Intervention	4
HPSH 5463	Adult Language Assessment & Intervention	4
		Total = 15

Spring Semester		**Credit hours**
HPSH 5325	Childhood Speech Sound Disorders	3
HPSH 5362	Motor Speech Disorders	3
HPSH 5382	Graduate Clinical Practicum II: SLP	3
HPSH 5430	Dysphagia	4
HPSH 6000	Master's Thesis (optional)	1-3
		Total Hours = 13-16

Summer Semester		**Credit Hours**
HPSH 5370	Professional Issues in Speech-Language Pathology	3
HPSH 5383	Graduate Clinical Practicum III: SLP	3
HPSH 6001	Master's Thesis (optional)	1-3
		Total Hours = 6-9

SECOND YEAR

Fall Semester		**Credit Hours**
HPSH 5201	Clinical Instrumentation & Technology for Communication Disorders	2
HPSH 5243	Aural Rehabilitation	2
HPSH 5143	Aural Rehabilitation Lab	1
HPSH 5328	Voice Disorders	3
HPSH 5329	Fluency Disorders	3
HPSH 5384	Graduate Clinical Practicum IV: SLP	3
HPSH 5110	Capstone Course	1
Or		
HPSH 6002	Master's Thesis (optional)	1-3
		Total Hours = 15-17

Spring Semester		**Credit Hours**
HPSH 5239	Evidence-Based Practice in Communication Disorders	2
HPSH 5385	Graduate Clinical Practicum V: SLP	3

HPSH 5466	Augmentative & Alternative Communication	4
HPSH 6003	Master's Thesis (optional)	1-3

Total Hours = 9-12

Course Descriptions

HPSH 5100 Foundations (1:1:0,F) A forum for the discussion of professional issues in communications disorders. No textbook is required.

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. No textbook is required.

HPSH 5143 Aural Rehabilitation Lab (1:0:1: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 5201 Clinical Instrumentation and Technology for Communication Disorders (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 5239 Evidence-Based Practice in Communication Disorders (2:2:0,F) This course is designed to prepare students for understanding and conducting research in speech and language science. Emphasis is placed on how to conduct a literature search and write a literature review. Students will learn how to present research findings at professional meetings and how to apply research findings in evidence-based practice. ISBN: 978-1-55766-870-7

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. ISBN: 978-1133281429

HPSH 5310 Special Topics in Speech Pathology (3:0:3,F) Directed study for non-thesis candidates. May be repeated for credit. No textbook is required.

HPSH 5320 Research Design (3:3:0,F) A summary of the basic concepts of science and research. Emphasis is placed on the nature of experimental designs and basic inferential statistical analyses, and the application of relevant research methodologies in clinical settings. ISBN: 978-089079964-2

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. ISBN: 978-0133810370

HPSH 5328 Seminar in Voice Disorders (3:3:0,F) An advanced discussion of the etiology, diagnosis, and treatment of voice disorders. ISBN: 978-0133007022

HPSH 5329 Fluency Disorders (3:3:0,F) An extensive review of current information on fluency disorders in children and adults. ISBN: 978-0133352047

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. ISBN: 978-1-111-13827-1

HPSH 5370 Professional Issues in Speech-Language Pathology (3:3:0,H) 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. ISBN: 978-1111309107

HPSH 5381-5385 Graduate Clinical Practicum: SLP (3:0:3,F) Supervised clinical practice in speech and/or language pathology. No textbook is required.

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. ISBN: 978-0-323-07184-0; 978-1416409984

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. ISBN: ProEd 31717; ProEd 31739

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. ISBN: 978-1-59756-477-9; 978-142834057-2

HPSH 5466 Augmentative and Alternative Communication (4:3:1,F) A study of the emerging area of augmentative and alternative communication, including a perspective on how these alternative and augmentative systems fit within the broad area of communication development and disorders. ISBN: 978-1598571967

HPSH 6000 Master's Thesis (V:0:V,F) May have 2 enrollments for credit. Consent of instructor is required. No textbook is required.

HPSH 6001 Master's Thesis (V:0:V,F) May have 2 enrollments for credit. Consent of instructor is required. No textbook is required.

HPSH 6002 Master's Thesis (V:0:V:,F) May have 2 enrollments for credit. Consent of instructor is required. No textbook is required.

HPSH 6003 Master's Thesis (V:0:V,F) May have 2 enrollments for credit. Consent of instructor is required. No textbook is required.

For additional information concerning a career in speech-language pathology, contact the American Speech-Language-Hearing Association (ASHA) in Rockville, Maryland; or visit the Department of Speech, Language, and Hearing Sciences at Texas Tech University Health Sciences Center.

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 available. Students obtain clinical and/or research experience at: the TTUHSC Speech and Hearing Clinic, several community-based clinics, public school programs, local private practices, and other medical, rehabilitative, and educational facilities outside the Lubbock community. In these settings, students have the opportunity to explore state-of-the-art technology, instrumentation, and assessment/treatment procedures in audiology and communication sciences.

The department also sponsors a chapter of the Student Academy of Audiology (SAA). This national audiology student group hosts community service events throughout the year to support those individuals with hearing loss and also to educate the local community on hearing and balance concerns. TTUHSC audiology students commonly hold elected positions at the national level of the Student Academy of Audiology. This opportunity allows students to be introduced to activites that will advance the profession of audiology in terms of education and advocacy for the profession and patients.

Laptop Requirements

The Doctor of Audiology (AuD) Program has the requirement that all incoming students must have a laptop computer. (*See general computer requirements in the General Information tab)

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

FIRST YEAR

Fall Semester		**Credit Hours**
HPSH 7342	Psychoacoustics and Auditory Perception	3
HPSH 7321/92	Clinical Observation/Clinical Practicum	3
HPSH 7440	Fundamentals of Sound and the Auditory System	4
HPSH 7446	Diagnostic Audiology	4
		Total = 14

Spring Semester		**Credit hours**
HPSH 7285	Audiology Practice Management	2
HPSH 7344	Clinical Amplification	3
HPSH 7350	Pediatric Audiology	3
HPSH 7150	Pediatric Audiology Lab	1
HPSH 7393	Clinical Practicum	3
		Total Hours = 12

Summer Semester		**Credit Hours**
HPSH 7001	Introduction to Clinical Research	1
HPSH 7158	Applications of Clinical Amplification	1
HPSH 7251	Counseling	2
HPSH 7330	Speech-Language Development and Disorders	3
HPSH 7394	Clinical Practicum	3
		Total Hours = 10

SECOND YEAR

Fall Semester		**Credit Hours**
HPSH 5320	Research Design	3
HPSH 7002	Clinical Research I	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 2	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 7003	Clinical Research II	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 7357	Advanced Amplification	3
HPSH 7398	Clinical Practicum	3
		Total Hours = 16

Spring Semester		Credit Hours
HPSH 7255	Advanced Concepts in Audiology	2
HPSH 7260	Hearing Conservation and Instrumentation	2
HPSH 7322	Auditory Processing Disorders	3
HPSH 7399	Clinical Practicum	3
		Total Hours = 10

Summer Semester		Credit Hours
HPSH 7019	Advanced Clinical Placement	6
		Total Hours = 6

FOURTH YEAR

Fall Semester		Credit Hours
HPSH 7020	AuD Independent Study	5
		Total Hours = 5

Spring Semester		Credit Hours
HPSH 7021	AuD Independent Study	5
		Total Hours = 5

Course Descriptions

HPSH 5320 Research Design (3:3:0,F) The purpose of this course is to summarize the basic concepts of science and research. Emphasis will be placed on the nature of experimental designs and basic inferential statistical analyses. Discussions will also include the application of relevant methodologies in clinical settings. ISBN: 978-089079964-2

HPSH 7001 Introduction to Clinical Research (1:1:0,F) Introduction to clinical research; grand rounds type of course where faculty discuss research interests with students to help students identify research method, committee, and topic. ISBN: 978-1-6-0406359-2

HPSH 7002 Clinical Research I (1:0:1,F) Clinical research course in which students prepare literature review and research questions in preparation for prospectus. ISBN: 978-1-6-0406359-2

HPSH 7003 Clinical Research II (1:0:1,F) Clinical research course resulting in culmination and presentation of student clinical research project. ISBN: 978-1-6-0406359-2

HPSH 7010 Independent Study (V:0:V,F) A variable credit course used for individualized leveling plans created by the program director. No textbook is required.

HPSH 7011 Independent Study (V:0:V,F) A variable credit course used for individualized leveling plans created by the program director. No textbook is required.

HPSH 7019 Advanced Clinical Placement (V:0:V,F) Supervised clinical practicum for students in the summer of their third year. No textbook is required.

HPSH 7020 AuD Independent Study (V:0:V,F) Independent study for advanced students in the fourth year of the Au.D. program. Two enrollments of Au.D. independent study course(s) 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 AuD Independent Study (V:0:V,F) Independent study for advanced students in the fourth year of the Au.D. program. Two enrollments of Au.D. independent study course(s) 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 AuD Independent Study (V:0:V,F) Independent study for advanced students in the fourth year of the Au.D program. Two enrollments of Au.D. independent study course(s) 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 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. No textbook is required.

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. No textbook is required.

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. ISBN: 978-1-59756-347-5

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. No textbook is required.

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. No textbook is required.

HPSH 7180 Implications of Pharmacology in Audiology (1:1:0,F) This course will provide the basic information necessary to understand the effects of prescription and nonprescription medications on the auditory and balance systems. Topics will include mechanisms of drug actions, side effects, how age and disease affect these mechanisms, specific effects of certain drugs on the hearing and balance system, and herbal medications. ISBN: 978-1-4-1801130-7

HPSH 7198-7199 Clinical Practicum (1:0:1,F) Supervised clinical practicum in audiology. No textbook is required.

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. Prerequisite: HPSH 7365 Balance Function. ISBN: 978-1-5-9756547-9

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. No textbook required.

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. No textbook is required.

HPSH 7247 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. ISBN: 9781133281429

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. ISBN: 978-0-13-315324-8

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. ISBN: 978-1-5-9756342-0

HPSH 7257 Advanced Amplification (2:2:0,F) This course includes: discussion of advanced features, verification of advanced features, and fine-tuning with advanced features; fitting special populations (e.g. children, non-verbal, conductive hearing loss, auditory neuropathy/dyssynchrony, etc.); special application of hearing aid systems through case studies. No textbook required.

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. ISBN: 978-0-9-72314305; 978-1-5-9756381-9

HPSH 7285 Audiology 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 financial management and accounting, personnel management, insurance, marketing, strategic planning, and audiology service delivery. Considerations associated with audiological service delivery for patients of various socioeconomic statuses will be discussed. ISBN: 978-1-58890-511-6

HPSH 7286 Business Management Practices for Audiologists (2:2:0,F) The current course will study a variety of topics important to the management and operation of audiology clinics and professional practices. ISBN: 978-1-565933453

HPSH 7321 Clinical Observation and Methods (3:0:3,F) Supervised observation of clinical assessment and management of individuals with communication disorders. No textbook is required.

HPSH 7322 Auditory Processing Disorders (3:2:1,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. ISBN: 978-1-5-9756562-2

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. ISBN: 978-0-13-707347-4

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. ISBN: 9789004252424

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 earmold selection. Prerequisite: HPSH 7342 Psychoacoustics and Auditory Perception or equivalent. ISBN: 978-1-59756-347-5

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. ISBN: 978-1-4180-4130-4

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. ISBN: 978-1-5-9756245-4

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. ISBN: 978-076930020-7; 978-1-59756-350-5

HPSH 7357 Advanced Amplification (3:3:1,F) This course explores the technology and theories behind amplification as they apply to low-incidence and difficult to fit amplification situations. This course will also include: discussion of advanced features, verification of advanced features, and fine-tuning with advanced features; fitting special populations (e.g. children, non-verbal, conductive hearing loss, auditory neuropathy/dyssynchrony, etc.); special application of hearing aid systems through case studies. Prerequisite: HPSH 7344 Clinical Amplification or permission of instructor. ISBN: 978-1604068108

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 of the Auditory System or equivalent. ISBN: 978-1604063639

HPSH 7365 Balance Function (3:3:0,F) Covers theoretical knowledge and applied skills of normal and pathological vestibular system. ISBN: 978-1-5-9756547-9

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. ISBN: 978-1-59756-552-3

HPSH 7390 Clinical Practicum - Individualized Experience (3:0:3,F) The course is intended to allow for individualized student instruction of clinical procedures and protocols. This course may be repeated for credit. No textbook is required.

HPSH 7392-7399 Clinical Practicum (3:0:3,F) Supervised clinical practicum in audiology. No textbook is required.

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. ISBN: 978-078178047-6; 978-1-59756-999-6

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. ISBN: 978-1-5-8890542-0

Ph.D. in Communication Sciences & Disorders (CSD)

Program Description

The Department of Speech, Language, and Hearing Sciences offers a Doctor of Philosophy (Ph.D.) degree in Communication Sciences and Disorders. The program is designed to prepare students with the competencies and abilities to perform in academic, research, and industrial positions. In addition, the program prepares students to meet the growing demands at local, state, regional, and national levels for doctoral level instructors/mentors.

The Ph.D. program offers an individualized program which allows each doctoral student to have both broad underpinnings of audiology, speech-language pathology, and/or communications sciences, along with a narrow focus in his/her chosen areas of expertise. As such, each student will be able to study and excel in an individually constructed plan of study that is tailored to the student's area of interest and specialization.

Laptop Requirements

The PhD in Communication Sciences & Disorders (CSD) Program has the requirement that all incoming students must have a laptop computer. (*See general computer requirements in the General Information Section)

Admission to the Program

The Doctor of Philosophy in Communication Sciences and Disorders program begins three times a year, in the Summer, Fall and Spring. Admission to the program is competitive. The application will open on August 1st and the deadline is February 28th for Summer admission, April 30th for Fall admission, and October 15th for Spring admission. Prospective students are urged to apply for admission as early as possible.

Application Process

Admission requirements include:

- Completion of the online application
- Submission of official transcripts
- Three letters of recommendation
- GRE scores
- Undergraduate or graduate degree in Speech, Language, and Hearing Sciences or other related fields such as psychology, linguistics, special education, electrical engineering, biomedical engineering, rehabilitation sciences, and biology
- A cumulative graduate GPA of 3.0 or better
- Letter of intent specifying area of interest
- Copy of master thesis or research paper
- Interview with at least one faculty member
- resume
- Proof of appropriate immunizations against infectious diseases
- TOEFL or IELTS scores, if English is the second language

Ph.D. in CSD Curriculum

Students in the Ph.D. program in Communication Sciences and Disorders must earn a total of 81 graduate semester credit hours to meet the minimal credit requirements. The total degree requirement hours may consist of a combination of graduate transfer hours and graduate hours completed within the proposed program.

All students must complete a minimum of 57-semester credit hours in the Ph.D. program. Individualized degree programs will be determined by the student's planning committee. A minimum of 9 hours of statistics/research design are required. In addition, a minimum of 12 semester credit hours must be taken within the Department of Speech, Language, and Hearing Sciences, and a minimum of 9 credit hours must be taken outside the department. Additional credit hours include required laboratory rotations and electives. The program requires a pre-dissertation project, comprehensive examination, and dissertation. In addition, the program provides students the opportunity to receive experience in teaching.

Course Descriptions

HPSH 7000 Doctoral Research (V:0:V,F) Enrollment associated with clinical research project. Instructor permission is required. May have 2 enrollments for credits. No textbook is required.

HPSH 7005-7007 Doctoral Research (V:0:V,F) Enrollment associated with clinical research project. Instructor permission is required. May have 2 enrollments for credits. No textbook is required.

HPSH 8000 Doctoral Research Seminar (V:0:V,F) Students will enroll in pre-dissertation research projects. This research is expected to make a significant contribution to the student's chosen area of study. No textbook is required.

HPSH 8001 Doctoral Research Seminar (V:0:V,F) Students will enroll in pre-dissertation research projects. This research is expected to make a significant contribution to the student's chosen area of study. No textbook is required.

HPSH 8002 Doctoral Research Seminar (V:0:V,F) Students will enroll in pre-dissertation research projects. This research is expected to make a significant contribution to the student's chosen area of study. No textbook is required.

HPSH 8003 Doctoral Research Seminar (V:0:V,F) Students will enroll in pre-dissertation research projects. This research is expected to make a significant contribution to the student's chosen area of study. No textbook is required.

HPSH 8320 Cortical Connections (3:3:0,F) This course will study the functional significance of the complex array of connections between cortical regions and subcortical regions that support cortical functions. Topics covered include brain & language, animal communication, motor speech processes, the descending pathways, memory & attention, cortical processing of pitch information, thalamocortical organization, cerebellum & cognition, perception of complex sounds, and sound source localization. No textbook is required.

HPSH 8321 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. No textbook is required.

HPSH 8322 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. No textbook is required.

HPSH 8323 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. No textbook is required.

HPSH 8324 Seminar in Augmentative and Alternative Communication (3:3:0,F) The purpose of this course is to present the theoretical and clinical basis of AAC. Emphasis will be placed on evaluating efficacy of AAC intervention with individuals with developmental and acquired disabilities. Discussions will include application of relevant research methodologies in clinical settings. May be repeated as topic varies. No textbook is required.

HPSH 8325 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. No textbook is required.

HPSH 8328 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. No textbook is required.

HPSH 8330 Seminar in Healthcare Policy and Administration (3:3:0,F) Seminar devoted to the study of major issues facing U.S. healthcare in the 21st century. Topics will include an overview of U.S. healthcare organizations and delivery systems, economics of healthcare policy, issues of access to care, managed care, quality assessment, and healthcare finance. ISBN: 978-156793274-4; 978-1567933543; 978-156793253-9

HPSH 8332 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. No textbook is required.

HPSH 8333 Seminar in Neural Bases of Pediatric Communication Disorders (3:3:0,F) Seminar devoted to the study of the impact of neurological impairments on the speech, language, cognitive, social, and swallowing abilities of children. Topics will include the neural basis of common pediatric communication disorders, childhood apraxia of speech, and others. Links will be made between the neural basis and clinical behavior, as well as evidence based practice interventions. No textbook is required.

HPSH 8334 Seminar in Cross-disciplinary Research in Speech and Hearing (3:3:0,F) Selected studies in communication sciences, offering the opportunity for cross-disciplinary interaction between faculty and students. Studies can include speech-language pathology, audiology, speech science, hearing science, or related fields. No textbook is required.

HPSH 8335 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. No textbook is required.

HPSH 8336 Seminar in Advanced Vestibular Issues (3:3:0,F) Seminar devoted to the area of understanding vestibular and balance issues. Topics include discussion about the physiological basis of the vestibular/balance system, pathophysiology of disorders, methods and evaluation of vestibular rehabilitation, and research in these areas. No textbook is required.

HPSH 8337 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. No textbook is required.

HPSH 8338 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. No textbook is required.

HPSH 8340 Laboratory Rotation I (3:0:3,F) First of three laboratory rotations required in the Ph.D. program. The primary purpose of the Laboratory Rotation is to provide doctoral students with the opportunity to experience different laboratory environments and research areas and in so doing, assist him or her in choosing a research area for dissertation work. No textbook is required.

HPSH 8341 Laboratory Rotation II (3:0:3,F) Second of three laboratory rotations required in the Ph.D. program. The primary purpose of the Laboratory Rotation is to provide doctoral students with the opportunity to experience different laboratory environments and research areas and in so doing, assist him or her in choosing a research area for dissertation work. No textbook is required.

HPSH 8342 Laboratory Rotation III (3:0:3,F) Third of three laboratory rotations required in the Ph.D. program. The primary purpose of the Laboratory Rotation is to provide doctoral students with the opportunity to experience different laboratory environments and research areas and in so doing, assist him or her in choosing a research area for dissertation work. No textbook is required.

