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#### PUBLICATION POLICY

The programs, policies, statements, fees, and/or courses contained in this document are subject to continuous review and evaluation. The School of Allied Health Sciences 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 Allied Health Sciences 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 Allied Health Sciences 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.

#### **ADMISSIONS INQUIRIES**

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

Texas Tech University Health Sciences Center School of Allied Health Sciences 3601 4<sup>th</sup> Street, STOP 6294 Lubbock, TX 79430 806-743-3220, fax 806-743-2994 www.ttuhsc.edu/sah

### FREQUENTLY ASKED QUESTIONS

#### What degrees does the School of Allied Health Sciences offer?

The School of Allied Health Sciences offers the following degrees:

- Bachelor of Science (B.S.)
  - Clinical Laboratory Science
  - o Clinical Services Management
  - o 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 Physical Therapy (M.P.T.)
- Master of Rehabilitation Counseling (M.R.C.)
- Master of Science (M.S.)
  - o Speech-Language Pathology
  - o Molecular Pathology
  - o Rehabilitation Sciences
- Doctor of Audiology (Au.D.)
- Doctor of Science in Physical Therapy (Sc.D.)
- Doctor of Philosophy in Communication Sciences and Disorders (Ph.D.)

#### How can I apply for admission to the School of Allied Health Sciences?

• The online application may be accessed via the Texas Tech University Health Sciences Center, School of Allied Health Sciences' website at www.ttuhsc.edu/sah.

#### How can I contact the School of Allied Health Sciences?

 Texas Tech University Health Sciences Center School of Allied Health Sciences
Office of Admissions and Student Affairs 3601 4<sup>th</sup> Street, Suite 2BC 194
Lubbock, TX 79430
806-743-3220, fax 806-743-2994
www.ttuhsc.edu/sah

#### How is the School of Allied Health Sciences organized?

- Department of Laboratory Sciences and Primary Care
  - o Program in Clinical Laboratory Science
  - Program in Molecular Pathology
  - Program in Physician Assistant Studies
- Department of Rehabilitation Sciences
  - Program in Athletic Training
  - Program in Clinical Services Management
  - Program in Occupational Therapy
  - Program in Physical Therapy (M.P.T. & Sc.D.)
  - Program in Rehabilitation Counseling
  - o Program in Rehabilitation Sciences
- Department of Speech, Language and Hearing Sciences
  - Program in Communication Sciences and Disorders
  - o Program in Audiology
  - o Program in Speech, Language and Hearing Sciences
  - Program in Program in Speech-Language Pathology

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# ACADEMIC CALENDAR

### **SUMMER 2004**

May 17	
May 24	MPT 2 Clinical Experience I Begins
May 28	MOT 2 Fieldwork I Ends
June 1	AT, MP, OT, PA, & PT Orientation
June 2	First Day of Classes
June 25	MPT 2 Clinical Experience I Ends
July 2-3	CLS Final Exams
July 4	Independence Day Holiday
July 7	MAT 2 Classes Begin MPT 2 Classes Begin
August 4	Last Day of Classes
- August 5-6	
August 23-27	MOT 2 Fieldwork I:1

## **FALL 2004**

August 30	SLHS, SLP, CLS, & Au.D. Orientation Classes Begin
September 6	Labor Day Holiday
September 27	MOT Fieldwork II:1 Begins
October 27-29	CLS Final Exams-Seniors
November 8	CLS Clinical Preceptorships Begin-Seniors

November 24-26	Thanksgiving Holiday
December 8	Last Day of Classes
December 10-15	Final Exams
December 17	MOT Fieldwor

### A Message from PAUL P. BROOKE, JR., Ph.D., FACHE Dean of the School of Allied Health Sciences Texas Tech University Health Sciences Center



I welcome the opportunity to introduce the School of Allied Health Sciences. Established by the Texas State Legislature in 1981, the School of Allied Health Sciences was created to educate allied health professionals to fill crucial shortages in meeting the healthcare needs of the people of West Texas. The School of Allied Health Sciences has since become a vital member of the Texas Tech University Health Sciences Center team.

From the first class of 18 students in 1983, the School has grown steadily. With campuses in Amarillo, Lubbock, Midland, and Odessa, the School now serves a student population of more than 700 students enrolled in fourteen different degree programs at the doctoral, masters and baccalaureate degree levels. In preparing the allied health professional who will meet the evolving healthcare needs of all Texans in the 21<sup>st</sup> century, the School of Allied Health Sciences remains focused on developing and presenting educational programs of the highest quality in a student-centered learning environment.

Our objective is to offer our learning opportunities that exceed nationally recognized standards of technical competence, while simultaneously developing the professional insight and serviceoriented compassion that will enable our graduates to excel in merging "high tech and high touch" throughout their professional careers. The faculty, students, and graduates of the School of Allied Health Sciences represent the very best in the complement of ideas, education, and clinical skills offered in service to the people of Texas.

# **GENERAL INFORMATION**

### MISSION

The mission of the Texas Tech University Health Sciences Center is to provide excellence in the education of healthcare professionals to serve the West Texas region, the state of Texas, and the nation through innovations in technology, research, and patient care.

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

- Develop professionals today to meet the health challenges of tomorrow
- •

### **OUR HISTORY**

In the 1960s, over 100 health-related professions were classified as Allied Health Professions by the federal government. Medica

Communication Sciences and Disorders. With the addition and changes of its programs, the School of Allied Health Sciences continues to grow and diversify.