HPSH 8343 Seminar in Grant Writing and Sponsored Projects (3:3:0, F) This seminar is designed to increase understanding of internal/external funding mechanisms and to provide training to Ph.D. students in grant preparation and funding opportunites. Topics include discussion about various types of external and internal funding opportunites, 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. No textbook required.

HPSH 8344 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. No textbook required.

HPSH 8345 Fundamentals of Effective College Teaching (3:3:0,F) This seminar is designed to acquaint graduate students with some of the principles and theories of higher education and with instructional practices associated with effective college teaching. This information applies without regard to the particular nature of the subject matter being taught, with an emphasis on the educational process rather than disciplinary content. Topics can include development of philosophy of teaching statement, development of a course syllabus with effective learning objectives, integration of technology with teaching pedagogy, designing and delivering an effective lecture presentation, preparation of teaching portfolio, development of testing and grading structures, and introduction to resources available to university instructors. No textbook required.

HPSH 8350 Intermediate Statistical Methods (3:3:0,F) Intermediate concepts of research and statistics for communication and rehabilitation scientist. ISBN: 0-13-171640-9

HPSH 8360 Advanced Statistical Methods (3:3:0,F) Advanced concepts of research and statistics for communication and rehabilitation scientist. No textbook is required.

HPSH 9000 Doctoral Dissertation (V:0:V,F) The Doctor of Philosophy degree in Communication Sciences and Disorders is a research degree and is conferred only in recognition of high achievement in independent scientific research and scholarship. No textbook is required.

HPSH 9001 Doctoral Dissertation (V:0:V,F) The Doctor of Philosophy degree in Communication Sciences and Disorders is a research degree and is conferred only in recognition of high achievement in independent scientific research and scholarship. No textbook is required.

HPSH 9002 Doctoral Dissertation (V:0:V,F) The Doctor of Philosophy degree in Communication Sciences and Disorders is a research degree and is conferred only in recognition of high achievement in independent scientific research and scholarship. No textbook is required.

HPSH 9003 Doctoral Dissertation (V:0:V,F) The Doctor of Philosophy degree in Communication Sciences and Disorders is a research degree and is conferred only in recognition of high achievement in independent scientific research and scholarship. No textbook is required.

Courses may also include curriculum from graduate programs in the Department of Speech, Language, and Hearing Sciences. Individualized degree programs also include courses from departments at Texas Tech University and the Texas Tech University Health Sciences Center.

Department of Rehabilitation Sciences


TEAMWORK

Master of Athletic Training (AT)

This program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE), 6850 Austin Center Blvd., Suite 100, Austin, TX 78731-3184 (http://www.caate.net)

The AT Profession

"Certified Athletic Trainers are unique health care providers who specialize in the prevention, assessment, treatment and rehabilitation of injuries and illness" as described by the National Athletic Trainers' Association (NATA). Athletic Trainers are integral members of the healthcare team, working under the direction of a licensed physician and in collaboration with other healthcare professionals, administrators, coaches, and parents. 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.

The American Medical Association recognized athletic training as an allied health profession in 1990. As athletic training has evolved into a recognized allied heath profession, the profession has undergone major educational reform.

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 misdmeanor 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 59-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 clinics, as well as physicians' offices, and the opportunity to view a variety of surgical procedures. By providing clinical experience early in the 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:

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 movement 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 cardiopulmonary 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/2012/11/policy-manual-paramedic-2013-14-Spring-Entry.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.

Laptop Requirement

The Master of Athletic Training (MAT) Program has the requirement that all incoming students must have a laptop computer. (*See general computer requirements in the General Information tab)

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.

Application Process

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

- A completed and submitted online application (including essay)
- 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. Provisional admission may be offered to applcants with a GPA of less than 2.7. Such applications will be reviewed on an indidvidual basis.

» A "C" or better in all prerequisite courses

» Verification of observation hours: volunteer work, paid employee, and/or observation under the direction of a BOC credentialed (ATC) or a Texas licensed athletic trainer (LAT). Applicants must have a minimum of 50 clock hours of observation experience under a BOC certified or LAT prior ot submitting an application for admission. This experience must be acquired after earning a high school diploma or equivalent.

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. Please go to *https://www.ttuhsc.edu/shp/mat/prereq.aspx* to access ATCAS & *http://www.ttuhsc.edu/shp/admissions/application.aspx* to access the required supplemental application. 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 (professional and scholastic aptitude) 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 see: *http://www.ttuhsc.edu/shp/prospective/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

Summer Semester Courses		**Credit Hours**
HPAT 5320	Introduction to Clinical Education	3
HPAT 5500	Human Anatomy	5
		Total = 8

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	Mangement & Prevention of Injuries	3
HPAT 5305	Biomechanics	3
		Total Hours = 14

Spring Semester Courses		**Credit Hours**
HPAT 5206	Clinical Experience II	2
HPAT 5234	Pharmacology	2
HPAT 5312	Introduction to Therapeutic Exercise & Strength Training	3
HPAT 5223	Special Populations & Concerns for the Athletic Trainer (even years)	2
OR		
HPAT 5322	Athletic Training Administration (odd years)	3
HPAT 5324	Lower Extremity Evaluation	3
		Total Hours =12/13

SECOND YEAR

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

Fall Semester Courses		**Credit Hours**
HPAT 5225	Clinical Experience III	2
HPAT 5302	Therapeutic Exercise	2

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 5223	Special Populations & Concerns for the Athletic Trainer (even years)	2
OR		
HPAT 5322	Athletic Training Administration (odd years)	3
HPAT 5227	Current Medical Diagnosis & Treatment	2
HPAT 5228	Clinical Experience IV	2

Total Hours = 9/10
Total = 59

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.

Course Descriptions

HPAT 5098 Practicum in Athletic Training (V:1-6) A hands-on athletic training related experience designed to meet the individual needs of the student. No textbook is required.

HPAT 5099 Independent Study in Athletic Training (V:1-6) 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). No textbook is required.

HPAT 5120 Research Directed Study I (1:1:0,F) A case based approach to research design, incorporating the management, reduction, and analysis of data sets. Information related to applying for jobs, interviewing, and writing cover letters and resumes is covered. ISBN: 978-0-13-171640-7

HPAT 5130 Athletic Training Review (1:1:0,F) This course is devoted to developing a study schedule and registering for the Athletic Training credentialing exams. Comprehensive exams will allow the students to assess their readiness to sit for the BOC and Texas Licensure exams. BOC Role Delineation Study, NATA Position Statements

HPAT 5200 Research Methods (2:2:0,F) Development of a working knowledge of descriptive and experimental research techniques and statistics and an introduction to performing electronic database searches. Critiquing the literature will be included. ISBN: 978-0-13-171640-7

HPAT 5201 Clinical Experience I (2:0:17-27*,F) A supervised educational experience in athletic training under the supervision of an athletic trainer, certified, and in good standing with the BOC 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/industrial. *Contact hours per week for Clinical Experience course (I-IV) may vary based on the clinical site where the student is assigned for the semester. No textbook is required.

HPAT 5206 Clinical Experience II (2:0:17-27*,F) A supervised educational experience in athletic training under the supervision of an athletic trainer, certified, and in good standing with the BOC 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/industrial. *Contact hours per week for Clinical Experience courses (I-IV) may vary based on the clinical site where the student is assigned for the semester. No textbook is required.

HPAT 5210 Head, Neck & Spine Evaluation (2:1:3,F) Theory, principles, clinical applications and literature review associated with athletic training evaluation, assesment, and management of muscoskeletal conditions within the head, neck, and spine. ISBN: 978-1437716030; ISBN: 978-0-07-174405-8

HPAT 5214 Seminar in Athletic Training (2:1:3,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 Practice Analysis 7

HPAT 5215 Therapeautic Modalities (2:1:3,F) Therapeutic modalities will emphasize the use of phsyical agents, biofeedback and expand upon the theory, principles, pertinent literature and clinical applications associated with patient managment. ISBN: 978-1-4511-0294-9

HPAT 5217 Pathophysiology (2:2:0,F) Pathophsiology will introduce basic concepts of cell biology, physiology, pathophysiology and the inflammatory/healing process as they relate to the athletic training profession. ISBN: 978-1-4377-1676-4

HPAT 5223 Special Populations & Concerns for the Athletic Trainer (2:2:0,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. ISBN: 978-0-7817-9779-5; 918-1-4925-0162-6

HPAT 5225 Clinical Experience III (2:0:17-27*,F) A supervised educational experience in athletic training under the supervision of an athletic trainer, certified, and in good standing with the BOC 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/industrial. *Contact hours per week for Clinical Experience courses (I-IV) may vary based on the clinical side where the student is assigned for the semester. No textbook is required.

HPAT 5227 Current Medical Diagnosis & Treatment (2:2:0,F) Physician presentation of the medical approach to the management of musculoskeletal disorders and afflications. Course content includes etiology, differential diagnosis, prognosis, medical and surgical management, and prophylactic measures for each condition relevant to athletic training. ISBN: 978-0-8036-3917-1

HPAT 5228 Clinical Experience IV (2:0:17-27*,F) A supervised educational experience in athletic training under the supervision of an athletic trainer, certified and in good standing with the BOC other healthcare professional. The objective is to obtain hands-on experiences in a variety of athletic training settings including intercollegiate, high school, and clinical/industrial. *Contact hours per week for Clinical Experience courses (I-IV) may vary based on the clinical site where the student is assigned for the semester. No textbook is required.

HPAT 5234 Pharmacology (2:2:0,F/IVC) 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 that are relevant to the practice of Allied Health clinicians. ISBN: 978-0-8036-4029-0

HPAT 5300 Advanced Anatomy for Sports Medicine (3:2:3,F) THIS COURSE IS NOT FOR MASTER OF ATHLETIC TRAINING STUDENTS. Integrated study of gross human anatomy embodying gross morphology and coordinating with development and histological aspects of the body. Included in regional dissection with emphasis on integumentary, musculoskeletal, nervous, and circulatory systems of the extremities. ISBN: 978-1-45111-945-9; 978-1-6040-67453 or 978-1-4160-5951-6

HPAT 5302 Therapeutic Exercise (3:2:3,F) Assimilation of all aspects of patient evaluation, treatment, and rehabilitation of injuries, with a focus on functional rehabilitation and return to activity. ISBN: 978-0-8036-1364-5

HPAT 5303 Management & Prevention of Injuries (3:2:3,F) A study of athletic training room procedures stressing the practical aspects of care and prevention of athletic injury is included. The course covers the cognitive, affective and psychomotor objectives of athletic training room procedures and management of acute injuries. ISBN: 978-0-07-802264-7; 978-155642-797-8

HPAT 5305 Biomechanics (3:3:0,F/IVC) Biomechanics of the musculoskeletal system and integrated human movement with clinically relevant applications. ISBN: 978-0-7817-7422-2

HPAT 5312 Introduction to Therapeutic Excercise & Strength Training (3:2:3,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. ISBN: 918-1-4925-0162-6; 978-07-7360-7127

HPAT 5320 Introduction to Clinical Education (3:1:6,F) This course is an introduction to basic skills necessary to practice as an athletic training student. The main concepts to be covered include medical terminology, basic documentation, blood-borne pathogens training, first responder responsibilities, CPR/first-aid techniques, taping techniques, safe modality application and identification of common general medical conditions. Hands on surface anatomy with palpation labs are utilized. ISBN: 978-0-0802-2647-7; 978-1-4557-7267-4

HPAT 5322 Athletic Training Administration (3:3:0,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. ISBN: 978-0-07360-7738-5

HPAT 5323 Management & Identification of General Medical Conditions (3:2:3,F) Study of the etiology, pathology, and clinical manifestations of common illnesses, infectious diseases, and dermatological conditions in athletic populations. ISBN: 978-1-61711-091-7

HPAT 5324 Lower Extremity Evaluation (3:2:3,F) Theory, principles, clinical applications and literature review associated with athletic training evaluation, assessment and management of musculoskeletal conditions within the lower extremity. ISBN: 978-1437716030; 978-0-07-174405-8

HPAT 5401 Upper Extremity Evaluation (4:3:3,F) Theory, principles, literature review and clinical applications associated with athletic training evaluation, assessment and management of musculoskeletal conditions ISBN: 978-1437716030; 978-0-07-174405-8

HPAT 5500 Human Anatomy (5:3:6,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, circulator and respiratory systems. ISBN: 978-1-45111-945-9; 978-1-6040-67453 or 978-1-4557-0418-7

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 (M.O.T.) 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). In addition, most states require licensure to practice; however, state licenses are usually dependent upon the results of the NBCOT Certification Examination. A felony conviction may affect a graduate's ability to sit for 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 one perceives, chooses, and engages in various, meaningful activities (also called occupations). Occupations are the ordinary and familiar things that people do everyday. The person's selection of and engagement in these meaningful activities contributes to one's identity and sense of purpose thereby influencing how one spends time and makes decisions.

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 their health and well-being. Within occupational therapy, engagement in valued occupations is used as a means of treatment to promote health and well being. Valued occupations encompass 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 ability to engage in valued occupations have been altered as a result of various circumstances (i.e. cognitive or developmental problems, injury or illness, social or emotional

deficits, or the aging process). The occupational therapist applies 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.

Current occupational therapy practice areas:

- Hospitals
- Rehabilitation centers
- Nursing homes
- Schools
- Home health
- Private practice
- Low vision services
- Community mental health
- Hand rehabilitation
- Burn centers
- Return-to-work programs
- Homeless shelters
- Retirement planning services
- Hospice services

Emerging occupational therapy practice area:

- Driver rehabilitation
- Ticket to work services
- Home modifications access
- Assistive technology
- Ergonomics consulting
- Community mental health
- Welfare to work services
- Community health practice
- Psychosocial needs of youth
- Interprofessional primary care
- Health & wellness consulting
- Case management

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.

Within the occupational therapy program, we believe that the optimal way to facilitate student learning is through processes involving the development of knowledge and reflective thinking. Students develop an understanding of a person(s) from an occupational perspective as they actively engage in opportunities to integrate and synthesize new learning with foundational concepts. As fundamental concepts are introduced and reintroduced in increasing complexity, students build skills that will guide clinical reasoning making. Bloom's levels of learning serve as an important component of the curriculum's framework that guides the student learning process. The levels are as follows: knowledge/comprehension, application, analysis, synthesis and evaluation (Bloom, 1984). The second curriculum component consists of the following six threads: Fundamental Concepts, Theoretical Foundations, Clinical Reasoning, Research Methods, Occupational Therapy Processes, and Professional Practice. The curriculum design fosters the development and application of student's knowledge, skills, behaviors, and attitudes needed for occupational therapy practice as concepts within the threads are introduced and reintroduced in increasing complexity (e.g., levels of analysis and synthesis/evaluation). The program further fosters the development and application of student's clinical reasoning over the course of the curriculum through involvement in hands on learning, research methods, and problem solving for professional practice.

Fieldwork

Fieldwork education is an integral aspect of our program. Students must pass a Criminal Background Check in order to participate in fieldwork experiences. The student is responsible for fees related to a Criminal Background Check, Drug Screening, 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 assignments 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. Following completion of all academic courses, students undertake 24 weeks of full-time Level II Fieldwork. 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's fieldwork experiences will be ongoing though the summer semester and will include clinical experiences throught the community. The student will actively participate in occupational therapy clinical situations to develop professional and clinical skills as well as understanding of clinical settings.

» **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 a 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 M.O.T. Academic Fieldwork Coordinator provides detailed information for selection procedures. The student's selection of a Fieldwork site must be approved by the M.O.T. Academic Fieldwork Coordinator and/or the Program Director prior to the student enrolling in the applicable Fieldwork courses. The M.O.T. Academic Fieldwork Coordinator reserves the right not to approve a student's selection of any clinical education site. The M.O.T. Academic Fieldwork Coordinator may consult with M.O.T. faculty and the M.O.T. Program Director in order to determine a Fieldwork placement for any student.

As such, the M.O.T. 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 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 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.

Laptop Requirement

The Master of Occupational Therapy (MOT) Program has the requirement that all incoming students must have a laptop computer. (*See general computer requirements in the General Information tab)

Admission to the Program

The academic phase of occupational therapy education begins in late May of each year. A Bachelor's Degree is required prior to beginning the program. The GRE is not required for admission into the program.

The Application Process

All applications must be submitted by November 15th. It is in the best interest of the applicant to apply as early as possible. To be considered for admission, the applicant must complete the TTUHSC School of Health Professions application. Documentation to be submitted includes: transcripts, verification of observation/experience hours in occupational therapy settings, two recommendation letters, verification of required immunizations, verification of current CPR certification, and personal essay. The supplemental application is located online at *http://www.ttuhsc.edu/shp/admissions/application.aspx.*

GPA Requirements

A minimum cumulative GPA of 3.0 on a 4.0 scale is required and a minimum Science GPA of 3.0 on a 4.0 scale is 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 sources.

Letters of Recommendation

Two 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 Professional 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 essay should be submitted with the application.

Personal Interview

To be considered an eligible applicant, one must meet the admission criteria and complete the application process prior to the deadline. The Master of Occupational Therapy admissions committee reviews all completed applications. Competitive applicants are interviewed via phone or onsite 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, 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. No more than 9 hours of prerequisites can be in progress and at least two science prerequisites must be completed for file to be reviewed. 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	Semester Hours
Anatomy & Physiology	6-8
Physics, and/or Biomechanics, and/or Kinesiology	3
Abnormal Psychology	3
Developmental Psychology	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, reflecting a broad perspective on physical, cognitive, emotional, social and biological issues affecting 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 relies on community experiences to incorporate the classroom material into clinical practice. Class sizes are restricted to ensure optimal student/instructor ratios and to enable each student to receive comprehensive instructional and clinical experience.

FIRST YEAR

Summer Semester

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

Total Hours = 9

Fall Semester Courses

HPOT 5319	Occupational Performance Throughout the Lifespan
HPOT 5330	Conditions in Occupational Therapy: Part 1
HPOT 5410	Theory and Foundations of Occupational Therapy
HPOT 5415	Fundamental Skills in Practice

Total Hours = 14

MOT 1 or MOT 2 Fall Semester (combined class offered every other year)

HPOT 5226	Professional Development in Occupational Therapy

Total Hours = 2

Spring Semester Courses

HPOT 5111	Overview and Analysis of Occupational Therapy Assessment
HPOT 5227	Introduction to Clinical Reasoning
HPOT 5307	Psychosocial Interventions in Occupational Therapy
HPOT 5316	Research Process in Occupational Therapy
HPOT 5317	Hand and Upper Extremity Rehabilitation
HPOT 5430	Conditions in Occupational Therapy: Part 2

Total Hours = 16

SECOND YEAR

Summer Semester Courses

HPOT 5105	Clinical Reasoning for Fieldwork
HPOT 5142	Assistive and Adaptive Technology
HPOT 5205	Fieldwork I: Pediatric Process in Fieldwork
HPOT 5210	Fieldwork I: Psychosocial Group Process

Total Hours = 6

Fall Semester Courses

HPOT 5314	Health and Community Settings
HPOT 5449	Occupational Assessment and Intervention in Children and Adolescents
HPOT 5450	Occupational Assessment and Intervention in Adults and Older Adults

Total Hours = 11

Spring Semester Courses

HPOT 5201	Fieldwork I: Adult Physical Dysfunction
HPOT 5315	Organization and Management in Occupational Therapy
HPOT 5327	Evidence for Research and Practice
HPOT 5455	OT Practice Seminar

Total Hours = 12

THIRD YEAR

Summer Semester Courses

HPOT 5931	Fieldwork II:1

Total Hours = 9

Fall Semester Courses

HPOT 5932	Fieldwork II:2

Total Hours = 9
Total = 88 hours

Course Descriptions

HPOT 5071 Fieldwork II: Specialization (V: 1-9,F) *Prerequisites: HPOT 5931, 5932* Optional additional full-time, supervised clinical experience in an area/facility of the student's choice. Student levels of learning in this course focus on the following: knowledge/comprehension, application, analysis, and synthesis/evaluation. No text required.

HPOT 5072 Special Topics in Occupational Therapy (V: 1-3,F) Selected topics of interest in occupational therapy. Please note that this course is not offered every year. No text required.

HPOT 5105 Clinical Reasoning for Fieldwork (1:1:0,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. No text required.

HPOT 5111 Overview and Analysis of Occupational Therapy Assessment (1:0:3,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. ISBN: 978-1-56900-356-5

HPOT 5142 Assistive and Adaptive Technology (1:1:0,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. ISBN: 978-0-323-09631-7; 978-0-7637-6172-1

HPOT 5201 Fieldwork I: Adult Physical Dysfunction (2:0:40,F) 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. No text required.

HPOT 5205 Fieldwork I: Pediatric Process in Fieldwork (2:0:5,F) This course focuses on the application of evaluation, intervention, and outcomes in a pediatric setting. Instruction and hands-on experiences provide opportunities for students to practice pediatric treatment skills as they 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. ISBN: 978-0-3231-6925-7

HPOT 5209 Applied Kinesiology in Occupational Therapy (2:1:3,F) The course looks at analysis of normal human movement, including explanations of how movements are produced at specific joints and their influence on occupation. Student levels of learning in this course focus on knowledge/comprehension, and application. ISBN: 978-0-323-05912-1; 978-0-8036-2352-1

HPOT 5210 Fieldwork I: Psychosocial Group Process (2:0:5,F) This course focuses on the application of evaluation, intervention, and outcome processes utilized in a variety of psychosocial practice settings. Instruction and lab experiences provide opportunities for students to practice therapeutic group skills as they develop and implement session plans for a group of individuals. Student levels of learning in this course focus on the following: application, analysis, synthesis, and evaluation. ISBN: 978-0-8036-1704-9

HPOT 5220 Introduction to Occupational Therapy (2:2:0,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. ISBN: 978-1-61711-638-4; 978-0-8036-3575-3

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. ISBN: 978-1-61711-638-4

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. No text required.

HPOT 5307 Psychosocial Intervention in Occupational Therapy (3:3:0,F) This course introduces students to concepts and methods for providing individual and group-based intervention for persons with mental illness and persons experiencing psychosocial stressors. Topics will include, but are not limited to: crisis intervention, therapeutic use of self, specific intervention strategies (i.e. stress management, relaxation, living skills training, etc.), group dynamics, types of groups, and group protocol development. Student levels of learning in this course focus on knowledge/comprehension, application, and analysis. ISBN: 978-0-8036-1704-9

HPOT 5314 Health and Community Settings (3:3:0,F) 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. ISBN: 978-0131708082

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. ISBN: 978-1-284-05441-5

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. ISBN: 978-0-8036-1525-0

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. ISBN: 978-0-323-03386-2; 978-1-451-14530-4

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. ISBN: 978-1-133-95119-3; 978-0-323-16925-7

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. ISBN: 978-0-8036-1525-0

HPOT 5330 Conditions in Occupational Therapy: Part 1 (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. ISBN: 978-0-803-61704-9; 978-0-323-05912-1; 978-0-323-16925-7

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. ISBN: 978-1-55642-573-8

HPOT 5415 Fundamental Skills in Practice (4:3:3,F) Introduction to 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. ISBN: 978-1-56900-257-5; 978-0-323-05912-1

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 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. ISBN: 978-0-323-05912-1; 978-0-323-16925-7

HPOT 5449 Occupational Assessment and Intervention in Children and Adolescents (4:3:3,F) Focus is on how typical and atypical sequences are used in pediatric occupational therapy assess-

ment 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. ISBN: 978-0-323-16925-7

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. ISBN: 978-0-323-05912-1; 978-0-323-17281-3

HPOT 5455 OT Practice Seminar (4:3:3,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 by utilizing an individualized competency checklist. Additional learning activities, including preparation for the national certification exam and developing/presenting professional presentations, provide additional tools for entry-level practice. Student levels of learning in this course focus on the following: knowledge/comprehension, application, analysis, and synthesis, and evaluation. No text required.

HPOT 5500 Human Anatomy (5:3:6,F) 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. 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. ISBN: 978-1-45111-945-9; 978-1-455704187 or 978-1-60406-745-3

HPOT 5931 Fieldwork II:1 (9:0:40,F) P*rerequisites: 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. No text required.

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. No text required.

Doctor of Physical Therapy (DPT)

The program is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE); North Fairfax Street, Alexandria, Virginia 22314; 703-706-3245; accreditation@apta.org; http://www.capteonline.org

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. PTs 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. PTs 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 basic, behavioral, clinical, and social sciences. In addition, physical therapists are investigators in 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 the 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 commitment 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 education, component consists of 36 weeks of clinical internship under the supervision of a licensed physical therapist. Clinical internships focus on foundational, musculoskeletal, and neurologic skills. Students also participate in a clinical internship designed to meet individual student interests, which may include pediatrics, sports medicine, women's health, etc. Sites

for clinical experiences are located primarily throughout Texas and the Southwestern US, but may be located anywhere in the United States mainland. Students should anticipate additional costs during their clinical internships. Students must pass a Criminal Background Check in order to participate in clinical internships. 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 the use of e-mail, accessing the internet, and the use of word processing programs. Computer labs are located on each campus.

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.

Laptop Requirement

The Doctor of Physical Therapy (DPT) Program has the requirement that all incoming students must have a laptop computer. (*See general computer requirements in the General Information tab)

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 *https://www.ttuhsc.edu/shp/dpt/prereq.aspx* to access PTCAS & *http://www.ttuhsc.edu/shp/admissions/application.aspx* to access the required supplemental application. 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 admisson 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 prerequsisite science grade point averages 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, quantative, and analytical subscale scores. Competitive GRE scores are dependant upon the strength of the application pool during the year of admission.

Experience

Applicants are expected to have some experience of 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 science 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
General Chemistry (for science majors, lab required)	8
General Physics (for science majors, lab required)	8
General Biology (for science majors, lab required)	8
Anatomy and Physiology (for science majors, lab required)	8
Psychology	3
Statistics	3
	Total Hours: 38

** Recommended courses: English, technical writing, speech, advancd 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 and Systems Screening	2
HPPT 8205	Evidence - Based Practice I	2
HPPT 8209	Exercise Physiology	2
HPPT 8301	Foundational Skills and 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 and 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 and Clinical Education	1
HPPT 8123	Clinical Reasoning 1	1
HPPT 8222	Clinical Internship 1 (4 weeks)	2
HPPT 8228	Motor Behavior	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	Assisstive and Adaptive Technology	1
HPPT 8224	Clinical Reasoning 2	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 2 (8 weeks)	4
HPPT 8455	Clinical Internship 3 (8 weeks)	4
		Total Hours = 9

Spring Semester Courses		Credit Hours
HPPT 8160	Graduate Seminar	1
HPPT 8456	Clinical Internship 4 (8 weeks)	4

HPPT 8458	Clinical Internship 5 (8 weeks)	4

Total Hours = 9

Total Curriculum Hours = 100

During professional studies, students are required to adhere to all program policies and academic and behavioral guidelines as stated in the TTUHSC Student Affairs Handbook-Code of Professional and Academic Conduct and the DRS Student Handbook. Expenses incurred on/for clinical rotations (such as, but not limited to: housing, transportation, immunizations, drug screening and criminal background check) are the responsibility of the student.

Course Descriptions

HPPT 8099 Independent Study (V:1-6,F) This course is a variable credit (1-6 hour) course for independent study. Instructor approval required prior to enrollment.

HPPT 8100 Professional Development (1:1:0,F) This course introduces future clinicians to the concepts of professionalism, professional associations, and leadership as they relate to the practice of 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. No textbook required.

HPPT 8114 Evidence-Based Practice II (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. ISBN 13: 978-1284034165

HPPT 8120 Communication and Clinical Education (1:1:0,F,IVC) 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. ISBN: 978-1-4557-2898-5; 13:978-0-8036-1878-7

HPPT 8123 Clinical Reasoning 1 (1:1:3,F,IVC) 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. No textbooks required.

HPPT 8142 Assistive & Adaptive Technology (1:1:0,F,IVC) 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. ISBN: 978-0-7637-6172-1; 978-0323096317

HPPT 8144 Professional Project (1:0:1,Online) 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. ISBN 978-1284034165.

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,IVC) 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. ISBN: 978-1416061052; 978-1-4377-2543-8; 11-887759-85-9

HPPT 8203 Functional Anatomy (2:1:3,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. ISBN: 978-0-323-03989-5; 978-3-13-146341-8

HPPT 8205 Evidence-Based Practice I (2:2:0,F, IVC) 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. ISBN 978-1284034165; 978-0803646575

HPPT 8209 Exercise Physiology (2:2:0,F,IVC) 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. ISBN: 978-1-60913-605-5; 978-0-7817-49909

HPPT 8212 Pharmacology (2:2:0,F,IVC) 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. ISBN: 978-0-8036-4029-5

HPPT 8216 Physical Agents and Modalities (2:1:3,F,IVC) 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. ISBN: 978-1-416-3257-1

HPPT 8222 Clinical Internship 1 (2:0:40,F) Four weeks of full-time clinical experience (approximately 160 hours) in a Physical Therapy practice setting. During Clinical Internship 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). No textbook is required.

HPPT 8224 Clinical Reasoning 2 (2:1:3,F,IVC) 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. ISBN: 0-7216-0619-9

HPPT 8226 Orthotics and Prosthetics (2:2:0, F, IVC) 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. ISBN: 13:978-1-4377-1936-9; 13-978-0967633510

HPPT 8228 Motor Control (2:2:0,F,IVC) 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. ISBN: 978-0-6083-1018-0

HPPT 8231 Diagnostic Imaging (2:2:0,F,IVC) 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. ISBN: 803619464

HPPT 8240 Differential Diagnosis (2:1:3,F,IVC) 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. ISBN: 0-7216-0619-9

HPPT 8246 Advanced Topics in Physical Therapy (2:2:0,F,IVC) This course includes selected advanced topics of interest to the profession of physical therapy. Topics may include, but are not limited to: health and welness promotion, women's physical therapy, ergonomics, alternative therapies, and biopsychosocial pain patterns. Additional topics of interest may be presented. ISBN: 978-0-7817-4481-2

HPPT 8301 Foundational Skills and Assessment (3:2:3,F,IVC) 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. ISBN: 978-0-8036-2954-7; 978-1-4557-0675-0; 978-0-8036-1527-4; 978-0-8036-2066-7; 978-0-8036-3575-3

HPPT 8303 Biomechanics (3:3:0,F,IVC) This course provides students with a fundamental understanding of the biomechanics of the musculoskeletal system and integrated human movement with clinically relevant applications. ISBN: 13:978-0-7817-7422-2; 10:0-7817-7422-5; 978-1-60913-3351; 978-0-323-03989-5

HPPT 8310 Therapeutic Exercise (3:2:3,F,IVC) 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. ISBN: 978-0-07-179369-8; 13:978-0-8036-2574-7; 13:978-0-07-179369-8

HPPT 8314 Inpatient/Integumentary Physical Therapist Practice (3:2:3,F,IVC) 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. ISBN: 978-1-4557-2896-1; 978-0-13-139524-4

HPPT 8318 Neuroscience (3:3:0,F,IVC) 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. ISBN: 978-0-13-302469-2; 978-1-4511-8625-3

HPPT 8327 Healthcare and Business Management (3:3:0,F,IVC) 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. ISBN: 13:978-1284054415; 10:128405441

HPPT 8329 Human Development (3:3:0,F,IVC) 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. ISBN: 978-0-766842606; 978-1-2840-3887-3; 978-0-766842601

HPPT 8407 Pathophysiology (4:4:0,F,IVC) 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. ISBN: 978-1416031185; 978-00717800-2; 978-0-07-180600-8

HPPT 8414 Cardiopulmonary Physical Therapist Practice (4:3:3,F,IVC) 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. ISBN: 978-0323059138; 978-0803621428; 978-1609136055.

HPPT 8422 Pediatric Physical Therapist Practice (4:3:3,F,IVC) 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. ISBN: 978-1-4160-6626-2

HPPT 8425 Musculoskeletal Physical Therapist Practice I (4:3:3,F,IVC) 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. ISBN:978-0-07-174404-1; 978-0-13-254478-8; 978-0-323-05590-1

HPPT 8426 Musculoskeletal Physical Therapist Practice II (4:3:3,F,IVC) 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. ISBN: 978-0-07-174404-1; 978-0-13-254478-8

HPPT 8453 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). No textbook is required.

HPPT 8455 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). No textbook is required.

HPPT 8456 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). No textbook is required.

HPPT 8458 Clinical Internship 5 (4:0:40,F) Eight weeks of full-time clinical experience (approximately 320 hours) in a predetermined specific PT clinical setting. The student has the opportunity to integrate patient management and evaluation skills and to develop entry-level and advanced competencies for entry-level physical therapists as defined in the Physical Therapist Manual for the Assessment of Clinical Skills (PT MACS). No textbook is required.

HPPT 8500: Gross Anatomy (5:3:6,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. ISBN: 978-1-45111-945-9; 978-1-60406-7453-3 or 9781455704187

HPPT 8521 Neuromuscular Physical Therapist Practice (5:4:3,F,IVC) 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. ISBN: 978-0803625792; 978-0131598669; 0-7817-6691-5

Transitional Doctor of Physical Therapy Pathway (tDPT)

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

Program Description

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.

Laptop Requirement

The Transitional Doctor of Physical Therapy (tDPT) Program has the requirement that all incoming students must have a laptop computer. (*See general computer requirements in the General Information tab)

Admission to the Program

Applications are accepted for admission for the Fall, Spring and Summer semesters. Application deadlines are July 1 for Fall, November 1 for Spring, and April 1 for Summer. Applicants must complete and submit the application for admission online at *http://www.ttuhsc.edu/shp/admissions/application.aspx*

Application Process

Eligibility requirements for admission to the Transitional DPT program are as follows:

» Either a bachelor's or master's professional degree in physical therapy

» License to practice physical therapy within the United States.

» Documentation submitted with application

» All official college transcripts: undergraduate, physical therapy program, graduate, and any other relevant university course work.

» Acceptable grade point average (3.0 minimum on a 4.0 scale).

» At least one supporting letter of recommendation from a current/former employer or a professional colleague in the field of physical therapy.

» Résumé listing professional experience.

» Essay about personal professional goals in 500 words or less.

» TOEFL or IELTS (Internationally trained applicants from a non-English speaking country).

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.

Course Descriptions

HPPT 8070 Independent Study (3:3:0,O) This independent study course is designed to meet the student's needs and/or interest. Instructor approval required prior to enrollment.

HPPT 8361 Professional Development (3:3:0,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. No required textbook.

HPPT 8362 Health and Wellness Promotion (3:3:0,O) This course focuses on the theories and practice of health promotion and wellness and is designed to assist students in acquiring the knowledge, skills, 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. No required textbook.

HPPT 8363 Screening and Differential Diagnosis (3:3:0,O) This course provides education in screening and differential diagnosis of conditions that may require referral to or examination by a physician. This course will educate the student about proper screening for medical disease to make an informed physical therapy diagnosis. Students will be required to draw upon their 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. ISBN: 978-1-4377-2543-8

HPPT 8364 Diagnostic Imaging (3:3:0,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. ISBN: 978-0-8036-3821-1

HPPT 8365 Evidence-Based Practice (3:3:0,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. ISBN: 978-1-2840-3416-5

HPPT 8366 Clinical Application of Pharmacology (3:3:0,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. ISBN: 978-0-8036-4029-0

HPPT 8367 Business Concepts for Physical Therapists (3:3:0,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. ISBN: 978-1484054415

Elective Courses (students with a master's degree in physical therapy choose 2 and student's with a bachelor's degree in physical therapy choose 4.):

HPPT 8371 Musculoskeletal Physical Therapy Practice (3:3:0,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. ISBN: 978-0-0714-7401-6

HPPT 8372 Neuromuscular Physical Therapy Practice (3:3:0,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. ISBN: 978-1-60831-018-0

HPPT 8373 Pediatric Physical Therapy Practice (3:3:0,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 (3:3:0,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 and overview of current intervention philosophies.

HPPT 8375 Integumentary Physical Therapy Practice (3:3:0,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. ISBN: 978-0-8036-1904-3

HPPT 8376 Geriatric Physical Therapy Practice (3:3:0,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. ISBN: 978-0-1317-0826-6

HPPT 8377 Assistive Technology (3:3:0,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. ISBN: 978-0-3230-9631-7

HPPT 8378 Applied Clinical Anatomy (3:3:0) 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. ISBN: 978-1-45111-945-9 and 978-1455704187 or 978-1-60406-745-3

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.

Laptop Requirement

The Program has the requirement that all incoming students must have a laptop computer. (*See general computer requirements in the General Information tab)

For students interested in pursuing both the tDPT and ScD degrees, the recommended steps would be as follows:

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 Orthopaedic 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 Orthopaedic Surgical Management
- HPPT 6311 Clinical Studies in Anatomy
- HPPT 6312 Neuroscience of Pain
- HPPT 6313 Biomechanics in Orthopaedics
- HPPT 6314 Motor Control in Orthopaedic 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.

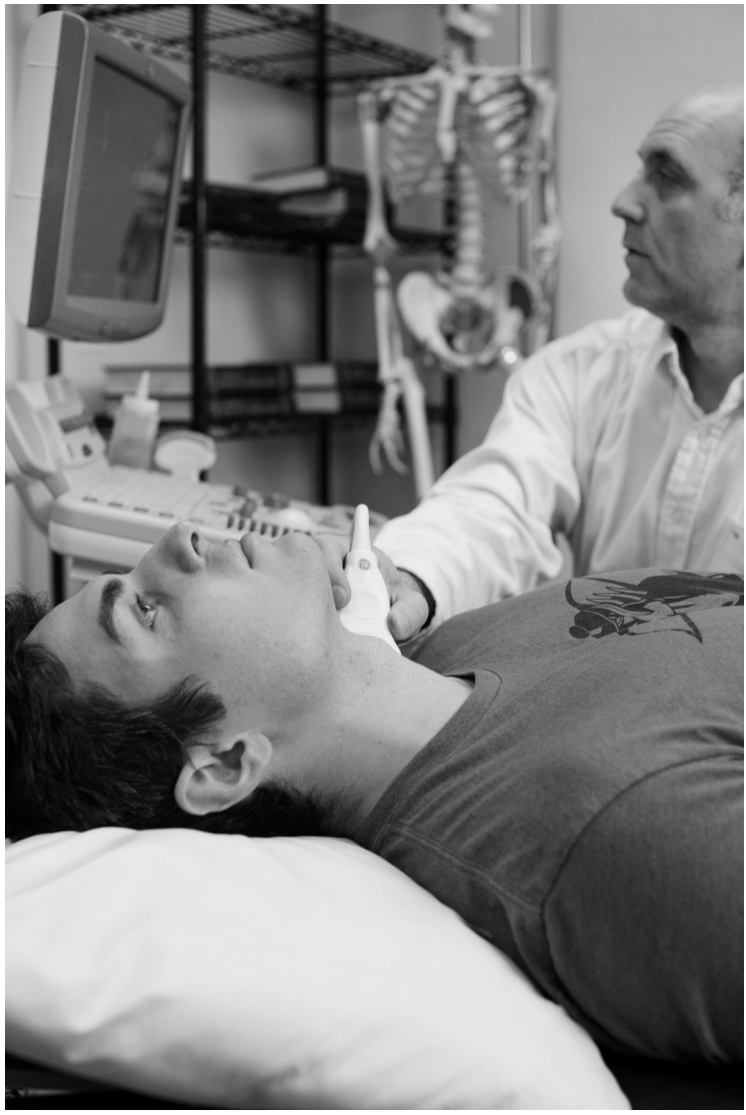
2. The student must complete the 7 tDPT core courses. It is recommended that Diagnostic Imaging (HPPT 8364) and Screening and Differential Diagnosis (HPPT 8363) be taken in the tDPT curriculum. These 6 SCH can then be applied toward the required ScD credit hours. - The student may choose to take Radiological Anatomy (HPPT 6317) and/or Orthopaedic 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 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 Orthopaedic Surgical Management
- HPPT 6311 Clinical Studies in Anatomy
- HPPT 6312 Neuroscience of Pain
- HPPT 6313 Biomechanics in Orthopaedics
- HPPT 6314 Motor Control in Orthopaedic 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.