#### PROGRAM STRUCTURE

The general format for TTUHSC, School of Allied Health Sciences programs vary. Please refer to specific program descriptions for requirements.

#### CORE CURRICULUM REQUIREMENT

All undergraduate students enrolled at the Texas Tech University Health Sciences Center are required to meet the designated core curriculum as specified by the Texas Higher Education Coordinating Board. The core curriculum is in addition to prerequisite requirements designated by the programs.

#### TRANSFER OF CREDITS

The School of Allied Health Sciences 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.

#### APPLYING FOR ADMISSION

Students admitted to Texas Tech University should not consider themselves also admitted to the School of Allied Health Sciences. For admission to any School of Allied Health Sciences 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 Allied Health Sciences. Students who successfully complete the program will receive one of the following degrees from the Texas Tech University Health Sciences Center: a Bachelor of Science in Clinical Laboratory Science, Speech, Language and Hearing Sciences or Clinical Services Management; a Master of Athletic Training, a Master of Science in Speech-Language Pathology, a Master of Science in Molecular Pathology, a Master of Science in Rehabilitation Sciences, a Master of Rehabilitation Counseling; a Doctor of Audiology, a Doctor of Science in Physical Therapy, or a Ph.D. in Communication Sciences and Disorders. After graduation, a certification or licensure examination may be required.

#### Deadlines for application to the individual programs are:

Athletic Training	
Early Admission	October 15
Traditional Admission	February 1
Audiology	February 1
Clinical Laboratory Science	March 1
Communication Sciences and Disorders (Ph.D.)	March 15
Molecular Pathology	March 1
Occupational Therapy	
Early Admission	October 15
Traditional Admission	March 1
Physician Assistant	December 15
Physical Therapy (MPT)	
Early Admission	October 15
Traditional Admission	February 1

Spring Semester	November 1
Clinical Services Management	
Summer Semester	May 1
Fall Semester	August 1
Spring Semester	December 1
Rehabilitation Sciences	
Summer Semester	May 1
Fall Semester	August 1

#### STUDENT HEALTH SERVICE

Students who pay the Medical Services Fee and are enrolled in the School of Allied Health Sciences are eligible to receive healthcare through the Department of Family Medicine at TTUHSC. However, services may vary from campus to campus.

regarding the Tobacco-Free Environment or the Tobacco Intervention Program please visit the TTUHSC website at www.ttuhsc.edu.

#### **REGISTRATION OF CONVICTED SEX OFFENDERS**

Senate Bill 871 passed in the recent regular Texas Legislative Session made changes to Chapter 62, Code of Criminal Procedure, and 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 62.064 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-tine 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, 2901 4<sup>th</sup> St., Lubbock, TX 79409, (806) 742-3931.

#### WITHDRAWAL FROM THE SCHOOL OF ALLIED HEALTH SCIENCES

A student who wishes to withdraw from the School of Allied Health Sciences must contact the Office of the Registrar at TTUHSC 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 Registrar 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 Allied Health Sciences.

#### STUDENTS WITH DISABILITIES

It is the policy of the School of Allied Health Sciences 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 Student Services immerdia-12.6( denTS WITH Dlice[)5.5(rdia64 Twfri5.5)-5.3J13.aC, TDf

# GENERAL ADMISSIONS POLICIES AND 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; letters of recommendation; honors and awards received; extra curricular and community service activities;

3. Specified subject examinations of the CEEB College Level Examination Program (CLEP)

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 CEEB 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 CEEB test scores be sent to the School of Allied Health Sciences. Information concerning each of the testing programs follows.

#### **Credit for CEEB Achievement Tests**

The CEEB achievement tests are part of the CEEB Admissions Testing Program. Each year there are several national administrations of the CEEB Achievement Tests. Students should plan to take the specified tests at national testing centers during their senior year of high school at an early testing date in order that scores may be reported by June. In addition to the national administration, there are limited administrations of the Achievement Tests recognized for credit by Texas Tech University during the Freshman Orientation Conferences held on the Texas Tech campus each summer.

Further information concerning the CEEB Achievement Tests may be obtained from your high school counselor or principal, the College Entrance Examination Board (Box 592, Princeton, NJ

least 30 days prior to taking the examination. The department will administer the examination no later than one week prior to the semester in which the challenged course is offered. Credit (CR) or no credit (NCR) will be reported to the Registrar's Office and entered on the official transcript. Unsuccessful students (NCR) will be required to enroll in the course at the first opportunity. A student may challenge a course only once. The fee for this examination is \$50.00. The Department of Speech, Language and Hearing Sciences does not offer credit by examination.

#### 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 Allied Health Sciences departments also may waive required courses based on experiential learning.

#### **International Students**

1. Applicants to all programs must have transcripts from any international college or university evaluated by a Foreign Transcript Evaluation Service. The evaluation must be a course-by-course evaluation of all academic work completed by the applicant. The Office of Admissions

# FINANCIAL INFORMATION

#### **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 send it to the TTUHSC Financial Aid Office. On-line FAFSA applications are available at www.FAFSA.ED.GOV.