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 clinical 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 orthopaedic afflictions suffered by patients. Over 80% of all patients seeking Physical Therapy services suffer from orthopaedic afflictions. Thus, this program will provide concentrated study at the applied doctoral level in the clinical science areas of orthopaedic Physical Therapy practice.

The ScD program emphasizes orthopaedic Physical Therapy diagnostics and management, to include orthopaedic 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.

Laptop Requirement

The Doctor of Science in Physical Therapy (ScD) Program has the requirement that all incoming students must have a laptop computer. (*See general computer requirements in the General Information tab)

Admission to the Program

Applications will be considered for Summer or Fall enrollment. The deadline for the Summer semester is March 15, and June 1 for Fall admissions.

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 interactive 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 neccesary 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	Orthopaedic 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 orthopaedic 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 Orthopaedic Surgical Management	3
HPPT 6311	Clinical Studies in Anatomy	3
HPPT 6312	Neuroscience of Pain	3
HPPT 6313	Biomechanics in Orthopaedic Physical Therapy	3
HPPT 6314	Motor Control in Orthopaedic Physical Therapy	3
HPPT 6319	Contemporary Topics in Autonomous Practice	3

Student evaluation for each didactic course will depend on the course. For many of the long weekend courses, the students will be evaluated through course participation, article abstracts, examinations, and term papers. For the website courses, students will be evaluated with online examinations, term papers, and logged participation in 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 and 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	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 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.

Course Descriptions

HPPT 6111 - 6116 Teaching Assistantship 1 (1:1:3,H) Enrollment allowed only after instructor pre-approval. This course provides the platform for sudents to recieve mentoring from ScD faculty in the delivery of clincal 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 discissed and mock clinic sessions will be executed. No textbook required.

HPPT 6303 Basic and Applied Science in Orthopaedics (3:3:0,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. ISBN: 1609133358

HPPT 6305 Updates in Orthopaedic Surgical Management (3:3:0,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. No textbook is required.

HPPT 6311 Clinical Studies in Anatomy (3:3:0,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. ISBN: 1582558566; 1455704180

HPPT 6312 Neuroscience of Pain (3:3:0,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. ISBN:1437702945

HPPT 6313 Biomechanics in Orthopaedic Physical Therapy (3:3:0,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. ISBN: 1609133358; 0736093400

HPPT 6314 Motor Control in Orthopaedic Physical Therapy (3:3:0,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. ISBN: 0736079610

HPPT 6317 Radiological Anatomy (3:3:0,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. ISBN: 0803638213

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. No textbook is required.

HPPT 6321 Advanced Clinical Practice for the Shoulder Complex (3:3:0,H) This course presents the examination and treatment of afflictions in the shoulder complex. The lecture components of this course include advancements in patho-anatomy, biomechanics, interpretation of functional examina-

tion, pathology, and treatment approaches. Clinical contact sessions include surface anatomy, basic functional examination and special tests, soft tissue treatments, and joint-specific treatment measures. This course includes management approaches to athritis/arthrosis, impingement, instability, labral afflictions, and soft tissue lesions. Case studies will be discussed and mock clinic sessions will be conducted. No textbook is required.

HPPT 6322 Advanced Clinical Practice for the Elbow & Forearm (3:3:0,H) This course presents the examination and treatment of afflictions in the elbow/forearm complex. The lecture components of this course include advancements in patho-anatomy, biomechanics, interpretation of functional examination, pathology, and treatment approaches. Clinical contact sessions include surface anatomy, basic functional 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. No textbook is required.

HPPT 6323 Advanced Clinical Practice for the Wrist & Hand (3:3:0,H) This course presents the examination and treatment of afflictions in the wrist/hand complex. The lecture components of this course include advancements in patho-anatomy, biomechanics, interpretation of functional examination, pathology, and treatment approaches. Clinical contact sessions include surface anatomy, basic functional 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. No textbook is required.

HPPT 6324 Advanced Clinical Practice for the Hip Complex (3:3:0,H) This course presents the examination and treatment of afflictions in the hip complex. The lecture components of this course include advancements in patho-anatomy, biomechanics, interpretation of functional examination, pathology, and treatment approaches. Clinical contact sessions include surface anatomy, basic functional 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. No textbook is required.

HPPT 6325 Advanced Clinical Practice for the Knee Complex (3:3:0,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 functional examination, pathology, and treatment approaches. Clinical contact sessions include surface anatomy, basic functional 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. No textbook is required.

HPPT 6326 Advanced Clinical Practice for the Ankle & Foot (3:3:0,H) This course presents the examination and treatment of afflictions in the ankle/foot complex. The lecture components of this course include advancements in patho-anatomy, biomechanics, interpretation of functional examination, pathology, and treatment approaches. Clinical contact sessions include surface anatomy, basic functional 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. No textbook is required.

HPPT 6327 Advanced Clinical Practice for the Upper Cervical Spine (3:3:0,H) This course presents the examination and treatment of afflictions in the Upper Cervical complex. The lecture components of this course include advancements in patho-anatomy, biomechanics, interpretation of functional examination, pathology, and treatment approaches. Clinical contact sessions include surface anatomy, basic functional 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. No textbook is required.

HPPT 6328 Advanced Clinical Practice for the Lower Cervical Spine (3:3:0,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 patho-anatomy, biomechanics, interpretation of functional examination, pathology, and treatment approaches. Clinical contact sessions include surface anatomy, basic functional 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. No textbook is required.

HPPT 6329 Advanced Clinical Practice for the CTJ & TOS (3:3:0,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 patho-anatomy, biomechanics, interpretation of functional examination, pathology, and treatment approaches. Clinical contact sessions include surface anatomy, basic functional 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. No textbook is required.

HPPT 6330 Advanced Clinical Practice for the Thoracic Spine & Ribs (3:3:0,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 patho-anatomy, biomechanics, interpretation of functional examination, pathology, and treatment approaches. Clinical contact sessions include surface anatomy, basic functional 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. No textbook is required.

HPPT 6331 Advanced Clinical Practice for Acute Lumbosacral Pain (3:3:0,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 patho-anatomy, biomechanics, interpretation of functional examination, pathology, and treatment approaches. Clinical contact sessions include surface anatomy, basic functional examination and special tests, soft tissue treatments, treatment to acute discogenic afflictions, and joint-specific treatment measures to the Sacrolliac 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. No textbook is required.

HPPT 6332 Advanced Clinical Practice for Recurrent and Chronic Lumbosacral Pain (3:3:0,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 patho-anatomy, biomechanics, interpretation of functional examination, pathology, and treatment approaches. Clinical contact sessions include surface anatomy, basic functional 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. No textbook is required.

HPPT 6404 Orthopaedic Physical Therapy Screening (4:4:0,H) This course will enhance physical therapists' knowledge and clinical skills designed to assist in the screening of patients for orthopaedic conditions which require examination by a physician. The class experiences should strengthen professional communication between physical therapists and physicians facilitating patient referral to physician. Radiology and laboratory screening are presented as special topics to enhance the therapist's understanding of pathology and the clinical implications of patient presentation. ISBN: 1437725430; 1416061053

HPPT 7000 Clinical Project (V:1-6,H) This is the student's independent clinical project. Content and goals will be established through mutual consent of student and instructor. No textbook is required.

HPPT 7001 Clinical Project 2 (V:1-6,H) *Prerequisite: HPPT 7000* This is the continuation of a student's independent clinical project. Content and goals will be established through mutual consent of student and instructor. No textbook is required.

HPPT 7002 Clinical Project 3 (V:1-6,H) *Prerequisite: HPPT 7000 & HPPT 7001* This is the continuation of a student's independent clinical project. Content and goals will be established through mutual consent of student and instructor. No textbook is required.

HPPT 7104 Clinical Project Presentation (1:1:0,H) For this credit, the student will present the development and findings from the project clinical project before the ScD faculty, other students and clinicians from the community. No textbook is required.

HPPT 7301 Seminar in Clinical Research Design (3:3:0,H) This course will emphasize methods in clinical research. This will include processes of obtaining, processing, interpreting, and using clinical data. ISBN: 0131716409

HPPT 7305 Curriculum Design and Teaching in Health Professions (3:3:0,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. ISBN: 1133936792

HPPT 7404 Educational Evaluation in Health Professions (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. ISBN: 0132689669

HPPT 7406 Advanced Statistics in Health Professions (4:4:0,H2) 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. ISBN: 0131716409

Doctor of Philosophy in Rehabilitation Sciences (PhD RS)

Program Description

Rehabilitation Sciences 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 physical impairments. The mission of the Doctor of Philosophy (PhD) in Rehabilitation Sciences program is to educate students to become faculty scholars (teachers and researchers), leaders and innovators in rehabilitation science to advance knowledge about factors and process that contribute to physical disability and how they can be reversed or minimized through rehabilitation.

Laptop Requirement

The Doctor of Philosophy in Rehabilitation Sciences (PhD RS) Program has the requirement that all incoming students must have a laptop computer. (*See general computer requirements in the General Information tab)

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 Sciences 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 sciences. The following is required for an individual to be considered for the PhD RS program:

» A bachelor's degree or higher in a related field (e.g., physical therapy, occupational therapy, athletic training, kinesiology, biology, medicine, biomedical engineering, etc.).

» Official transcripts that reflect the earned degree and a minimum cumulative GPA of 3.0 out of 4.0. Candidates who hold a Bachelor's degree must have an undergraduate GPA of 3.0 or better, while candidates who hold a higher degree must have at least a 3.0 GPA for each undergraduate and graduate degree, as applicable.

» Official GRE scores (verbal, quantitative, analytical, writing)

» At least three letters of recommendation

» A formal and well-crafted letter of intent specifying appropriate goals, interests, and work or other experiences consistent with the objectives of the program;

» A current résumé

» Any other pertinent information that is volunteered

» Candidates who speak English as a second language must submit official TOEFL scores.

Qualified candidates 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 in Rehabilitation Sciences program is an interdisciplinary program that requires completion of 88 semester credit hours post-baccalaureate, including 76 semester credit hours of course work and

12 semester credit hours of dissertation. Up to 24 semester credit hours may be transferred from an approved graduate program. Students entering the program who hold a bachelor's degree or a graduate degree without a thesis must successfully complete a research project within the program prior to embarking on dissertation research. All students must successfully complete a qualifying examination for admission to candidacy prior to beginning the dissertation. All students must successfully complete a doctoral dissertation.

The PhD in Rehabilitation Sciences program curriculum consists of five major content areas: Rehabilitation Sciences core (32 credit hours), pedagogy and teaching (5 credit hours), approved electives (12 credit hours), research tools (21 credit hours), and research (18 credit hours, including 12 credit hours of dissertation). Students will enroll in courses at TTUHSC and TTU and typically will enroll continuously in Summer, Fall, and Spring semesters. Students will select primary and secondary academic emphases and research concentrations to develop customized areas of expertise.

Course Descriptions

HPRS 5189, 5289, 5389 Special Topics in Rehabilitation Sciences (1:1:0,F; 2:2:0,F; 3:3:0,F) Selected topics of interest in the rehabilitation sciences. No textbook is required.

HPRS 5199, 5299, 5399 Independent Study in Rehabilitation Sciences (1:0:1,F; 2:0:2,F; 3:0:3,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, teaching assistant participation, laboratory manual development, or a teaching, clinical or research observation. No textbook is required.

HPRS 5100 History and Philosophy of Rehabilitation Sciences (1:1:0,F) An exploration of the history and philosophy of physical rehabilitation, key sub-disciplines, and the applied sciences that support and inform the physical rehabilitation professions. ISBN: 978-0-309-6374-6

HPRS 5303 Biomechanics (3:3:0,F) Biomechanics of the musculoskeletal system and integrated human movement with clinically relevant applications. ISBN: 13-978-0-7817-7422-2

HPRS 5314 Motor Control in Orthopaedics (3:3:0,H/F) 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 principles will be discussed. ISBN: 978-0-73-607961-7.

HPRS 5318 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. ISBN: 978-0-13-302469-2; 978-1-45118625-3

HPRS 5320 Computer Methods in Rehabilitation Sciences Research (3:3:0,F) This course provides an introduction to problem solving and custom program development in Matlab for rehabilitation sciences research. ISBN: 978-0-12405876-7

HPRS 5330 Seminar in Health Care Policy and Administration (3:3:0,F) Seminar devoted to the study of major issues facing U.S. health care in the 21st century. Topics will include an overview of U.S. health care organizations and delivery systems, economics of health care policy, issues of access to care, managed care, quality assessment, and health care finance. ISBN: 978-1449683740; 978-1449625610

HPRS 5340 Introductory Statistical Methods (3:3:0,F) Introductory concepts of research and statistics for communication and rehabilitation scientists. ISBN: 13:978-0-13-171640-7

HPRS 5350 Intermediate Statistical Methods (3:3:0,F) Intermediate concepts of research and statistics for communication and rehabilitation scientists. ISBN: 13:978-0-13-171640-7.

HPRS 5360 Advanced Statistical Methods (3:3:0,F) Advanced concepts of research and statistics for communication and rehabilitation scientists. ISBN: 978-1412988018; 978-0-415-81711-0

HPRS 5407 Pathophysiology (4:4:0,F/IVC) 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. ISBN: 13:978-0071806008; 13:978-0071780032

HPRS 5500 Gross Anatomy (5:3:6,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. ISBN: 978-1-45111-945-9; 978-1-45570-418-7, 978-1-60406-745-3

HPRS 6101, 6102, 6103, 6104 Seminar in Rehabilitation Sciences Research (1:1:0,F) Selected topics in rehabilitation sciences research explored through reading and discussion. No textbook is required.

HPRS 6111, 6112,6113 Seminar in Rehabilitation Sciences Professional Development (1:1:0,F) Selected topics in rehabilitation sciences professional development explored through reading and discussion. ISBN: 978-1-579226442

HPRS 6151, 6152 Teaching Apprenticeship (1:0:1,F) Students will participate in teaching a course in rehabilitation sciences while under faculty supervision. No textbook is required.

HPRS 6201 Methods in Clinical Anatomy Research (2:0:2,F) Methods and laboratory techniques in clinical anatomy research. No textbook is required.

HPRS 6202 Methods in Clinical Behavior in Rehabilitation Research (2:0:2,F) Methods and laboratory techniques in clinical behavior in rehabilitation research. No textbook is required.

HPRS 6203 Methods in Clinical Biomechanics Research (2:0:2,F) Methods and laboratory techniques in clinical biomechanics research. ISBN: 13: 978-0-7360-9340-8

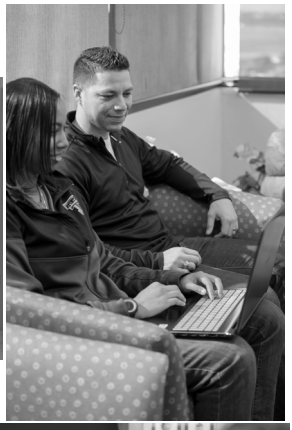
HPRS 6204 Methods in Clinical Musculoskeletal Rehabilitation Research (2:0:2,F) Methods and laboratory techniques in clinical musculoskeletal rehabilitation research. No textbook is required.

HPRS 6205 Methods in Clinical Neuromuscular and Postural Control Research (2:0:2,F) Methods and laboratory techniques in clinical neuromuscular and postural control research. No textbook is required.

HPRS 7001, 7002, 7003, 7004, 7005, 7006 Research (V:1-9,F) Students will participate in rehabilitation sciences research while under faculty supervision. No textbook is required.

HPRS 8001, 8002, 8003, 8004, 8005, 8006 Doctoral Dissertation (V:1-9,F) Research for an advanced degree. The Doctor of Philosophy degree in Rehabilitation Sciences is a research degree and is conferred only after recognition of high achievement in independent scientific research and scholarship. No textbook is required.

Department of Healthcare Management & Leadership



Bachelor of Science in Clinical Services Management (CSM)

Program Description

The objective of this program is to expand educational access to graduates of community college technical programs in health profession disciplines who frequently find themselves blocked from advancement educationally and professionally because of the technical emphasis in their Associate of Applied Sciences (A.A.S.) degree. This program provides the appropriate educational foundation and prerequisite credit hours to students who have an A.A.S. degree and desire to pursue a baccalaureate degree. The program also offers the didactic educational requirements for a long-term care administration track. Community college graduates are the primary candidates for the program. Examples are Certified Occupational Therapy Assistants, Physical Therapy Assistants, Radiology Technologists, Respiratory Care Practitioner, Medical Technologists, and Emergency Medical Technicians.

The B.S., CSM degree program operates as a "2 + 2" format to provide wide exposure to the skills, knowledge, and abilities needed for success in supervisory management in the U.S. healthcare delivery system. The B.S., CSM degree program will prepare students with the competencies needed to enter various supervisory and entry-level management positions in hospital-based departments or sub-units, community based healthcare operations, long term care facilities, sub-acute care facilities, home health agencies, independent living centers, and ambulatory clinics. Upon completion of the program, students will possess the competencies and skills necessary for successfully meeting the challenges presented by the current and evolving healthcare delivery system.

Requirements for graduation will include the successful completion of a minimum of 120 semester credit hours. The program courses are conveniently offered through the use of distance education technology by using SAKAI and internet access. The curriculum structure will follow a non-traditional format, which allows for completion of degree requirements at a pace set by the ability and availability of the student.

Admission to the Program

The CSM program begins three times a year, in the Summer, Fall and Spring. The application 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 May 1st for Summer, August 1st for Fall and December 1st for Spring.

Unconditional Admission: Students who have an Associate of Applied Sciences degree in a health professions discipline, and have completed the common core curriculum requirement for a baccalaureate degree, can apply for unconditional admission to the CSM program.

Provisional Admission: Applicants who have prerequisite course work completed over seven years prior to the application date; have not completed the common core curriculum requirements for a baccalaureate degree; have an A.A. or A.S. degree; or have 67 credit hours of lower division B.S. degree courses work; may be granted provisional admission. Students accepted on this basis must demonstrate their ability to meet the academic demands of the program.

Application Process

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/shp/admissions/application.aspx*

Prerequisite Courses

Required Course	Semester Hours
Communication	6
Math	3
College Algebra or higher level	
Life and Physical Science	6
At least one course in biological/life science (e.g. biology, human genetics, human anatomy and physiology) and one in physical science (physics or chemistry) are required	
Language, Philosophy and Culture	3
Creative Arts	3
Social and Behavioral Science	3
Individual or Group Behavior	
American History	
6	
Government/Political Science	6
Component Area Option	6
	Total TCC: 42 hours

CSM Curriculum

The program consists of 54 semester credit hours of upper-level 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 (The Hub/Sakai) courses offerings. The program requires the completion of all required core courses prior to enrollment in the advanced management courses and electives.