NOTE: Financial aid award letters to other colleges and universities, including TTU, are not transferable to TTUHSC. Separate financial aid applications are required for TTUHSC. For further information regarding financial aid, please contact:

TTUHSC Financial Aid Office 3601 4<sup>th</sup> Street, Suite 3B310 Lubbock, TX 79430 806-743-3025

#### Scholarships

The School of Allied Health Sciences has scholarships dedicated to currently enrolled students. In addition, there are general scholarships funded by private foundations and organizations. Scholarships are administered by the School of Allied Health Sciences Office of Admissions and Student Affairs.

Scholarships given to incoming students will be based on the admissions application including all information that is provided by that application and the application process (i.e. grade point

# **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 \$96 per semester credit hour. Non-resident and foreign students will be charged tuition at a rate of \$406 per semester credit hour. Students enrolled in the graduate masters programs in Speech-Language Pathology and Molecular Pathology will be charged an additional \$24 per semester credit hour. Students enrolled in the graduate doctoral programs in Audiology and Physical Therapy will be charged an additional \$48 per semester credit hours.

To be granted status as a resident of Texas for006 Tciehour. St

appropriate fees waived.

### DISTANT LEARNING TUITION (CSM, RC, RS, Sc.D. - PT)

Out of state students enrolled in a distant learning program pay a flat fee of \$250 per credit hour, which is \$750 per three hour course. Texas residents pay tuition of \$96 per credit hour, which is \$288 per three hour course, and appropriate fees.

#### **REFUND OF TUITION AND FEES**

Texas Education Code, Section 54.006, provides the amount of tuition and fees to be refunded to

# DEPARTMENT OF SPEECH, LANGUAGE AND HEARING SCIENCES

#### THE FIELD OF SPEECH, LANGUAGE AND 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 ten Americans has some kind of communication disorder. To meet the needs of these people, speech-language pathologists and audiologists use 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.

Speech-language pathologists specialize in prevention, identification, evaluation, treatment, and rehabilitation of speech, language, and swallowing disorders. Their work involves conducting research; treating numerous 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. Audiologists assess and treat individuals who are challenged by hearing impairments or balance problems. They test and diagnose hearing disorders, prescribe and dispense hearing aids and assistive listening devices, help prevent hearing loss, and conduct research, among many other professional duties.

Four years of undergraduate education in the basi

and the National Association of Future Doctors of Audiology. Besides numerous community fundraising 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 the primary clinical practica 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 area and eastern New Mexico. Additional practica sites are available through an externship program in hospitals, schools, 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

### **Program in Speech, Language and Hearing Sciences**

#### ADMISSION TO THE BACHELOR OF SCIENCE PROGRAM

Admission into the undergraduate program begins in March of each year for the following fall class. Class enrollment is limited. Admission requirements include (1) completing the online application, (2) a minimum cumulative GPA of 3.0 on a 4.0 scale, (3) a grade of "C" or better in all prerequisite courses, (4) demonstration of superior written communication skills, and (5) proof of appropriate immunizations against infectious diseases. Provisional admission may be offered to applicants with a GPA of less than 3.0. Such applications will be reviewed on an individual basis. Students are required to adhere to all policies as outlined by the Department of Speech, Language and Hearing Sciences, the School of Allied Health Sciences, and Texas Tech University Health Sciences Center. Students also have specific rights as outlined in the student handbook.

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.

Lab Science:	12 hours
At least one course in l	biological/life science and one in physical science are required.
The following three co	urses are recommended: Biology of Animals (4 hours), Human
Anatomy and Physiolo	gy (4 hours) and Physics (4 hours)
English	9 hours (Technical Writing is required.)
History	6 hours
Political Science	6 hours
Math	6 hours (Statistics is required.)
Behavioral/ Social Sciences	15 hours
At least one course add	essing multicultural issues and one addressing human life span are
required. Courses may	be from any of the following departments: anthropology,
communications, family	studies, health, human development, philosophy, psychology, or
sociology.	
Humanities	3 hours
Visual & Performing Arts	3 hours
General Electives	6 hours
Minimum Total	66 hours

# SPEECH, LANGUAGE AND HEARING SCIENCES CURRICULUM: UNDERGRADUATE

The following are the departmental course requirements. Academic policies regarding minimum grade performance are cited in the Student Handbook.

#### EXAMPLE UNDERGRADUATE PROGRAM

#### FIRST YEAR

Fall Semester	Course	Credit Hours
AHSL 3219	Supervised Observation Lab: AUD	2
AHSL 3220	Supervised Observation Lab: SLP	2
AHSL 3327	Phonetics	3
AHSL 3522	Anatomy & Physiology	5 Total hours = 12
Spring Semester AHSL 3221	Course Clinical Methods	<b>Credit Hours</b> 2

AHSL 3421	Speech and Hearing Science	4
AHSL 3323	Language Development	3
AHSL 3442	Clinical Audiology	4
		Total hours $= 13$
SECOND YEAR		

### Fall Semester

Course

**Credit Hours** 

acoustics, speech perception, and psychoacoustics.

**AHSL 3426** Phonetics/Articulation and Phonological Disorders (4:3:1) 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.

AHSL 3442 Clinical Audiology (4:3:1) 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

### **Program in Speech-Language Pathology**

#### ADMISSION TO THE SPEECH-LANGUAGE PATHOLOGY PROGRAM

Professional education includes two years of study beyond the baccalaureate level. The application deadline is February 1 prior to the summer/fall semester in which classes begin. Class enrollment is limited each year. Admission requires (1) completing the online application, (2) a cumulative GPA of 3.0 on a 4.0 scale, (3) a GPA of 3.0 on a 4.0 scale in audiology and speech pathology courses, (4) demonstration of superior oral and written communication skills, (5) completion of a telephone interview with the Admissions Committee, (6) above-average scores on the verbal, quantitative, and analytical subtests of the GRE, (7) proof of appropriate immunizations against infectious diseases, and (8) 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 may apply to the graduate program, but must take one year (two semesters) of leveling course work. Students may take the leveling courses and then apply to the graduate program, or apply and be accepted to the graduate program and complete the leveling courses before beginning graduate studies. Provisional admission may be offered to applicants with a GPA of less than 3.0. Such applications will be reviewed on an individual basis. Students are required to adhere to all policies as outlined by the Department of Speech, Language and Hearing Sciences, the School of Allied Health Sciences and

Texas Tech University Health Sciences Center. Students also have speciv8(ncee specuate proe specuEhtGPARs8p8(e g Tc5(e)-Sxas )6.7lo

AHSL 6000 (optional)	Master's Thesis	1-3
		Total Hours $= 6-9$

SECOND YEAR

Fall Semester	Course	Credit Hours
AHSL 5143	Aural Rehabilitation Lab	1
AHSL 5343	Aural Rehabilitation	3
AHSL 5328	Voice	3
AHSL 5384	Graduate Clinical Practicum IV: SLP	3
AHSL 5310	Special Topics in Speech-Language Pathology	3
Or		
AHSL 6000	Master's Thesis	1-3
		Total Hours = 11-13
Spring Semester	Course	Credit Hours
AHSL 5362	Motor Speech Disorders	3
AHSL 5466	Augmentative & Alternative Communication	4
AHSL 5385	Graduate Clinical Practicum V: SLP	3
AHSL 6000 (optional)	Master's Thesis	1-3
		Total Hours $= 10-13$

#### COURSE DESCRIPTIONS: PROFESSIONAL CURRICULUM

AHSL 5010 Independent Study (v:v:0) A variable credit course used for individualized leveling plans created by the program director.

AHSL 5100 Foundations (1:1:0) A forum for the discussion of professional issues in communication disorders. May be repeated for credit.

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

AHSL 5320 Research Design (3:3:0) 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.

AHSL 5325 Childhood Speech Disorders (3:3:0) Current approaches to assessment and management of pediatric speech disorders and developmental phonological disorders in special populations.

AHSL 5328 Seminar in Voice Disorders (3:3:0) An advanced discussion of the etiology, diagnosis, and treatment of voice disorders.

AHSL 5329 Fluency Disorders (3:3:0) An extensive review of current information on fluency disorders in children and adults.

AHSL 5330 Dysphagia (3:3:0) A detailed study of the anatomy and physiology of normal and disordered s0.001 Tc0.0023 Tw[and th)7.7(e )6.6(a6.3( )l)

will learn how to present research findings at professional meetings, and how to apply research findings in evidence-based practice.

**AHSL 5343 Aural Rehabilitation (3:3:0)** 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.

**AHSL 5362 Motor Speech Disorders (3:3:0)** 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 addressed, diagnosed, and managed.

AHSL 5381-5385 Graduate Clinical Practicum: SLP (3:3:0) Supervised clinical practice in speech and/or language pathology.

**AHSL 5424 Pediatric Language Assessment & Intervention (4:4:0)** Comparison of typical and atypical language in children from infancy through adolescence. Assessment and management strategies for diverse populations, and varied service delivery models.

AHSL 5463 Adult Language Assessment & Intervention (4:3:1) 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.

**AHSL 5466 Augmentative and Alternative Communication (4:4:0)** 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.

AHSL 6000 Master's Thesis (3) May be repeated for credit. Consent of instructor required.

Summer Semester	Course	Credit Hours
AHSL 7349	Auditory Neuroscience	3
AHSL 7175	Professional Issues in Audiology	1
AHSL 7394	Clinical Practicum	3

#### FOURTH YEAR

Fall Semester AHSL 7020	Course AuD Independent Study	Credit Hours 5
		Total Hours $= 5$
Spring Semester AHSL 7020	<b>Course</b> AuD Independent Study	Credit Hours 5
	1 5	Total Hours $= 5$

#### COURSE DESCRIPTIONS: PROFESSIONAL CURRICULUM

**AHSL 5320 Research Design (3:3:0)** 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.

AHSL 7000 Doctoral Research (v:v:0) May be repeated for credit. Instructor permission is required.

**AHSL 7020 AuD Independent Study (v:v:0)** Independent study for advanced students in the fourth year of the AuD program. Three enrollments required before graduation. May not be taken before all courses and comprehensive examinations are successfully completed. May be repeated for credit.

AHSL 7030 Clinic Independent Study (v:v:0) Independent study for students in summer clinical placements in the first two years of the AuD program. This course can be repeated for credit.

AHSL 7130 Advanced Concepts in Audiology (1:1:0) Provide training on using additional testing and techniques to expand the diagnostic and rehabilitative focus of audiologists.

**AHSL 7147 Aural Rehabilitation Lab** (1:0:1) This lab course is designed to provide clinical training on using additional testing and techniques to expand the diagnostic and rehabilitative focus of audiologists.