Students enrolled in the Clinic Services Management (CSM) program are required to complete the final six (6) academic hours through CSM program courses. HPCM 4478 is the program capstone course and must be taken in the last semester of enrollment prior to completion of the program. Exceptions to this policy may be considered by the Program Director on a case by case basis.

Required Core Courses

HPCM 4302	Financial Management for Clinical Supervisors
HPCM 4303	Principles of Personnel Management for Clinical Supervisors
HPCM 4304	Management in Healthcare Organizations
HPCM 4306	Marketing Principles and Entrepreneurship
HPCM 4311	US Healthcare System

Required Advanced Management Courses

HPCM 4313	Community Health Issues
HPCM 4314	Quality Assurance/Risk Management
HPCM 4317	Statistics for Healthcare Supervisors
HPCM 4318	Healthcare Law/Ethics
HPCM 4331	Leadership in Healthcare Organizations
HPCM 4401	Healthcare Management Information Systems

HPCM 4477	Case Study - Summer I and/or Fall
HPCM 4478	Case Study - Summer II and/or Spring

Elective Courses*

HPCM 4305	Capital Project Design
HPCM 4308	Organizational Behavior
HPCM 4312	Foundations of Managed Care
HPCM 4315	Issues in Gerontology for Healthcare Managers
HPCM 4316	Integrated Deliver Systems and Organizational Relationships
HPCM 4320	Long-term Care Management
HPCM 4321	Regulatory Aspects of Long Term Care
HPCM 4360	Special Topics

Course Descriptions

HPCM 4302 Financial Management for Clinical Supervisors (3:3:0,O) Examines the basic principles of financial management related to clinical support activities. Topics will include healthcare accounting systems, revenue planning, cost accounting, departmental budgeting, resource management allocation, and reimbursement programs that are common to the clinical support service setting. ISBN: 978-1284029864

HPCM 4303 Principles of Personnel Management for Clinical Supervisors (3:3:0,O) 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 personnel contracts. Includes a review of case studies that demonstrate the impact of the human resource functions in healthcare organizations. ISBN: 978-0324317046

HPCM 4304 Management in Healthcare Organizations (3:3:0,O) Provides an overview of operations management and practical decision-making by analyzing the day-to-day operations in a healthcare system. Identification of problem solving approaches to problems in personnel staffing, personnel training and directing, performance measurement, patient flow, facility configuration, materials management. ISBN: 978-1449688851

HPCM 4305 Capital Project Design (3:3:0,O) Methods for management of capital projects. Topics include financial considerations, procurement, site preparation, contracting, scheduling, and acceptance for operational readiness. ISBN: 978-1567933598

HPCM 4306 Marketing Principles and Entrepreneurship for Healthcare Professionals (3:3:0,O) The course covers the principles of marketing and their application in healthcare delivery systems. Topics include the concepts and tools to conduct a community needs assessment, market research, and creation of a business plan for the delivery of healthcare services. ISBN: 978-1284062441

HPCM 4308 Organizational Behavior (3:3:0,O) 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. ISBN: 978-0-7637-6383-1

HPCM 4311 The U.S. Healthcare System (3:3:0,O) A review of the healthcare system, both public and private sector. 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. ISBN: 978-1284029888

HPCM 4312 Foundations of Managed Care (3:3:0,O) Examines principles of managed care and contemporary issues in the organization and administration of managed healthcare organizations. Topics include ambulatory organizations, integrated delivery systems, providing services to a population through a medical group practice, and managed care contracting. ISBN: 978-128043259

HPCM 4313 Community Health Issues (3:3:0,O) 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. ISBN: 978-0-7637-9011-0

HPCM 4314 Quality Assurance and Risk Management (3:3:0,O) The course provides an overview of legal requirements and ethical standards in healthcare. Topics include the principles of Total Quality Management (TQM), Continuous Quality Improvement (CQI), Joint Commission on Accreditation of Healthcare Organizations (JCAHO) requirements, quality assurance, risk management, outcomes measures, benchmarking, and utilization management resulted from the expectations of patients and payers; fiduciary responsibility of hospital boards and districts, and changing technology. No textbook required.

HPCM 4315 Issues in Gerontology for Healthcare Managers (3:3:0,O) Overview of the physical, psychosocial, cognitive, cultural, and environmental factors that affect persons as they age. Special topics include financial and administrative issues that affect patient services, adaptive equipment, assistive technology, and community resources. ISBN: 978-1-4129-6966-6

HPCM 4316 Integrated Delivery Systems and Organizational Relationships (3:3:0,O) An overview of the components and organizational issues of integrated delivery systems, the interaction of interdisciplinary staff composed of technicians and professionals, team building, product line service delivery and operational management in the clinical support service setting. No textbook required.

HPCM 4317 Statistics for Healthcare Supervisors (3:3:0,O) Introduction to descriptive and inferential statistics, quantitative and qualitative research designs, and relate their application for clinical and managerial operations in a healthcare organization. ISBN: 978-0716774785

HPCM 4318 Healthcare Law & Ethics (3:3:0,O) An introduction to the regulatory, legal, and ethical issues related to the healthcare delivery industry. Topics of study are directed toward reimbursement issues; utilization review; HIPPA; patient rights; malpractice; long-term regulatory issues; and federal, state, and local statutes. ISBN: 9781449672119

HPCM 4320 Long Term Care Management (3:3:0,O) 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, care delivery systems, reimbursement and personnel administration. ISBN: 9780763764500

HPCM 4321 Regulatory Aspects of Long-Term Care (3:3:0,O) Analysis and application of regulatory requirements in the daily operational environment of a certified and licensed long term care facility are covered. Topics in this course will include; Texas, Federal and JCAHO regulatory requirements in the care, architectural and life safety code compliance issues of long term care facility operations. ISBN: None (The Long Term Care Survey Manual)

HPCM 4331 Leadership in Healthcare Organizations (3:3:0,O) The course presents an overview of management theory and leadership principles. Topics include behavioral and managerial practices with emphasis upon interpersonal relations, problem solving skills, time management, stress management, and wellness. No textbook required.

HPCM 4360, 4361 Special Topics (3:3:0,O) Guided independent research projects with focus upon a management problem in the clinical support service setting. Examples are assistive technology, early childhood intervention, grant writing, independent living centers, or rehabilitation services. No textbook is required. Prerequisites: consent of instructor

HPCM 4363-4366 Long Term Care Practicum (3:0:V5-40,H) This supervised practical work experience, conducted in an approved long-term care facility, will prepare the student for a career as a

Licensed Long Term Care Administrator through practical application of the didactic curriculum. Two semesters of this practicum are required to take the nursing home administrator licensure examination. Prerequisites: consent of the instructor. No textbook is required.

HPCM 4401 Healthcare Management Information Systems (4:4:0,O) A course in the basic concepts and the tools for collecting and analyzing data used by healthcare organizations. Topics include an overview of current desktop computer technology, local area networks (LAN) and integration of information system networks. Emphasis will be placed upon applications to medical records, patient registration systems, and appointment systems. Medical records administration will include the basic concepts and principles of creating, maintaining, and archiving medical information with consideration for legal requirements and confidentiality and explore the area of electronic media. ISBN: 978-0763756918

HPCM 4477, 4478 Case Study I-II (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, internatl analysis, competitive advantage, marketing and strategic analysis and planning. Students in AHCM 4478 will be required to work on a guided independent research project on a healthcare organizations. Prerequisites to HPCM 4478 include: HPCM 4302, 4303, 4306, 4311, 4317, 4318, 4477. ISBN: 978-1433805615; 4477=978-1118466469

Bachelor of Science in Health Sciences (BSHS)

Program Description

The objective of this program is to expand educational access to graduates of community college technical programs in health profession disciplines who frequently find themselves blocked from advancement educationally and professionally because of the technical emphasis in their Associate of Applied Sciences (A.A.S.) degree. This program provides the appropriate educational foundation and prerequisite credit hours to students who have an A.A.S. degree and desire to pursue a baccalaureate degree. The B.S.H.S is an educational program designed to provide graduates of first-professional degree programs with enhanced knowledge and competencies necessary to meet their professional goals along with current and future expectations for their clinical practice. While most post-professional programs have some type of focus or concentration (i.e., research, education, or advanced practice) all post-professional programs aim to advance the skillset of the practicing clinician so that the graduate of the post-professional program can assume either additional or new roles and responsibilities within the profession. Examples are Certified Radiology Technologists, Respiratory Care Practitioners and Paramedics.

The B.S.H.S degree program operates as a "3 + 1" format to provide wide exposure to the skills, knowledge, and abilities needed for greater success in in the U.S. healthcare delivery system. The B.S.H.S degree program will prepare students with the competencies needed for successfully meeting the challenges presented by the current and evolving healthcare delivery system.

Requirements for graduation will include the successful completion of a minimum of 120 semester credit hours. The program courses are conveniently offered through the use of distance education technology by using a course management system and internet access. The curriculum structure will follow a non-traditional format, which allows for completion of degree requirements at a pace set by the ability and availability of the student.

Admission to the Program

Unconditional Admission: Students who have an Associate of Applied Sciences degree in a health professions discipline, an overall GPA of 2.5 on a 4.0 scale, and have completed the common core curriculum requirement for a baccalaureate degree, have their certification / licensure /registration in their professional field, can apply for unconditional admission to the B.S.H.S program.

Application Process

Applications may be submitted at any time. It is in the best interest of the applicant to apply as early as possible prior to the semester in which the applicant plans to begin.Applications must be completed online at *https://www.ttuhsc.edu/merlin.*

Prerequisite Courses

Required Course	Semester Hours
Natural Science	6
Math	3
History	6
Political Science	6
English	6
Social & Behavioral Science	9

Language, Philosophy, & Culture	3
Creative Arts	3
Component Area Option/Elective	3
	Total Hours: 42

BSHS Curriculum

The program consists of 30 semester credit hours of upper-level 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) courses offerings. The program requires the completion of all required common core courses (42 SCH with at least a "C" in each course) prior to enrollment in the B.S.H.S courses.

A discipline specific capstone course must be taken in the last semester of enrollment prior to completion of the program. Exceptions to this policy may be considered by the Program Director on a case by case basis.

Required Core Courses

HPHS 4302	Financial Management for Clinical Supervisors
HPHS 4303	Principles of Personnel Management for Clinical Supervisors
HPHS 4304	Management of Clinical Support Services in Healthcare Organizations
HPHS 4311	US Healthcare System
HPHS 4313	Community Health Issues
HPHS 4314	Quality Assurance/Risk Management
HPHS 4317	Statistics for Healthcare Supervisors
HPHS 4318	Healthcare Law/Ethics
HPHS 4331	Leadership in Healthcare Organizations

Advanced Capstone Courses (one for the students area of concentration)

HPHS 4344	Advanced Respiratory Care Case Study
HPHS 4345	Advanced Emergency Medical Services Case Study (internship)
HPHS 4346	Advanced Medical Imaging Case Study

Course Descriptions

HPHS 4302 Financial Management for Clinical Supervisors (3:3:0,O) Examines the basic principles of financial management related to clinical support activities. Topics will include healthcare accounting systems, revenue planning, cost accounting, departmental budgeting, resource management allocation, and reimbursement programs that are common to the clinical support service setting. ISBN: 978-1284029864

HPHS 4303 Principles of Personnel Management for Clinical Supervisors (3:3:0,O) 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 personnel contracts. Includes a review of case studies that demonstrate the impact of the human resource functions in healthcare organizations. ISBN: 978-0324317046

HPHS 4304 Management of Clinical Support Services in Healthcare Organizations (3:3:0,O) Provides an overview of operations management and practical decision-making by analyzing the day-to-

day operations in clinical support service activities. Identification of problem solving approaches to problems in personnel staffing, personnel training and directing, performance measurement, patient flow, facility configuration, materials management. ISBN: 978-1449688851

HPHS 4311 The U.S. Healthcare System (3:3:0,O) A review of the healthcare system, both public and private sector. 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. ISBN: 978-1284029888

HPHS 4313 Community Health Issues (3:3:0,O) 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. ISBN: 978-0-7637-9011-0

HPHS 4314 Quality Assurance and Risk Management (3:3:0,O) The course provides an overview of legal requirements and ethical standards in healthcare. Topics include the principles of Total Quality Management (TQM), Continuous Quality Improvement (CQI), Joint Commission on Accreditation of Healthcare Organizations (JCAHO) requirements, quality assurance, risk management, outcomes measures, benchmarking, and utilization management resulted from the expectations of patients and payers; fiduciary responsibility of hospital boards and districts, and changing technology. No textbook required.

HPHS 4317 Statistics for Healthcare Supervisors (3:3:0,O) Introduction to descriptive and inferential statistics, quantitative and qualitative research designs, and relate their application for clinical and managerial operations in a healthcare organization. ISBN: 978-0716774785

HPHS 4318 Healthcare Law & Ethics (3:3:0,O) An introduction to the regulatory, legal, and ethical issues related to the healthcare delivery industry. Topics of study are directed toward reimbursement issues; utilization review; HIPPA; patient rights; malpractice; long-term regulatory issues; and federal, state, and local statutes. ISBN: 9781449672119

HPHS 4331 Leadership in Healthcare Organizations (3:3:0,O) The course presents an overview of management theory and leadership principles. Topics include behavioral and managerial practices with emphasis upon interpersonal relations, problem solving skills, time management, stress management, and wellness. No textbook required.

HPHS 4344 Advanced Respiratory Case Study (3:2:1,H) Focus on professional written and oral communication as practiced within the scope of respiratory care. Develop audience specific written documents, including writing that is appropriate for a professional journal or conference, and prepare, deliver, and evaluate oral presentations. No textbook is required.

HPHS 4345 Advanced Emergency Medical Services Case Study (3:2:1,H) Focus on professional written and oral communication as practiced within the scope of emergency medical services. Develop audience specific written documents, including writing that is appropriate for a professional journal or conference, and prepare, deliver, and evaluate oral presentations. No textbook is required.

HPHS 4346 Advanced Medical Imaging Case Study (3:2:1,H) Focus on professional written and oral communication as practiced within the scope of diagnostic imaging. Develop audience specific written documents, including writing that is appropriate for a professional journal or conference, and prepare, deliver, and evaluate oral presentations. No textbook is required.

Bachelor of Science in Healthcare Management (BSHM)

Beginning Fall 2016, the programs formally known as the Bachelor of Science in Clinical Services Management (CSM) and the Bachelor of Science in Health Sciences (BSHS) will merge into a program known as Bachelor of Science in Healthcare Management (BSHM).

The program will offer two tracks, the Executive Track and the Professional Track. These tracks will guide the 24-hour technical credit portion of the degree plan. Individual details will be discussed with the academic advisor after an in-depth analysis of official transcripts.

Program Description

The mission of the Bachelor of Science in Healthcare Management (BSHM) program is to prepare students to be successful, competent and ethical managers in the evolving U.S. healthcare system.

The BSHM degree 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 are allowed to transfer existing college credits and technical credits to complete the 120 credit hour requirement for a bachelor's degree. Transfer credits are considered on a case-by-case basis.

Requirements for graduation will include the successful completion of a minimum of 120 semester credit hours which includes the 42 hours of Texas Common Core and with the balance being BSHM courses and technical/approved credits for an accredited higher education institution. The BSHM program courses are conveniently offered through the use of distance education technology by using a course management system and internet access. The curriculum structure will follow a non-traditional format, which allows for completion of degree requirements at a pace set by the ability and availability of the student.

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: An Associate of Applied Sciences (AAS) degree in a health science concentration, an overall GPA of 2.5 on a 4.0 scale, completion of the Texas Common Core curriculum for a baccalaureate degree effective Fall 2017, certification/licensure/registration in a professional field can apply for admission to the BSHM program.

Provisional Admission

Provisional admission may be considered on a case-by-case basis for applicants without an AAS degree, but they must have completed 66 hours of undergraduate work

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.

Prerequisite Courses

Required Course	Semester Hours
Natural Science	6
Math	3

History	6
Political Science	6
English	6
Social & Behavioral Science	9
Creative Arts	3
Language, Philosophy, & Culture	3
Component Area Option/Elective	3
Total Hours: 42	

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 *https://www.ttuhsc.edu/shp/admissions/application.aspx.*

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

BSHM Curriculum

The program consists of a combination of technical semester credit hours and upper-level BSHM undergraduate courses. Courses will rotate and students will register as they appear each semester. Students will select courses from their degree plan and register each semester to complete the 120 hour degree plan objective. The distance education format relies primarily on internet based (HUB/AKAI) course offerings. The program requires the completion of all required Texas Common Core courses (42 SCH with at least a "C" in each course) prior to enrollment in the BSHM courses.

There are two tracks available after admission to the program. The Healthcare Professional Track is for those students who are healthcare professionals with a certification/registration/licensure in a clinical discipline listed below. The Executive Management Track is for those students without clinical certification/registration/licensure but with upper level courses in business or an associate of arts (AA). Either track prepares a graduate for a management position in a healthcare organization.

Healthcare Professional Track

Concentration Options:

- Certified Radiology Technologists
- Emergency Medical Services
- Respiratory Care Practitioners
- Occupational Therapy Assistants
- Physical Therapy Assistants
- Liscensed Vocational Nurse

Students entering the Healthcare Professional Track must have an Associate of Applied Sciences (AAS) and certification/licensure/registration in one of the health science concentrations listed above. The AAS may provide up to 48 Technical Credit hours for transfer to the BSHM.

Executive Management Track

Students who do not have an AAS may be considered for provisional admission to the BSHM, Executive Management Track. Students accepted must have completed at least 42 college credit hours and the Texas Common Core requirements (see table above).

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 Track:

Students entering the program with training in a healthcare concentration (e.g., 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.

Technical Credits - Executive Management Track:

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.

A discipline specific capstone (Case Study) course must be taken in the last semester of enrollment prior to completion of the program. Exceptions to this policy may be considered by the Program Director on a case-by-case basis.