AHSL 7164 Auditory Electrophysiology Lab (1:0:1) Hands-on experiences with equipment utilized to allow students to practice and demonstrate the skills instructed in "auditory electrophysiology" lecture course.

**AHSL 7166 Research Colloquium (1:1:0)** Seminar discussion on applied research techniques in the field of audiology. Emphasis is placed on analyzing research applied to patients across the lifespan.

**AHSL 7175 Professional Issues in Audiology (1:1:0)** Overview of the social, political, and economic climate in hearing healthcare delivery. Basic and advanced strategies for practice management and development. Interprofessional relationships and responsibilities. Supervision of other professionals.

**AHSL 7255 Instrumentation (2:2:0)** 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.

AHSL 7321 Clinical Observation and Methods (3:0:3) Supervised observation of clinical assessment and management of individuals with communication disorders.

**AHSL 7322 Auditory Processing Disorders (3:3:0)** 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.

AHSL 7324 Language Disorders (3:3:0) 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.

**AHSL 7340 Auditory Anatomy and Physiology (3:3:0)** This course is an in-depth exposure to the structure and function of the auditory system. Emphasis is placed on peripheral structure and function, up to and including important brainstem nuclei. An introduction to cortical structures and processing is presented.

AHSL 7343 Cortical Connections (3:3:0) Seminar course related to cortical processing speech and other acoustic signals and perceptual stimuli. Includes a discussion of cellular, intracellular, and cortical communication and connections involved in analysis and perception of sound, including speech.

**AHSL 7345 Advanced Amplification (4:3:1)** Advanced topics in clinical amplification including programmable instruments, digital processing and digital amplification, multimicrophone technology and other noise reduction systems will be presented.

**AHSL 7347 Aural Rehabilitation (3:3:0)** 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.

**AHSL 7348 Educational Audiology (3:3:0)** Audiological considerations in educational settings. The incidence, treatment and educational sequela of hearing impairment in the auditory-verbal classroom will be covered.

**AHSL 7349 Auditory Neuroscience (3:3:0)** This course will assist students in understanding anatomy/physiology and cell biology of the auditory system from cochlea up to cortex, subsidized by introduction of nervous system and neural signaling and virtual lab exercise. Completion of this course should establish a solid base for understanding, applying, designing, and initiating different auditory test applications and research.

AHSL 7351 Counseling in Audiology (3:3:0) 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.

**AHSL 7352 Clinical Disorders in Audiology (3:3:0)** The purpose of this course is to provide students with information to understand the following areas: 1) the anatomy and physiology of auditory mechanisms and lowering areas; 2) etiology and pathology of auditory disorders; and 3) audiological and otologic evaluation/management of auditory disorders.

**AHSL 7364 Auditory Electrophysiology (3:3:0)** Covers theoretical knowledge and applied skills of normal and pathological auditory systems.

### **Program in Communication Sciences and Disorders**

#### 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

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.

**AHSL 8322 Advanced Auditory Research (3:3:0)** 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.

**AHSL 8323 Seminar in Language and Culture (3:3:0)** 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.

**AHSL 8324 Seminar in Augmentative and Alternative Communication (3:3:0)** 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 deve

# DEPARTMENT OF LABORATORY SCIENCES AND PRIMARY CARE

### **Program in Clinical Laboratory Science**

#### **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.

A student admitted into the Clinical Laboratory Science program must meet basic and essential requirements that are necessary to be able to obtain employment in the field of clinical laboratory medicine. The essential functions identified are the following:

- 1. Must be able to communicate effectively, in English, in the written and verbal form with colleagues, instructors, patients, and other members of the healthcare team.
- Must have the physical and motor function ability to observe, learn and implement various technical skills associated with the practice of clinical laboratory medicine such as: hand-eye coordination to operate specialized automated and technical equipas:1hand o.saQO3( of002 Tc0i)6.sc6.6,(dicinet ad3i)51
Sciences. Students accepted into the early admission program in the School of Allied Health Sciences are not automatically accepted into Texas Tech University, nor are students admitted to

Spring S CHEM CHEM ENGL BIOL	emester 1308 1108 1302 1404	<b>Course</b> Principles of Chemistry II Principles of Chemistry II Lab Advanced College Rhetoric Biology II or A&P	Credit Hours 3 1 3 4
*Elective	•		3 Total hours = 14
SECON	D YEAR		
Fall Sem	ester	Course	<b>Credit Hours</b>
CHEM	2303	Introduction to Organic Chemistry	3
CHEM	2103	Introduction to Organic Chemistry Lab	1
HIST	2300	U.S. History to 1877	3
POLS	1301	American Government Organization	3
*Elective	•		3
*Elective			3
			Total hours $= 16$
Spring S	emester	Course	<b>Credit Hours</b>
MBIO	3401	Principles of Microbiology	4
HIST	2301	U.S. History after 1877	3
POLS	2302	American Public Policy	3
Science I	Elective		3-4
			Total hours 13 - 14

\* Electives must be one behavioral science, one humanities and one visual performing arts. Please see advisor.

# PRE-MED OPTION

The pre-med mentor program is designed to provide direction to students interested in attending medical school following the completion of a degree

Spring S	emester	Course	Credit Hours
CHEM	1308	Principles of Chemistry II	3
CHEM	1108	Principles of Chemistry II Lab	1
BIOL	1404	Biology II	4
ENGL	1302	Advanced College Rhetoric	3
*Elective	•		3
			Total hours $= 14$

#### SECOND YEAR

Fall Semester		Course	Credit Hours
PHYS	1306	General Physics	3
PHYS	1103	General Physics Lab	1
CHEM	3305	Organic Chemistry	3
CHEM	3105	Organic Chemistry Lab	1
HIST	2300	U.S. History to 1877	3
POLS	1301	American Government Organization	3
*Electiv	e		3
			Total hours $= 17$
Spring S	Semester	Course	<b>Credit Hours</b>
PHYS	1307	General Physics	3
PHYS	1104	General Physics Lab	1
CHEM	3306	Organic Chemistry	3
CHEM	3106	Organic Chemistry Lab	1

Principles of Microbiology

American Public Policy

U.S. History after 1877

Course

Genetics

4

3

3

Total hours = 18

**Credit Hours** 4 3

Total hours = 7

\* Electives must be one behavioral science, one humanities and one visual performing arts. Please see advisor.

#### PREPROFESSIONAL CURRICULUM: PRE-PHYSICIAN ASSISTANT OPTION

# FIRST YEAR

THIRD YEAR

BIOL 3416

\*Elective

Summer Semester

3401

2302

2301

MBIO

POLS

HIST

Fall Semester		Course	Credit Hours
CHEM	1307	Principles of Chemistry I	3
CHEM	1107	Principles of Chemistry I Lab	1
BIOL	1403	Biology I	4
MATH	1320	College Algebra	3
ENGL	1301	Essentials of College Rhetoric	3
*Electiv	e	-	3
			Total hours $= 17$

Spring Sen	nester	Course	Credit Hours
CHEM 13	308	Principles of Chemistry II	3
CHEM 1	108	Principles of Chemistry II Lab	1
ENGL 13	302	Advanced College Rhetoric	3
BIOL 14	404	Biology II	4
*Elective			3
*Elective			3
			Total hours $= 17$

#### SECOND YEAR

Fall Ser	nester	Course	<b>Credit Hours</b>
CHEM	2303	Organic Chemistry	3
CHEM	2103	Organic Chemistry Lab	1
HIST	2300	U.S. History to 1877	3
POLS	1301	American Government Organization	3
ZOOL	2403	Anatomy & Physiology I	4
*Electiv	e		3
			Total hours $= 17$
Spring	Semester	Course	<b>Credit Hours</b>
ZOOL	2404	Anatomy & Physiology II	4
POLS	2302	American Public Policy	3
HIST	2301	U.S. History after 1877	3
MBIO	3401	Principles of Microbiology	4
F&N	1325	Nutrition	3
			Total hours $= 17$

# THRID YEAR

Summer Semester	Course	Credit Hours
*Elective		3
		Total hours $= 3$

\*Electives must be one behavioral science, one humanities and one visual performing arts. The other two electives should be behavioral sciences to fulfill the TTUHSC PA prerequisites. Please see advisor.

## **PROFESSIONAL CURRICULUM: STANDARD, PRE-MED & PRE-PHYSICAN** ASSISTANT OPTIONS

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.

## FIRST YEAR

Fall Semester		Course	Credit Hours
AHMT	3400	Clinical Chemistry I	4
AHMT	3405	Clinical Bacteriology I	4
AHMT	3455	Principles of Immunology	4
AHMT	3470	Hematology I	4
AHMT	3110	Professional Issues in CLS	1
			Total hours $= 17$