Required Core Courses for the Healthcare Professional and Executive Management Tracks

HPHM 4302	Financial Management for Clinical Supervisors
HPHM 4303	Principles of Personnel Management for Clinical Supervisors
HPHM 4304	Management in Healthcare Organizations
HPHM 4311	The U.S. Healthcare System
HPHM 4313	Community Health Issues
HPHM 4314	Quality Assurance and Risk Management
HPHM 4317	Statistics for Healthcare Supervisors
HPHM 4318	Healthcare Law and Ethics
HPHM 4331	Leadership in Healthcare Organizations

Required Core Courses for the Executive Management Track

HPHM 4306	Marketing Principles and Entrepreneurship for Healthcare Professionals
HPHM 4401	Healthcare Management Information Systems

Advanced Capstone Courses (Students Technical Area of Concentration or Executive Management Track)

HPHM 4344	Advanced Respiratory Care Case Study
HPHM 4345	Advanced Emergency Medical Services Case Study (Internship)
HPHM 4346	Advanced Medical Imaging Case Study
HPHM 4477	Case Study I – Summer I or Fall
HPHM 4478	Case Study II – Summer II or Spring

Elective Courses for the Executive Management Track

HPHM 4305	Capital Project Design
HPHM 4308	Organizational Behavior
HPHM 4312	Foundations of Managed Care
HPHM 4315	Issues in Gerontology for Healthcare Managers
HPHM 4316	Integrated Delivery Systems and Organizational Relationships
HPHM 4320	Long-term Care Management
HPHM 4321	Regulatory Aspects of Long-Term Care

Course Descriptions

HPHM 4302 Financial Management for Clinical Supervisors (3:3:0) Examines the basic principles of financial management related to clinical support activities. Topics will include healthcare accounting systems, revenue planning, cost accounting, departmental budgeting, resource management allocation, and reimbursement programs that are common to the clinical support service setting. ISBN: 978156793277-5

HPHM 4303 Principles of Personnel Management for Clinical Supervisors (3:3:0) 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 personnel contracts. Includes a review of case studies that demonstrate the impact of the human resource functions in healthcare organizations. ISBN: 978-0-324-31704-6

HPHM 4304 Management in Healthcare Organizations (3:3:0) Provides an overview of operations management and practical decision-making by analyzing the day-to-day operations in clinical support service activities. Identification of problem solving approaches to problems in personnel staffing, personnel training and directing, performance measurement, patient flow, facility configuration, materials management. ISBN: 978-0-7637-6865-2

HPHM 4305 Capital Project Design (3:3:0,O) Methods for management of capital projects. Topics include financial considerations, procurement, site preparation, contracting, scheduling, and acceptance for operational readiness. ISBN: 978-1567933598

HPHM 4306 Marketing Principles and Entrepreneurship for Healthcare Professionals (3:3:0,O) The course covers the principles of marketing and their application in healthcare delivery systems. Topics include the concepts and tools to conduct a community needs assessment, market research, and creation of a business plan for the delivery of healthcare services. ISBN: 978-1284069563

HPHM 4308 Organizational Behavior (3:3:0,O) 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. ISBN: 978-0-7637-6383-1

HPHM 4311 The U.S. Healthcare System (3:3:0) A review of the healthcare system, both public and private sector. 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. ISBN: 978-0-7637-8458-4

HPHM 4313 Community Health Issues (3:3:0) 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. ISBN: 978-0-7637-4634-6

HPHM 4314 Quality Assurance and Risk Management (3:3:0) The course provides an overview of legal requirements and ethical standards in healthcare. Topics include the principles of Total Quality Management (TQM), Continuous Quality Improvement (CQI), Joint Commission on Accreditation of Healthcare Organizations (JCAHO) requirements, quality assurance, risk management outcomes measures, benchmarking, and utilization management in the clinical support service setting. Includes an overview of case law that has resulted from the expectations of patients and payers; fiduciary responsibility of hospital boards and districts, and changing technology. ISBN: 0-7637-2712-1

HPHM 4315 Issues in Gerontology for Healthcare Managers (3:3:0,O) Overview of the physical, psychosocial, cognitive, cultural, and environmental factors that affect persons as they age. Special topics include financial and administrative issues that affect patient services, adaptive equipment, assistive technology, and community resources. ISBN: 978-1-4129-6966-6

HPHM 4316 Integrated Delivery Systems and Organizational Relationships (3:3:0,O) An overview of the components and organizational issues of integrated delivery systems, the interaction of interdisciplinary staff composed of technicians and professionals, team building, product line service delivery and operational management in the clinical support service setting. No textbook required.

HPHM 4317 Statistics for Healthcare Supervisors (3:3:0) Introduction to descriptive and inferential statistics, quantitative and qualitative research designs, and relate their application for clinical and managerial operations in a healthcare organization. ISBN: 0-7167-5881-4

HPHM 4318 Healthcare Law & Ethics (3:3:0) An introduction to the regulatory, legal, and ethical issues related to the healthcare delivery industry. Topics of study are directed toward reimbursement issues; utilization review; HIPPA; patient rights; malpractice; long-term regulatory issues; and federal, state, and local statutes. ISBN: 978-0-7637-6473-9

HPHM 4320 Long-Term Care Management (3:3:0,O) 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, care delivery systems, reimbursement and personnel administration. ISBN: 9780763764500

HPHM 4321 Regulatory Aspects of Long-Term Care (3:3:0,O) Analysis and application of regulatory requirements in the daily operational environment of a certified and licensed long term care facility are covered. Topics in this course will include; Texas, Federal and JCAHO regulatory requirements in the care, architectural and life safety code compliance issues of long term care facility operations. ISBN: None (The Long Term Care Survey Manual)

HPHM 4331 Leadership in Healthcare Organizations (3:3:0) The course presents an overview of management theory and leadership principles. Topics include behavioral and managerial practices with emphasis upon interpersonal relations, problem solving skills, time management, stress management, and wellness. ISBN: 978-0-7637-8151-4

HPHM 4344 Advanced Respiratory Care Case Study (3:2:1) Focus on professional written and oral communication as practiced within the scope of respiratory care. Develop audience specific written documents, including writing that is appropriate for a professional journal or conference, and prepare, deliver, and evaluate oral presentations. No textbook is required.

HPHM 4345 Advanced Emergency Medical Services Case Study (3:2:1) Focus on professional written and oral communication as practiced within the scope of emergency medical services. Develop audience specific written documents, including writing that is appropriate for a professional journal or conference, and prepare, deliver, and evaluate oral presentations. No textbook is required.

HPHM 4346 Advanced Medical Imaging Case Study (3:2:1) Focus on professional written and oral communication as practiced within the scope of diagnostic imaging. Develop audience specific written documents, including writing that is appropriate for a professional journal or conference, and prepare, deliver, and evaluate oral presentations. No textbook is required.

HPHM 4363-4366 Long-Term Care Practicum (3:0:V5-40,H) This supervised practical work experience, conducted in an approved long-term care facility, will prepare the student for a career as a Licensed Long Term Care Administrator through practical application of the didactic curriculum. Two

semesters of this practicum are required to take the nursing home administrator licensure examination. Prerequisites: consent of the instructor. No textbook is required.

HPHM 4401 Healthcare Management Information Systems (4:4:0,O) A course in the basic concepts and the tools for collecting and analyzing data used by healthcare organizations. Topics include an overview of current desktop computer technology, local area networks (LAN) and integration of information system networks. Emphasis will be placed upon applications to medical records, patient registration systems, and appointment systems. Medical records administration will include the basic concepts and principles of creating, maintaining, and archiving medical information with consideration for legal requirements and confidentiality and explore the area of electronic media. ISBN: 978-1-56793-297-3

HPHM 4477, 4478 Case Study I-II (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 and strategic analysis and planning. Students in APHM 4478 will be required to work on a guided independent research project on a healthcare organization. Prerequisites to HPHM 4478 include: HPHM 4302, 4303, 4306, 4311, 4317, 418, 4477. ISBN: 978-1433805615; 4477=9781118466469

Master of Science in Clinical Practice Management (CPM)

Program Description

The goal of the Master of Science in Clinical Practice Management 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 MSCPM 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 CPM 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 May 1st for Summer, August 1st for Fall and December 1st for Spring.

Application Process

Individuals applying to the program should already hold a bachelor's degree from a regionally accredited college or university. A health related degree is preferred, but not required for admission into the program. To be considered for admission, an overall grade point average (GPA) of 2.7 on a 4.0 scale in the last 60 hours of college credit is required. Provisional admission may be offered to applicants with a GPA less than 2.7. Such applications will be evaluated on an individual basis.

The following are considered in the admissions process:

- All official college transcripts
- Acceptable grade point average
- Working healthcare (or related) experience
- The GRE/GMAT is not required

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.

CPM Curriculum

The following courses are offered at least once every year. MSCPM 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. HPCP 5308 Practice Management II may only be taken in the last term. It is the degree's capstone class.

Required Core Courses

HPCP 5303	Research Methods
HPCP 5305	Leadership & Ethics in the Health Professions
HPCP 5306	Healthcare Delivery System
HPCP 5307	Practice Management I
HPCP 5308	Practice Management II
HPCP 5309	Decision Making and Business Statistics
HPCP 5310	Coding and Healthcare Law
HPCP 5311	Healthcare Finance and Resource Management
HPCP 5312	Marketing and Strategic Planning
HPCP 5330	Introduction to Informatics

Electives*

HPCP 5301	Current Concepts in Healthcare
HPCP 5302	Medical Sociology
HPCP 5315	Professional Development and Healthcare Ethics
HPCP 5316	Independent Study
HPCP 5317	Introduction to Health and Public Policy
HPCP 5318	Organizational Behavior and Theory
HPCP 5322	Risk, Quality and Patient Safety

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

Course Descriptions

HPCP 5301 Current Concepts in Healthcare (3:3:0,O) This course discusses topical issues that pertain to healthcare. These may include, but are not limited to, the delivery and financing of healthcare, technological advances in healthcare, consumer-important issues in healthcare, recent advances in the diagnosis, prevention, and treatment of disease, and legal issues related to healthcare. The course is conducted in a seminar format, with the instructor and students providing current material for discussion. Prior to enrolling in this course, the student is expected to have a firm foundation in the subject of healthcare delivery in the United States. Recommended prerequisite: HPCP 5306 Healthcare Delivery System. No textbook is required.

HPCP 5302 Medical Sociology (3:3:0,O) This course provides an introduction to central topics in the sociology of medicine, health, and illness. Topics include but are not limited to: epidemiology, history of medicine in the West, public health, the social stratification of illness, the medical profession, and health care provision, access and delivery. In exploring these topics, emphasis will be placed on how socio-economic factors such as age, gender, ethnicity, race, and financial status affect health care. ISBN-13: 978-0-205-82883-8

HPCP 5303 Research Methods (3:3:0,O) This course provides the basic statistical and methodological principles underlying clinical and theoretical research, research design, and techniques for con-

ducting appropriate literature reviews. Students will critically evaluate measurement systems, interpretations of findings, and methodologies applied within the literature. ISBN-13: 978-0-071-79071-0

HPCP 5305 Leadership & Ethics in the Health Professions (3:3:0,O) The emphasis of this course is on understanding the fundamentals of leadership and ethics as it applies to leading personnel in health professionals. A heavy emphasis is placed on understanding the seminal concepts of leadership and ethics as it applies to organizational behavior and theory in practice within the health professions. Several leadership, personality and ability-job-fit diagnostics tests are given to students to discern natural leadership tendencies for decision making. These tests also support the creation of a personal ethical framework. These competencies and skills are later applied to case studies and practical excercise. Measurment of leadership perfomance and ethical outcomes are evaluated. ISBN-13: 978-1-284-02688-7

HPCP 5306 Healthcare Delivery System (3:3:0,O) This course provides an introduction to health care services, offering students an overview of the U.S. health care delivery system and the important components of the system. The course will examine the health care delivery system broadly and explore contemporary issues affecting the institutions that provide health care and are designed to protect the health of the American public. The course will cover the historical development of the U.S. health care system, the changing roles of health care providers, major health programs, determinants of health, disparities in health, and health care 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. health care system. ISBN-13: 978-0-826-10687-2; ISBN-13: 978-1-284-03542-1

HPCP 5307 Practice Management I (3:3:0,O) This course discusses managerial principles, operations, and functions within the healthcare system. The purpose of this course is to provide a strong foundation in key concepts important to healthcare management. A wide range of topics, including management, leadership, healthcare law, human resource management, financing, strategic planning, and quality improvement are addressed. ISBN-13: 978-0-763-79086-8

HPCP 5308 Practice Management II (3:3:0,O) This capstone course is intended to integrate and apply key concepts as learned in other classes in the MS-CPM program. Students in this course will work in interdisciplinary teams to develop a comprehensive Business Plan for a new hospital or clinic product line or service. This final project will allow the student to demonstrate competency across the various disciplines within the MS-CPM program. It also provides an excellent opportunity to demonstrate business writing and research skills common among senior healthcare executives. Prerequisite: This class may only be taken in the student's last semester in the program. ISBN-13: 978-1-567-93357-4

HPCP 5309 Decision Making and Business Statistics (3:3:0,O) This course is intended to provide an overview of descriptive and inferential statistical methods and applications pertinent to health care management professionals, with an emphasis on the use of commonly available software applications, such as Microsoft Excel, to formulate and carry out decision-making practices applied to real world healthcare issues in the practice setting. ISBN-13: 978-1-428-35229-2

HPCP 5310 Coding and Healthcare Law (3:3:0,O) This course addresses current CPT and HCPCS coding issues and healthcare related laws. The course will provide the learner with current coding requirements, reimbursement changes, and legal issues facing the healthcare industry. Topics include utilization review, HIPPA, patient rights, and malpractice legislation. ISBN-13: 978-1-603-59759-3

HPCP 5311 Healthcare Finance and Resource Management (3:3:0,O) This course concentrates on learning the fundamentals of Business Case Analysis (BCA). The purpose of this class is to assist the student in developing the necessary analytical ability, attitudes and decision making skills required of the clinical practice manager in a changing environment. The course provides in-depth knowledge of the business case analysis approach to decision-making in the ambulatory setting. ISBN-13: 978-1-567-93425-0

HPCP 5312 Marketing and Strategic Planning (3:3:0,O) The purpose of this class is to integrate key aspects of marketing and strategic planning into a blended class that results in the completion of an integrated Business Plan for a new capital venture. The class examines strategic planning techniques, concepts, and practices as they apply to organizational survival. Leadership responsibilities regarding the creation of mission, vision, goals and objective statements are explored. The second half of the course integrates marketing with strategic planning such that the "Five P's" of marketing, and the

complementary roles of public relations, advertising, and sales (the marketing mix) are captured in the organizational analysis. ISBN-13: 978-1-567-93348-2

HPCP 5315 Professional Development and Healthcare Ethics (3:3:0,O) This course guides the student's growth through professional development. Topics include effective communication, education, professionalism, ethical issues, practice expectations, and promotion of the student's profession. ISBN: 978-1-402-01460-4

HPCP 5316 Independent Study (3:3:0,O) Students may have the opportunity to do an independent study project in lieu of a comparable core course or as an elective. The independent study project could be a comprehensive literature review, research, or a practice-based work project. Students design their study plan, syllabus, and deliverables with faculty assistance. Students may only enroll in this course after having obtained written permission from the faculty member with whom they will be working. No textbook is required.

HPCP 5317 Introduction to Health and Public Policy (3:3:0,O) This course presents an overview of policymaking and describes health and public policy in the United States, questions concerning practical issues in problem identification, policy formulation, implementation, and policy evaluation are addressed in this course. Special emphasis is placed on the interaction of social, political, and economic forces in shaping health policies. ISBN-13: 978-1-449-65330-9

HPCP 5318 Organizational Behavior and Theory (3:3:0,O) The purpose of this course is to help students gain an appreciation of the theory of organizations and how this theory shapes the way healthcare administrators come to think about their administrative responsibilities and the range of options available to them through the literature. Understanding the attitudes and behaviors of individuals and groups in healthcare organizations will also be emphasized. Students will earn 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. ISBN-13: 978-1-435-48818-2; ISBN-13: 978-0-066-62099-2

HPCP 5322 Risk, Quality and Patient Safety (3:3:0,O) This course introduces the concepts of health care risk and quality management and how these domains go hand in hand with patient safety. Class work addresses the major elements of a 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 Join Commission accreditation. ISBN-13: 978-0-470-30017-6

HPCP 5330 Introduction to Informatics (3:3:0,O) This course will introduce the student to the uses of information technology as it applies to healthcare, including information retrieval, electronic medical records, physician order entry, telemedicine, consumer health informatics, security, privacy, and confidentiality in the electronic environment, HIPAA regulations, ethics, computerized medical imaging, and decision support. The course will provide the student with the fundamental knowledge about information technology (IT) necessary to practice within the modern healthcare environment. ISBN-13: 978-1-447-14473-1

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 May 1st for Summer, August 1st for Fall and December 1st for Spring.

Application Process

Individuals applying to the program should already hold a bachelor's degree from a regionally accredited college or university. A health related degree is preferred, but not required for admission into the program. To be considered for admission, an overall grade point average (GPA) of 2.7 on a 4.0 scale in the last 60 hours of college credit is required. Provisional admission may be offered to applicants with a GPA less than 2.7. Such applications will be evaluated on an individual basis.

The following are considered in the admissions process:

- All official college transcripts
- Acceptable grade point average
- Working healthcare (or related) experience
- The GRE/GMAT is not required

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.

MSHA Curriculum

The following courses are offered at least once every year. 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 may only be taken in the last term.

Required Core Courses

HPHA 5303	Research Methods
HPHA5305	Leadership & Ethics in the Health Professions
HPHA 5306	Healthcare Delivery Systems
HPHA 5307	Health Organization and Human Resource Management
HPHA 5309	Decision Making with Business Statistics
HPHA 5310	Coding and Healthcare Law
HPHA 5311	Healthcare Finance and Resource Management
HPHA 5312	Marketing and Strategic Planning
HPHA 5314	Healthcare Administration Capstone
HPHA 5330	Introduction to Informatics

Electives*

HPHA 5301	Current Concepts in Healthcare
HPHA 5302	Medical Sociology
HPHA 5315	Professional Development and Healthcare Ethics
HPHA 5316	Independent Study
HPHA 5317	Introduction to Health and Public Policy
HPHA 5318	Organizational Behavior and Theory
HPHA 5322	Risk, Quality and Patient Safety

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

Course Descriptions

HPHA 5301 Current Concepts in Healthcare (3:3:0,O) This course discusses topical issues that pertain to healthcare. These may include, but are not limited to, the delivery and financing of healthcare, technological advances in healthcare, consumer-important issues in healthcare, recent advances in the diagnosis, prevention, and treatment of disease, and legal issues related to healthcare. The course is conducted in a seminar format, with the instructor and students providing current material for discussion. Prior to enrolling in this course, the student is expected to have a firm foundation in the subject of healthcare delivery in the United States. Recommended prerequisite: HPHA 5306 Healthcare Delivery System. No textbook is required.

HPHA 5302 Medical Sociology (3:3:0,O) This course provides an introduction to central topics in the sociology of medicine, health, and illness. Topics include but are not limited to: epidemiology, history of medicine in the West, public health, the social stratification of illness, the medical profession, and health care provision, access and delivery. In exploring these topics, emphasis will be placed on how socio-economic factors such as age, gender, ethnicity, race, and financial status affect health care. ISBN-13: 978-0-205-82883-8

HPHA 5303 Research Methods (3:3:0,O) This course provides the basic statistical and methodological principles underlying clinical and theoretical research, research design, and techniques for con-

ducting appropriate literature reviews. Students will critically evaluate measurement systems, interpretations of findings, and methodologies applied within the literature. ISBN-13: 978-0-071-79071-0

HPHA 5305 Leadership & Ethics in the Health Professions (3:3:0,O) The emphasis of this course is on understanding the fundamentals of leadership and ethics as they applies to leading personnel in health professionals. A heavy emphasis is placed on understanding the seminal concepts of leadership and ethics as they applies to organizational behavior and theory in practice within the health professions. Several leadership, personality, and ability-job-fit diagnostics tests are given to students to discern natural leadership tendencies for decision making. These tests also support the creation of a personal ethical framework. These competencies and skills are later applied to case studies and practical excercises. Measurement of leadership perfomance and ethical outcomes are evaluated. ISBN-13: 978-1-284-02688-7

HPHA 5306 Healthcare Delivery System (3:3:0,O) This course provides an introduction to healthcare services, offering students an overview of the U.S. healthcare delivery system and the important components of the system. The course will examine the healthcare delivery system broadly and explore contemporary issues affecting the institutions that provide healthcare and are designed to protect the health of the American public. The course will cover the historical development of the U.S. healthcare system, the changing roles of healthcare providers, major health programs, determinants of health, disparities in health, and healthcare finance. The goal of the course is to provide students with the necessary skills to be effective participants in efforts to improve the U.S. healthcare system. ISBN-13: 978-0-826-10687-2; ISBN-13: 978-1-284-03542-1

HPHA 5307 Health Organization and Human Resource Management (3:3:0,O) This course provides an overview of the principles of managing healthcare organizations and human resources. Concepts presented include healthcare supervision and management, teamwork, recruitment and selection, performance management and evaluation, compensation and benefits, motivation, training and development, and employment and labor law.