Spring Semester	Course	Credit Hours
AHMT 3450	Clinical Chemistry II	4
AHMT 3460	Clinical Bacteriology II	4
AHMT 3465	Immunohematology I	4
AHMT 4480	Hematology II	4
		Total hours $= 16$
SECOND YEAR		
Summer Semester	Course	<b>Credit Hours</b>
AHMT 3310	Urinalysis/Body Fluids	3
AHMT 4185	Clinical Correlations	1
AHMT 4305	Molecular Diagnostics	3
		Total hours $= 7$
Fall Semester *	Course	<b>Credit Hours</b>
AHMT 4320	Laboratory Management	3
AHMT 4300	Applied Statistics & Research	3
AHMT 4455	Parasitology/Mycology	4
AHMT 4640	Clinical Preceptorship I	6
* Classes for 13 weeks; Clin	nical preceptorship follow and continue through Spi	ring
		Total hours $= 16$
Spring Semester	Course	Credit Hours
Spring Semester AHMT 4741	Course Clinical Preceptorship II	<b>Credit Hours</b> 7
Spring Semester AHMT 4741 AHMT 4842	Course Clinical Preceptorship II Clinical Preceptorship III	Credit Hours 7 8
Spring Semester AHMT 4741 AHMT 4842 AHMT 4105	<b>Course</b> Clinical Preceptorship II Clinical Preceptorship III Senior Seminar	Credit Hours 7 8 1
Spring Semester AHMT 4741 AHMT 4842 AHMT 4105	<b>Course</b> Clinical Preceptorship II Clinical Preceptorship III Senior Seminar	Credit Hours 7 8 1 Total hours = 16
Spring Semester AHMT 4741 AHMT 4842 AHMT 4105 Total Hours Required (Sta	Course Clinical Preceptorship II Clinical Preceptorship III Senior Seminar andard Option)	Credit Hours 7 8 1 Total hours = 16
Spring Semester AHMT 4741 AHMT 4842 AHMT 4105 Total Hours Required (Sta Prerequisites	Course Clinical Preceptorship II Clinical Preceptorship III Senior Seminar andard Option)	Credit Hours 7 8 1 Total hours = 16 57-58
Spring Semester AHMT 4741 AHMT 4842 AHMT 4105 Total Hours Required (Sta Prerequisites Professional Curriculum	Course Clinical Preceptorship II Clinical Preceptorship III Senior Seminar andard Option)	Credit Hours 7 8 1 Total hours = 16 57-58 $\underline{72}$
Spring Semester AHMT 4741 AHMT 4842 AHMT 4105 Total Hours Required (Sta Prerequisites Professional Curriculum	Course Clinical Preceptorship II Clinical Preceptorship III Senior Seminar andard Option)	Credit Hours 7 8 1 Total hours = 16 57-58 $\frac{72}{129-130}$
Spring Semester AHMT 4741 AHMT 4842 AHMT 4105 Total Hours Required (Sta Prerequisites Professional Curriculum Total Hours Required (Pr	Course Clinical Preceptorship II Clinical Preceptorship III Senior Seminar andard Option) e-Med Option)	Credit Hours 7 8 1 Total hours = 16 57-58 $\frac{72}{129-130}$
Spring Semester AHMT 4741 AHMT 4842 AHMT 4105 Total Hours Required (Sta Prerequisites Professional Curriculum Total Hours Required (Pr Prerequisites	Course Clinical Preceptorship II Clinical Preceptorship III Senior Seminar andard Option) e-Med Option)	Credit Hours 7 8 1 Total hours = 16 57-58 $\frac{72}{129-130}$ 70
Spring Semester AHMT 4741 AHMT 4842 AHMT 4105 Total Hours Required (Sta Prerequisites Professional Curriculum Total Hours Required (Pr Prerequisites Professional Curriculum	Course Clinical Preceptorship II Clinical Preceptorship III Senior Seminar andard Option) e-Med Option)	Credit Hours 7 8 1 Total hours = 16 57-58 $\frac{72}{129-130}$ 70 72
Spring Semester AHMT 4741 AHMT 4842 AHMT 4105 Total Hours Required (Sta Prerequisites Professional Curriculum Total Hours Required (Pr Prerequisites Professional Curriculum	Course Clinical Preceptorship II Clinical Preceptorship III Senior Seminar andard Option) e-Med Option)	Credit Hours 7 8 1 Total hours = 16 57-58 $\frac{72}{129-130}$ 70 $\frac{70}{72}$ 142
Spring Semester AHMT 4741 AHMT 4842 AHMT 4105 Total Hours Required (Sta Prerequisites Professional Curriculum Total Hours Required (Pr Prerequisites Professional Curriculum	Course Clinical Preceptorship II Clinical Preceptorship III Senior Seminar andard Option) e-Med Option)	Credit Hours 7 8 1 Total hours = 16 57-58 $\frac{72}{129-130}$ 70 $\frac{70}{72}$ 142
Spring Semester AHMT 4741 AHMT 4842 AHMT 4105 Total Hours Required (Sta Prerequisites Professional Curriculum Total Hours Required (Pr Prerequisites Professional Curriculum	Course Clinical Preceptorship II Clinical Preceptorship III Senior Seminar andard Option) e-Med Option)	Credit Hours 7 8 1 Total hours = 16 57-58 $\frac{72}{129-130}$ 70 $\frac{70}{72}$ 142 71
Spring Semester AHMT 4741 AHMT 4842 AHMT 4105 Total Hours Required (Sta Prerequisites Professional Curriculum Total Hours Required (Pr Prerequisites Professional Curriculum Total Hours Required (Pr Prerequisites Professional Curriculum	Course Clinical Preceptorship II Clinical Preceptorship III Senior Seminar andard Option) e-Med Option)	Credit Hours 7 8 1 Total hours = 16 57-58 $\frac{72}{129-130}$ 70 $\frac{70}{72}$ 142 71 72

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.

#### COURSE DESCRIPTIONS: PROFESSIONAL CURRICULUM

AHMT 3110 Introduction to Clinical Laboratory Science (1:1:0) An overview and introduction to the profession.

AHMT 3310 Urinalysis and Body Fluids I (3:2:3) Analysis of the physical, chemical, and microscopic parameters of urine and body fluids. Special emphasis is placed on understanding kidney function and pathology.

AHMT 3400 Clinical Chemistry I (4:3:6) An introduction to the basic principles, methodologies, and physiology of clinical chemistry.

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

**AHMT 3450 Clinical Chemistry II** (4:3:6) Prerequisite: AHMT 3400. The qualitative and quantitative chemical analysis of blood and other body fluids. Correlation of test results to health and disease states.

**AHMT 3455 Principles of Immunology (4:3:6)** 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.

AHMT 3460 Clinical Bacteriology II (4:3:6) Prerequisite: AHMT 3405. A continuation of AHMT 3405 with an emphasis in clin

AHMT 34070 Hme I (4:3:6)

AHMT 4741 Clinical Preceptorship II An intermediate supervised clinical practicum in an affiliated clinical laboratory.

AHMT 4842 Clinical Preceptorship III An advanced supervised clinical practicum in an affiliated clinical laboratory.