HPHA 5309 Decision Making and Business Statistics (3:3:0,O) This course is intended to provide an overview of descriptive and inferential statistical methods and applications pertinent to health care management professionals, with an emphasis on the use of commonly available software applications, such as Microsoft Excel, to formulate and carry out decision-making practices applied to real world healthcare issues in the practice setting. ISBN-13: 978-1-428-35229-2

HPHA 5310 Coding and Healthcare Law (3:3:0,O) This course addresses current CPT and HCPCS coding issues and healthcare related laws. The course will provide the learner with current coding requirements, reimbursement changes, and legal issues facing the healthcare industry. Topics include utilization review, HIPPA, patient rights, and malpractice legislation. ISBN-13: 978-1-603-59759-3

HPHA 5311 Healthcare Finance and Resource Management (3:3:0,O) This course concentrates on learning the fundamentals of Business Case Analysis (BCA). The purpose of this class is to assist the student in developing the necessary analytical ability, attitudes, and decision making skills required of the clinical practice manager in a changing environment. The course provides in-depth knowledge of the business case analysis approach to decision-making in the ambulatory setting. ISBN-13: 978-1-567-93425-0

HPHA 5312 Marketing and Strategic Planning (3:3:0,O) The purpose of this class is to integrate key aspects of marketing and strategic planning into a blended class that results in the completion of an integrated business plan for a new capital venture. The class examines strategic planning techniques, concepts, and practices as they apply to organizational survival. Leadership responsibilities regarding the creation of mission, vision, goals, and objective statements are explored. The second half of the course integrates marketing with strategic planning such that the “Five P’s” of marketing, and the complementary roles of public relations, advertising, and sales (the marketing mix) are captured in the organizational analysis. ISBN-13: 978-1-567-93348-2

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 5315 Professional Development and Healthcare Ethics (3:3:0,O) This course guides the student's growth through professional development. Topics include effective communication, education, professionalism, ethical issues, practice expectations, and promotion of the student's profession. ISBN: 978-1-402-01460-4

HPHA 5316 Independent Study (3:3:0,O) Students may have the opportunity to do an independent study project in lieu of a comparable core course or as an elective. The independent study project could be a comprehensive literature review, research, or a practice-based work project. Students design their study plan, syllabus, and deliverables with faculty assistance. Students may only enroll in this course after having obtained written permission from the faculty member with whom they will be working. No textbook is required.

HPHA 5317 Introduction to Health and Public Policy (3:3:0,O) This course presents an overview of policymaking and describes health and public policy in the United States. Questions concerning practical issues in problem identification, policy formulation, implementation, and policy evaluation are addressed in this course. Special emphasis is placed on the interaction of social, political, and economic forces in shaping health policies. ISBN-13: 978-1-449-65330-9

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HPHA 5322 Risk, Quality, and Patient Safety (3:3:0,O) This course introduces the concepts of health care risk and quality management and how these domains go hand in hand with patient safety. Class work addresses the major elements of a 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. ISBN-13: 978-0-470-30017-6

HPHA 5330 Introduction to Informatics (3:3:0,O) This course will introduce the student to the uses of information technology as it applies to healthcare, including information retrieval, electronic medical records, physician order entry, telemedicine, consumer health informatics, security, privacy, and confidentiality in the electronic environment, HIPAA regulations, ethics, computerized medical imaging, and decision support. The course will provide the student with the fundamental knowledge about information technology (IT) necessary to practice within the modern healthcare environment. ISBN-13: 978-1-447-14473-1

Department of Clinical Counseling & Mental Health

Master of Rehabilitation Counseling (MRC)

The program is accredited by the Council on Rehabilitation Education (CORE). 1699 E. Woodfield Rd., Suite 300; Schaumburg, IL 60173; 847.944.1345; www.core-rehab.org

The RC Profession

Work and working are highly valued in our society. Rehabilitation Counselors provide and coordinate services for individuals with a range of physical, psychiatric, and/or developmental disabilities. These professionals work to assist clients in gaining the skills and resources necessary to obtain meaningful work and lead full and self-satisfying lives. This is done through a range of activities, including: counseling, provision of adaptive equipment, vocational training, job placement, modifying the work environment, and assisting clients to cope effectively with their environment and function as independently as possible.

Program Description

This Rehabilitation 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 rehabilitation 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 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.

Graduates of the program can seek employment in state agencies, non-profit organizations, healthcare facilities, private rehabilitation firms, insurance companies, health management organizations, probation and corrections fields, educational institutions, private industry, and research organizations. The program actively recruits students from diverse populations and has a minority rate of 25%. Since the inception of the program over 87% of students who enter the program finish with their degree or certification requirements.

The Master of Rehabilitation Counseling (MRC) degree program is a distance education, 48 semester credit hour graduate program, moving to 60 semester credit hours in spring 2017 (pending SACS approval), designed to provide a comprehensive exposure to the field of Rehabilitation Counseling. The MRC program was designed specifically for people who cannot attend 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 at-site practicum 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 MRC 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, Rehabilitation 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 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 off campus settings, either at the student's place of employment (when appropriate) or in designated rehabilitation settings.

Second, all students will be required to undertake a 600 hour supervised internship in a rehabilitation setting. Students undertaking supervised employment in Rehabilitation 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 rehabilitation settings.

Purpose Statement

It is our purpose to provide a quality comprehensive rehabilitation counselor education program that is progressive in the areas of pedagogy, technology and research that fosters students' personal and professional growth and provides leadership in the field at the local and national levels.

Program Goals

» To recruit, educate and graduate a diverse population of students who are prepared to provide rehabilitation counseling services in a variety of employment settings.

» To provide a rigorous academic environment that provides a solid foundation to prepare entry level Rehabilitation Counselors who meet national certification standards.

» To work closely with the public and private rehabilitation communities to ensure well-trained graduates who are considered valued employees.

» To develop a faculty that is valued by our students and the rehabilitation community for our teaching, research, and service.

» To achieve the highest quality program possible within the constraints of available financial, human, technological, and time resources.

» To develop commitment within students to empower individuals with disabilities to identify and maximize their resources to meet their developmental, vocational, independent living, and educational needs.

» To instill 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 MRC program, students will possess the competencies and experiences necessary to take the national certification examinations, and if successful, be accredited as a Certified Rehabilitation Counselor (CRC).

Admission to the Program

The MRC 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, 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. Provisional admission may be offered to applicants with a GPA of less than 2.7. Such applications will be reviewed on an individual basis. Graduate Record Examination (GRE) or Millers Analogies Test (M.A.T.) scores are NOT required for entry into the MRC 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 www.ttuhsc.edu/merlin. Applications for non-degree seeking students wishing to participate in selected MRC courses are accepted up to three weeks prior to the start of the semester.

MRC Curriculum Fall 2016

CORE COURSEWORK

Course		Credit Hours
HPRC 5301	Professional Orientation and Ethical Practice	3
HPRC 5302	Counseling Theories	3
HPRC 5303	Medical Aspects of Disability	3
HPRC 5304	Employment Development & Career Services	3
HPRC 5305	Case Management	3
HPRC 5306	Psycho-Social Aspects of Disability	3
HPRC 5307	Diversity Along the Lifespan	3
HPRC 5308	Research Methodologies & Interpretation of Research Findings	3
HPRC 5309	Group Counseling Thoery and Practice	3
HPRC 5311	Micro Counseling Skills Practice	3
HPRC 5321	Assessment from a Rehabilitation Perspective	3
HPRC 5342	Addictions	3

Total Hours = 36

PRACTICAL EXPERIENCE

Course		Credit Hours
HPRC 5312	Practicum	3
HPRC 5313	Internship I	3
HPRC 5314	Internship II	3
HPRC 5315	Internship III	3

Total Hours = 12

ELECTIVES*

Course		Credit Hours
HPRC 5111	Independent Study	1
HPRC 5310	Special Topics	3
**Elective credits are optional and not required for graduation*		**Total Hours = 4**

Fall 2016 Course Descriptions

HPRC 5111 Independent Study (1:1:0,O) This course is a single credit hour course in specific areas of rehabilitation counseling as identified by faculty, students, or the community. No textbook required

HPRC 5301 Professional Orientation and Ethical Practice (3:3:0,O) Introduction to the history and philosophy of rehabilitation, ant 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. ISBN: 978-1-4164-0495-8

HPRC 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. ISBN: 10L0-13-715257-4; ISBN:-10:1285083717; ISBN-10: 1285175239

HPRC 5303 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. ISBN: 978-0-9855538-9-0

HPRC 5304 Employment Development and Career Services (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. ISBN: -10:1285075447; ISBN-10:0-942071-29-8

HPRC 5305 Case Management (3:3:0,O) Review of the case management process, including case finding, service coordination, and client advocacy. Discussion of the planning process to maximize personal independence, and the role of the rehabilitation counseling process in the identification and use of community resources. The role of computer technology in case load management, functional assessment, job matching, etc. Emphasis is placed on the rehabilitation counseling professional as part of an interdisciplinary team. The role, functions, and utilization of other professionals, particularly rehabilitation professionals such as occupational therapists, physical therapists, communication disorders specialists, etc, will be explored. ISBN-10: 1285173228

HPRC 5306 Psycho-Social Aspects of Disability (3:3:0,O) Exploration of the psychological and social aspects of disability, with particular emphasis on the impact of the disability experience from the perspective of the rehabilitation counseling services consumer. The implications of each disorder on the client's personal, social and occupational functioning will be addressed. Special attention is given to psychological disorders on treatment planning, counseling and rehabilitation. ISBN-13: 9780398086121; ISBN-10:0826106021

HPRC 5307 Diversity Along the Lifespan (3:3:0,O) An introduction to issues of human growth and development through a diversity perspective. Exploring the impacts of diversity and cultural mores as they impact the roles individuals inhabit across their lifespan. ISBN-13:978-0132851022; ISBN-13:978-1-84787-179-4

HPRC 5308 Research Methodologies and Interpretation of Research Findings (3:3:0,O) Exploration of current trends in research in rehabilitation and related fields. Basic research design, methodologies, analysis, and interpretation will be reviewed. A discussion of the applications of research methodologies, findings, and interpretations in guiding and evaluating rehabilitation counseling prac-

tice (e.g. - choosing interventions, planning assessments, evaluating results, etc.) is also included. ISBN-10:0398078785

HPRC 5309 Group Counseling Theory and Practice (3:3:1,O) This course is designed to prepare counselors to become knowledgeable and skillful in using theoretical constructs of group counseling with 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 passes AHRC 5302 or equivalent before enrolling. ISBN: 10-:0-415-53291-4; ISBN-10: 0-415-64480-1

HPRC 5310 Special Topics (3:3:0,O) Specialized seminars or courses in specific areas of rehabilitation counseling as identified by faculty, students or the community. No textbook is required.

HPRC 5311 Micro Counseling Skills Practice (3:3:2,O) Exploration, development, and practice of the micro-skills deemed essential building blocks of counseling. Training allows for observed development and peer practice in a laboratory setting prior to implementation with public patrons. Students must have passed HPRC 5302 or equivalent before enrolling. ISBN: 13: 978-1285065359

HPRC 5312 Practicum (3:3:7,H) Supervised rehabilitation counseling practicum fostering professional growth, knowledge skills development, and awareness into the rehabilitation counseling process and issues that affect service delivery. Includes both in-class and on-site experiences in settings that facilitate the development of basic rehabilitation counseling and practice skills. This course may be repeated if the 100 hour requirement is not met. Students must have passed HPRC 5311 before enrolling. ISBN-10:0-205-95965-2

HPRC 5313/5314/5315 Internship I/II/III (3:1:40,F) An immersion experience of supervised practice within a rehabilitation counseling services setting. Students will serve as a rehabilitation professional under the supervision of a fully qualified practitioner. Mandatory group supervision by faculty in an online setting. Requires 600 hours of supervised clinical practice throughout the three internship courses. Students must have passed HPRC 5312 befor enrolling. No textbook is required.

HPRC 5321 Assessment from a Rehabilitation Perspective (3:3:0,O) Focusing on both the tasks of vocational and mental health assessment, this course will touch on models of psychosocial readiness to engage in the rehabilitation process. A comprehensive study of commonly used vocational assessment tools as well as the newly published DSM-V, often called the 'bible' of mental health diagnostics. ISBN-10:1416405410; ISBN-10:084002861X

HPRC 5342 Addictions (3:3:0,O) A thorough review of addictions including models of addiction, assessment, treatment, and interations between addiction and rehabilitation services. Issues of prevalence, culture, and political interactions are discussed. ISBN: 128545717X

HPRC 5380 Distance Education: Essentials for Success (3:3:0,O) This course is designed to help the student address common pitfalls in graduate education. Content areas included: online computer skills, communication, group work, time management, expectations for professional and academic conduct, review of MRC policy, test taking skills, and information on learning styles. The goal of this course is to better prepare students for success in online graduate courses. No textbook is required.

HPRC 5381 Writing at a Master's level (3:3:0,O) This course is designed to address the changes to academic writing that may have occurred since the student was last in school and better prepare students for the requirements of academic writing at the graduate level of education. This is an in-depth course on all areas of writing skills that will be used in an on-line graduate program. Content areas include: grammar, types of academic papers, source selection and evaluation, outlines and organization of papers, writing skills, APA standards, MS word tutorials, using library services, editing and critical evaluation of papers and journals, overview of different writing styles (formal/informal/web/technical), and proofreading. ISBN: 1-4338-2562-6

HPRC 6000 Internship Completion (V1-6:V1-6:V1-40,F) A variable credit course used for completion of core required internship hours after HPRC 5313-15 have been completed. No text required.

MRC Curriculum Spring 2017 Forward

As of spring semester 2017, the TTUHSC MRC program will be a 60 credit hour program (pending SACS approval). The following information will apply at that time:

CORE COURSEWORK

Course		Credit Hours
HPRC 5301	Introduction to Counseling and Ethical Development	3
HPRC 5302	Counseling Theories	3
HPRC 5303	Medical Aspects of Disability	3
HPRC 5304	Career Counseling	3
HPRC 5306	Psycho-Social Aspects of Disability	3
HPRC 5307	Multicultural Counseling	3
HPRC 5309	Group Counseling	3
HPRC 5311	Micro Counseling	3
HPRC 5316	Foundations of Rehabilitation and Ethical Development	3
HPRC 5319	Human Growth and Development	3
HPRC 5320	Professional Development in Clinical Rehabilitation Counseling	3
HPRC 5321	Assessment	3
HPRC 5323	Psychopathology and Diagnosis	3
HPRC 5324	Research and Statistics	3
HPRC 5325	Treatment Planning and Case Management	3
		Total Hours = 48

PRACTICAL EXPERIENCE

Course		Credit Hours
HPRC 5312	Practicum	3
HPRC 5313	Internship I	3
HPRC 5314	Internship II	3
HPRC 5315	Internship III	3
		Total Hours = 12

ELECTIVES*

Course		Credit Hours
HPRC 5111	Independent Study	1
HPRC 5310	Special Topics	3
**Elective credits are optional and not required for graduation*		**Total Hours = 3**

Spring 2017 Forward Course Descriptions

HPRC 5111 Independent Study (1:1:0,O) This course is a single credit hour course in specific areas of rehabilitation counseling as identified by faculty, students, or the community. No textbook required

HPRC 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, multiculutral 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) profesional code of ethics. ISBN: 978-0130985361

HPRC 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. ISBN: 10L0-13-715257-4; ISBN:-10:1285083717; ISBN-10: 1285175239

HPRC 5303 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. ISBN: 978-0-9855538-9-0

HPRC 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. ISBN: -10:1285075447; ISBN-10:0-942071-29-8

HPRC 5306 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 a 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 psychoogical implications for persons with disabiilities, family,support systems, and the general population. ISBN: 978-0826106025

HPRC 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. ISBN:13:978-0132851022

HPRC 5309 Group Counseling (3:3:1,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 HPRC 5302 or equivalent before enrolling. ISBN: 978-0-415-53291-4; ISBN: 978-0-415-64480-8

HPRC 5310 Special Topics (3:3:0,O) Specialized seminars or courses in specific areas of rehabilitation counseling as identified by faculty, students or the community. No textbook is required.

HPRC 5311 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 5302 or equivalent before enrolling. ISBN: 13: 978-1285065359

HPRC 5312 Practicum (3:3:7,H) Supervised rehabilitation counseling practicum fostering professional growth, knowledge skills development, and awareness into the rehabilitation counseling process and issues that affect service delivery. Includes both in-class and on-site experiences in settings that facilitate the development of basic rehabilitation 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 before enrolling. ISBN-10:0-205-95965-2

HPRC 5313/5314/5315 Internship I/II/III (3:1:40,O) An immersion experience of supervised practice within a rehabilitation counseling services setting. Students will serve as a rehabilitation profession-

al under the supervision of a fully qualified practitioner. Mandatory group supervision by faculty in an online setting. Requires 600 hours of supervised clinical practice throughout the three internship courses. Students must have passed HPRC 4312 before enrolling. ISBN: 978-0-205-95965-5

HPRC 5316 Foundations of Rehabilitation and Ethical Development (3:3:0;O) Introduction to the history and philososphy 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. ISBN: 978-1-4164-0495-8

HPRC 5317 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. ISBN: 10:128545717X

HPRC 5319 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 develp the skills and attitudes necessary to provide ethical counseling services to diverse individuals across the lifespan. ISBN: 978-0132942881

HPRC 5320 Professional Development in Clinical Rehabilitation 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 rehabilitation counselor trainee. Topics focus on the work the student has completed throughout the program. This course should be taken concurrently with HPRC 5312. ISBN 978-0826108418; ISBN: 978-0415958622

HPRC 5321 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. ISBN: 10:1416405410; ISBN: 10:084002861X

HPRC 5323 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. ISBN: 978-1483349763; ISBN: 978-1935660170; ISBN: 011-0743488109

HPRC 5324 Research and Statistics (3:3:0,O) This course provides the student with an exploration of current trends in research in rehabilitation 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 rehabilitation counseling practice (e.g. - choosing interventions, planning assessments, evaluating results, etc.); and an introduction to research statistics. ISBN: 13:978-0199946754

HPRC 5325 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. ISBN: 978-125176383; ISBN: 978-1305089617

HPRC 5380 Distance Education: Essentials for Success (3:3:0,O) This course is designed to help the student address common pitfalls in graduate education. Content areas included: online computer skills, communication, group work, time management, expectations for professional and academic conduct, review of MRC policy, test taking skills, and information on learning styles. The goal of this course is to better prepare students for success in online graduate courses. No textbook is required.

HPRC 5381 Writing at a Master's level (3:3:0,O) This course is designed to address the changes to academic writing that may have occurred since the student was last in school and better prepare students for the requirements of academic writing at the graduate level of education. This is an in-depth course on all areas of writing skills that will be used in an on-line graduate program. Content areas include: grammar, types of academic papers, source selection and evaluation, outlines and organization of papers, writing skills, APA standards, MS word tutorials, using library services, editing and

critical evaluation of papers and journals, overview of different writing styles (formal/informal/web/technical), and proofreading. ISBN: 1-4338-2562-6

HPRC 6000 Internship Completion (V1-6:V1-6:V1-40,F) A variable credit course used for compeltion of core required internship hours after HPRC 5313-15 have been completed. No text required.

Faculty Directory

School of Health Professions Faculty

ALLEN, Brad, Assistant Program Director of Doctor of Science in Physical Therapy; Assistant Professor of Physical Therapy, 2012. B.S.P.T., Texas Tech University Health Scences Center, 1993; Sc.D., Texas Tech University Health Sciences Center, 2010.

BENNETT, Katie, Associate Professor in Clinical Laboratory Science and Molecular Pathology, 2009. B.S., West Texas A&M University, 2000; Ph.D., Texas Tech University Health Sciences Center, 2009.

BURGESS, Nathan, Assistant Professor of Physical Therapy, 2009. B.S., Wayland Baptist University, 2001; M.P.T., Texas Tech University Health Sciences Center, 2004.

BRISMEE, Jean-Michel, Professor of Doctor of Science in Physical Therapy, 1997. B.S., Catholic University of Louvain, Belgium, 1982; M.S., Texas Tech University, 1996; Sc.D., Texas Tech University Health Sciences Center, 2003.

BROOKS, Toby J., Clinical Education Coordinator, 2015; Associate Professor, 2014; Faculty of Athletic Training, 2009. B.S., Southern Illinois University, 1998; M.S., University of Arizona, 2000; Ph.D., University of Arizona, 2002.

BULLARD, Tamra, Assistant Professor of Physical Therapy, 2015. B.S., Angelo State University, 1997; M.P.T., Texas Tech University Health Sciences Center, 2002; D.P.T., Andrew Taylor Still University, 2008.

CAREY, Jena, Assistant Professor of Physician Assistant Studies, 2016. A.A.S., Sul Ross State University, 2006; B.S., Sul Ross State University, 2008; M.S., Sul Ross State University, 2010; M.S., Sul Ross State University, 2014.

CARR, Heather, Clinical Instructor of Speech, Language, and Hearing Sciences, 2012. B.S. in Speech, Language, and Hearing Sciences, Texas Tech University Health Sciences Center, 2004; M.S. in Speech-Language Pathology, Texas Tech University Health Sciences Center, 2006.

CARTER, Tammy, Program Director of Clinical Laboratory Sciences, 2016; Assistant Professor of Clinical Laboratory Science and Molecular Pathology, 2013. B.S., Texas Tech University Health Sciences Center, 2000; M.T. (ASCP), 2000; Ph.D., Texas Tech University Health Sciences Center, 2013; M.B. (ASCP), 2016.

CHESTNUTT, Jacqueline, Clinical Education Coordinator in Clinical Laboratory Science and Molecular Pathology, 2002. B.S., Texas Tech University Health Sciences Center, 1997; M.S.M.P, Texas Tech University Health Sciences Center, 2011.

COHEN, Michelle, Assistant Professor of Occupational Therapy, 2014. B.S. Oklahoma State University, 1998; M.A., University of Southern California, 2000.

CORWIN, Melinda D., Professor of Speech, Language, and Hearing Sciences, 1994; Program Director of Speech, Language, and Hearing Sciences, 2013; Co-Program Director of Communication Sciences and Disorders. B.S., Texas Tech University, 1987; M.S., Texas Tech University, 1989; Ph.D., Texas Tech University, 2006, Ph.D., 2014.

DALTON, Jacquelyn, Assistant Professor of Rehabiliation Counseling, 2011. B.A. Mississippi State University, 1992: M.Ed., Delta State University, 1996; Ph.D., University of Wisconsin, 2007.

DAME, Mark, Assistant Professor of Healthcare Management, 2013. B.A., Indiana University, 1984; M.H.A., Indiana University, 1993.

DENDY, Douglas, Assistant Professor of Physical Therapy, 2010. M.P.T., Texas Tech University Health Sciences Center, 1998.

DEMBOWSKI, James, Associate Professor of Speech, Language, and Hearing Sciences, 2004. B.S., Northwestern University, 1975; M.S., University of Texas at Dallas, 1988; Ph.D., University of Wisconsin-Madison, 1998.

FRANCIS, Conrad, Assistant Professor of Healthcare Administration, 2012. B.S., University of the West Indies, 1989; PMBA., Florida Institute of Technology, 2000; DBA., Nova Southeastern University, 2005.

GEDDIE, Matthew, Assistant Professor of Occupational Therapy, 2003. B.S., Texas Tech University Health Sciences Center, 1994; M.B.A., Wayland Baptist University, 2002; Ph.D, Texas Tech University, 2011.

Gehring, Reid, Assistant Professor of Physical Therapy, 2015. B.S., Texas Tech University Health Sciences Center, 2006; D.P.T., Texas Tech University Health Sciences Center, 2008.

GILBERT, Kerry, Associate Professor, 2009, and Program Director of Physical Therapy, 2004. B.S., University of Texas, 1993; M.P.T., Texas Tech University Health Sciences Center, 1997; Sc.D., Texas Tech University Health Sciences Center, 2004.

GRANADOS, Sarai, Clinical Instructor of Speech, Language, and Hearing Sciences, 2011. B.S. in Communication Disorders, Texas Tech University Health Sciences Center, 2002; M.S. in Speech, Language & Hearing Sciences, Texas Tech University Health Sciences Center, 2004.

GUSTAFSON, Tori J., Associate Professor of Speech, Language. and Hearing Sciences, 2008. B.S., Texas Tech University, 1990; M.S., Texas Tech University, 1992; Au.D., Central Michigan University, 2003.

HALL, Brittany, Assistant Professor of Speech, Language, and Hearing Sciences, 2008. B.S., Texas Tech University Health Sciences Center, 2003; M.S., Texas Tech University Health Sciences Center, 2005.

HENDRIX, Ericka, Assistant Professor and Program Director of Molecular Pathology, 2011/2013. B.S., Texas Tech University, 1997; M.S., Texas Tech University Health Sciences Center, 2003; M.B. (ASCP); Ph.D., Texas Tech University, 2014.

HICKS, Candace Bourland, Professor of Speech, Language, and Hearing Sciences, and Program Director of Audiology, 2001; Co-Program Director of Communication Sciences and Disorders Ph.D., 2014. B.S.E., Arkansas State University, 1992; M.S., Purdue University, 1995; Ph.D., Vanderbilt University, 2000.

HOLLAND, Hesper, Clinical Instructor of Speech, Language, and Hearing Sciences, 2013. B.S., Texas Tech Univeristy Health Sciences Center, 2001; M.S., Texas Tech University Health Sciences Center, 2003.

HOOPER, Troy, Assistant Professor of Doctor of Science Program in Physical Therapy, 2007. B.S., Angelo State University, 1996; M.P.T., Texas Tech University Health Sciences Center, 2001; Ph.D., Texas Tech University Health Sciences Center, 2015.

HOOTEN, Michael, Regional Dean of Amarillo, Program Director of B.S., Healthcare Management and Assistant Professor of Healthcare Management, 1999. B.S., Texas Tech University, 1981; M.H.A., Baylor University, 1990; Ed.D., Texas Tech University, 2004.

HOUSE, Morgan, E., Healthcare Management Program Director, 2016; Assistant Professor of Healthcare Management, 2005. B.S. Wayland Baptist University, 2002; M.B.A., Wayland Baptist University, 2003.

HUBBARD, Joel D., Associate Professor of Clinical Laboratory Science and Molecular Pathology, 1990. B.S., Texas Tech University, 1976; M.T. (ASCP), Baptist Memorial Hospital (Dallas), 1977; Ph.D., Texas Tech University Health Sciences Center, 1986.

HUNT, Sharon, Healthcare Administration Program Director, 2016; Assistant Professor of Healthcare Administration, 2012. B.B.A., Texas Tech University, 1988; M.B.A., Wayland Baptist University, 2002.

JACKSON, John, Assistant Professor of Occupational Therapy, 2003. B.S., Medical College of Georgia, 1986; M.A., Texas Woman's University, 1998; Ed.D, Texas Tech University, 2011.

JAMES, C. Roger, Professor of Rehabilitation Sciences, Director of the Center for Rehabilitation Research, 2004, and Program Director of Ph.D. in Rehabilitation Sciences, 2009. B.S., Southwest Missouri State University, 1988; M.S., University of Oregon, 1991; Ph.D., University of Oregon, 1996.

JANKOWSKI, James E., Assistant Professor and Regional Clinical Coordinator of Physician Assistant Studies, 2004. B.S., Southwest Texas State University, 1991; M.Ed., Southwest Texas State University, 2000; M.P.A.S., Texas Tech University Health Sciences Center, 2006.

JOHNSTON, Sara, Assistant Professor of Rehabilitation Counseling, 2014. B.S., University of Wisconsin-Madison, 1989; M.S., University of Wisconsin-Madison, 2004; Ph.D., University of Iowa, 2013.

JUAREZ, Luis C., Assistant Professor and Regional Clinical Coordinator of Physician Assistant Studies, 2014. B.A., University of Texas at Austin, 1995; D.C., Parker University, 2002; B.S., University of Texas Pan American, 2007; M.P.A.S., University of Texas Pan American, 2010.

KEARNS, Gary, Assistant Professor of Physical Therapy, 2015. M.P.T., Texas Tech University Health Sciences Center, 2002; Sc.D, Texas Tech University Health Sciences Center, 2015

KELLER, Michael, J., B.S., West Texas State University, 1979; B.S.N., West Texas State University, 1981; M.B.A., Wayland Baptist University, 1987; M.S., United States Army War College, 2011.

KOUL, Rajinder K., Associate Dean, Chair and Professor of Speech, Language, and Hearing Sciences, 1994. B.Sc., University of Mysore, 1984; M.Sc., University of Mysore, 1986; Ph.D., Purdue University, 1994.

KROLL, Tobias A., Assistant Professor of Speech, Language, and Hearing Sciences, 2012. M.A., University of Muenster, Germany, 2007; Ph.D., University of Louisiana at Lafayette, 2014.

KUBALA, Koy, Assistant Professor of Clinical Laboratory Sciences, 2016. B.S., Texas Tech University Health Sciences Center, 2006; MLS(ASCP), 2006; M.S., Texas Tech University Health Sciences Center, 2007; Certificate, University of Texas Medical Branch at Galveston, 2013; SBB(ASCP), 2013.

KUMAR, Neeraj, Regional Dean, Odessa, 2015; Assistant Professor and Assistant Program Director, Odessa, of Physical Therapy, 2015. B.S., Manipal Academy of Higher Education, 1996; M.S., Guru Nanak Dev University, 1998; Ph.D., State University of New York-Buffalo, 2009.

LARSEN, Hal S., Executive Associate Dean, 1987; B.S., Brigham Young University, 1970; M.S., 1973; M.T. (ASCP), Utah Valley Hospital, 1974; CLS (NCA), 1984; Ph.D., University of Nebraska Medical Center, 1980.

LEE, Sue Ann, Associate Professor of Speech, Language, and Hearing Sciences, 2010. B.A. in Special Education, Ewha Women's University, 1990; M.A. in Special Education, Ewha Women's University, 1992; M.A. in Speech & Hearing Sciences, The Ohio State University, 1998; Ph.D. in Communication Sciences & Disorders, The University of Texas at Austin, 2004.

LAFAVE, Dee Ann, Clinical Instructor in Speech, Language, and Hearing Sciences, 2005. B.S., Texas Tech University, 1985; M.S., Texas Tech University, 1988.

MILLER, Misty, Assistant Professor of Physical Therapy, 2014. M.PT., Texas Tech University Health Sciences Center, 1997; D.P.T., Texas Tech University Health Sciences Center, 2011.

MOORE, Gretchen, Laboratory Manager and Instructor in Clinical Laboratory Science and Molecular Pathology, 2014. B.S. Medical Technologist, University of Texas Southwestern Medical Center MT (ASCP), 1983.

MUNGER, Larry R., Assistant Professor of Athletic Training, 2014. B.S., University of Kansas, 1995; M.S., Arizona School of Health Sciences, 1997; Ph.D., Texas Tech University, 2010.

PANASCI, Kathryn, Assistant Professor of Physical Therapy, 2011; Program Director Transitional Doctor of Physical Therapy Pathway, 2014; B.S., Northeastern University, 2003; M.P.T., Northeastern University, 2004; D.P.T., Texas Tech University Health Sciences Center, 2011.

PASUPATHY, Rubini, Assistant Professor of Healthcare Administration, 2003. B.A., Texas Tech University, 1998; M.B.A., Texas Tech University, 2003; Ph.D., Texas Tech University, 2010.

PENDERGRASS, Timothy, Assistant Professor of Physical Therapy, 2011. B.S., University of North Texas, 1998; M.S., Texas Tech University, 2002; M.P.T., Texas Tech University Health Sciences Center, 2006; Sc.D, Texas Tech University Health Sciences Center, 2013.

PERRY, Carolyn, Assistant Professor of Speech, Language, and Hearing Sciences, 2004. B.S., Texas Tech University, 1991; M.S., Texas Tech University, 1993.

POSTERARO, Robert H., Associate Professor, and Assistant Program Director of Healthcare Administration, 2009. B.S., Fordham College, 1969; M.D., Yale University School of Medicine, 1973; M.B.I., Oregon Health & Science University, 2005.

POTTER-BRUNET, Joan, Assistant Professor of Physical Therapy, 1999; Assistant Program Director, Amarillo, 2014. B.S., University of Texas Southwest Medical Center, 1991; M.S., West Texas A&M University, 2002; D.P.T., A T Still University, Arizona, 2010.

REDMAN, Wade, Chair, Department of Laboratory Sciences and Primary Care, 2016; Assistant Professor of Clinical Laboratory Science, 2005. B.S., Texas Tech University Health Sciences Center, 1999; MT (ASCP) DLM CM; M.B.A., Wayland Baptist University, 2004; Ph.D., Texas Tech University, 2014.

REEL, Leigh Ann, Associate Professor of Speech, Language, and Hearing Sciences, 2009. B.B.S., Hardin-Simmons University; Au.D., Texas Tech University Health Sciences Center, 2005; Ph.D., Texas Tech University Health Sciences Center, 2009.

RICE-SPEARMAN, Lori, Dean, 2016; B.S. Texas Tech University Health Sciences Center, 1986; M.T. (ASCP), 1986; M.S., Texas Tech University, 1991; Ph.D., Texas Tech University, 2010.

ROBOHM-LEAVITT, Christina M., Associate Professor and Program Director of Physician Assistant Studies, 2014. B.S. University of Colorado Health Sciences Center, 2005; Physician Assistant Certificate, University of Colorado Health Science Center, 1997; M.S. University of Colorado Health Sciences Center, 1999.

SANCIBRIAN, Cheryl L., Professor of Speech, Language, and Hearing Sciences and Program Director of Speech-Language Pathology, 1993. B.S., Texas Tech University, 1976; M.S., Texas Tech University, 1978.

SAWYER, Barbara G., Professor of Molecular Pathology and Clinical Laboratory Science, 1993. B.A., Stephen F. Austin State University, 1974; B.S., University of Texas Southwestern Medical Center, 1977; MT (ASCP), 1977; Ph.D., University of Texas Southwestern Medical Center, 1988; CLSp (Molecular Biology), 2001.

SAWYER, Steven F., Professor and Chair, Department of Rehabilitation Sciences, and Associate Dean for Faculty Development, 2010/2003. B.S., University of California at Irvine, 1980; Ph.D., University of California at San Diego, 1988; M.P.T., Texas Tech University Health Sciences Center, 1997.

SCHROEDER, Dave, Assistant Professor of Rehabilitation Counseling, 2011. B.A., Michigan State University, 1982; M.A., Michigan State University, 2003; Ph. D., Michigan State University, 2012.

SCHMITT, Mary Beth, Assistant Professor of Speech, Language, and Hearing Sciences, 2014. B.S., Texas Tech University Health Sciences Center, 1996: M.S., Texas Tech University Health Sciences Center, 1998; Ph.D., The Ohio State University, 2013.

SECHRIST, Dawndra A., Assistant Professor and Program Director of Occupational Therapy, 2001. B.S., Texas Tech University, 1992; B.S., Texas Tech University Health Sciences Center, 1994; M.A., Texas Woman's University, 2001; Ph.D., Texas Tech University, 2006.

SIZER, Phillip S., Associate Dean for Research SHP, 2016; Program Director of Doctor of Science in Physical Therapy, 2002; Professor of Physical Therapy, 1990. B.S.P.T., University of Texas Medical Branch, 1985; M.Ed, Texas Tech University, 1993, Ph.D., Texas Tech University, 2002.

SNEED, Zachery, Assistant Professor of Rehabilitation Counseling, 2016. B.S., University of North Texas, 2001; M.S., University of North Texas, 2003; Ph.D., Southern Illinois University, 2006.

SPEARS, Evans, Chair, Department of Clinical Counseling and Mental Health, 2016; Associate Professor and Program Director of Rehabilitation Counseling, 2002. B.A., Coe College, 1991; M.A., University of Iowa, 1994; Ph.D., University of Arizona, 2003.

STEADMAN, Natalie D., Assistant Professor of Athletic Training, 2005. B.S., Texas Tech University, 1990; B.S.P.T., Texas Tech University Health Sciences Center, 1992; M.A.T., Texas Tech University Health Sciences Center, 2002.

STEWART, Brooke, Assistant Professor of Clinical Laboratory Science, 2014. B.S., Texas Tech University Health Sciences Center, 2005; M.S., Texas Tech University Health Sciences Center, 2006.

STELTER, Laurie, Assistant Professor of Occupational Therapy, 2014. B.S., Texas Tech University Health Sciences Center, 1998; M.A., Texas Woman's University, 2004.

TAYLOR, LesLee, Associate Professor of Athletic Training, 2009; Program Director of Athletic Training, 2000. B.S., University of Kansas, 1993; M.S., University of Arizona, 1995; Ph.D., Texas Tech University, 2001.

TAYLOR, Michael A., Associate Professor and Associate Director, Regional Clinical Coordinator of Physician Assistant Studies, 2004. B.S., University of Oklahoma Health Science Center, 1982; M.P.A.S., University of Nebraska Medical Center, 1997.

TIONGCO, Cindi, Assistant Professor of Occupational Therapy, 2008. B.S.O.T., Texas Tech University Health Sciences Center, 2002; M.O.T., Texas Tech University Health Sciences Center, 2002.

WHISNER, Sandra, Assistant Professor of Occupational Therapy, 2003. B.B.A., Texas Tech University, 1992; B.S., Texas Tech University Health Sciences Center, 1997; M.A., Texas Woman's University, 2003; Ph.D., Texas Women's University, 2014.

WHITAKER, Melissa, Clinical Instructor of Speech, Language, and Hearing Sciences, 2014. B.S. Texas Tech University Health Sciences Center, 2002. M.S. Texas Tech University Health Sciences Center, 2004.

YOON, Yang-Soo, Assistant Professor of Speech, Language, and Hearing Sciences, 2014. B.S.E., Seoul National University of Technology, 1993; M.S., Texas A&M Kingsville, 1996; Ph.D., University of Illinois at Urbana-Champaign, 2008.

YORK, Deborah, Assistant Professor of Physical Therapy, 2015. B.S., Howard Payne University, 1998; M.P.T., Texas Tech University Health Sciences Center, 2002.

ZIMMERMAN, Renee, Assistant Professor of Speech, Language, and Hearing Sciences, 2012. B.S., Texas Tech University Health Sciences Center, 2005; Au.D., Texas Tech University Health Sciences Center, 2009.

ZUPANCIC, Steven, Associate Professor of Speech, Language, and Hearing Sciences, 2006. B.S., Eastern New Mexico University, 1999; Au.D., Texas Tech Health Sciences Center, 2003; Ph.D., Texas Tech University Health Sciences Center, 2007.

Subject Index

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TEXAS TECH UNIVERSITY
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