# **Program in Molecular Pathology**

# 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 an on-campus interview.

# PREREQUISITE REQUIREMENTS

**AHMP 5102 Graduate Seminar (1:1:0)** Prerequisite: AHMP 5101. Graduate seminar. Independent study and prep for external certification in Molecular Biology.

AHMP 5300 Applied Statistics & Research (3:2:3) 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. Independent work on research project with application of statistical analyses to assigned project.

**AHMP 5301 Clinical Laboratory Survey (3:3:1)** Survey of the clinical laboratory that includes common laboratory assays (Hematology, Clinical Chemistry, Microbiology, Transfusion Services, and Body Fluids) and addresses the purpose, function, and utilization of laboratory services. Specimen procurement, patient education and consent, and quality assurance are discussed.

**AHMP 5309 Diagnostic Molecular Pathology (3:3:0)** Presentation of human genetic disease with a focus on causative genetic alterations in neoplastic, immunologic, endocrine, viral, and infectious diseases. Prenatal diagnosis and carrier screening will be discussed. Independent case study presentation required.

AHMP 5405 Applied Molecular Techniques I (4:3:6) 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. Independent work on research project with mentor.

**AHMP 5406 Molecular Biology of the Cell (4:4:0)** Comprehensive survey course in eukaryotic molecular biology and genetics required by all students planning a career in molecular pathology or basic biomedical research. Course will cover the fundamental concepts of eukaryotic genetics, regulation of transcription, cell-cell communication, and immunogenetics with a focus on human systems. A strong background in biology and chemistry is assumed.

**AHMP 5407 Pathophysiology (4:4:0)** 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.

**AHMP 5408 Applied Molecular Techniques II (4:3:6)** Prerequisite: AHMP 5405. Continuation of Applied Molecular Techniques I with advanced training and technical experie adcioue

# **Program in Physician Assistant Studies**

Physician Assistants are skilled healthcare professionals who are academically and clinically prepared to practice medical skills with the supervision of a licensed physician. With physician management, the PA can exercise autonomy in making medical decisions and provide a broad range of diagnostic and therapeutic 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.

PA's are physician-dependent healthcare providers, and that is a distinctive characteristic of the profession. The Physician – PA team is a close professional relationship built on trust and collegiality. The PA is trained to provide quality healthcare as an agent or extension of the physician. The PA is accountable to a supervising physician, and the physician is ultimately responsible for care rendered by the PA.

#### **PROGRAM DESCRIPTION**

Based in Midland, Texas, and located on the campus of Midland College, the Texas Tech University Health Sciences Center PA Program belongs to the Department of Laboratory Sciences and Primary Care in the School of Allied Health Sciences 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.

#### PREPROFESSIONAL PREREQUISITES

A minimum 3.0 grade point average (GPA) on a 4.0 scale is required on the overall GPA and the science GPA. All science prerequisites are recommended to be completed within seven (7) years of the application date. A finished degree, professional studies, healthcare certification, licensure or work experience are not required. AP and CLEP credit will not be accepted for any science or

(Computer literacy, medical terminology, and communication skills recommended)

PROFESSIONAL CURR	ICULUM	
First Summer Semester	Course	Credit Hours
AHPA 5101	Introduction to PA Profession	1
AHPA 5306	Pharmacology I	3
AHPA 5301	Clinical Laboratory	3
AHPA 5406	Physiology	4
AHPA 5501	Anatomy	5
AHPA 5201	Medical Ethics	2
		Total Hours = 18
First Fall Semester	Course	Credit hours
AHPA 5502	Physical Examination	5
AHPA 5309	Pediatrics / Geriatrics	3
AHPA 5310	Medical Interviewing	3
AHPA 5307	Pharmacology II	3
AHPA 5407	Pathology	4
		Total Hours = 18
First Spring Semester	Course	Credit Hours
AHPA 5308	Neuroscience	3
AHPA 5311	Cardiology	3
AHPA 5403	Clinical Medicine I	4
AHPA 5404	Clinical Medicine II	4
AHPA 5312	Clinical Medicine III	3
AHAP 5313	Clinical Medicine IV	3
		Total Hours $= 20$
Second Summer Semester	Course	Credit Hours
AHPA 6302	Medical Spanish	3
AHPA 6301	Preventive Medicine & Community Health	3
AHPA 6501	Clinical Medicine V	5
AHPA 6306	Medical Psychology	3 yc 9u-6.6()-277 T(is/77 TTcTc0.0036 Twt)-379
AHPA 5404	Cliff )-2773.4( )-37467 (Cardiolog) & 67 46	7 2 )&D3.75 T7 92Psy-374&)&h(atr( )2(y-374&C)( )-17-8)3(et

# COURSE DESCRIPTIONS: PROFESSIONAL CURRICULUM

AHPA 5101 Introduction to the Physician Assistant Profession (1:1:0) This lecture series

**AHPA 5311 Cardiology (3:3:0)** 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.

**AHPA 5312 Clinical Medicine III (3:3:0)** This lecture series examines the complex disease states frequently encountered in the primary care medicine setting. Students are challenged to correlate the subjective signs and symptoms with physical examination findings and clinical pathophysiology in developing critical thinking and a problem oriented approach to diagnosis and treatment. Referral of patients to other healthcare providers or agencies is discussed. The approach to problems in orthopedic and musculoskeletal disease processes including acute, chronic, continuing, rehabilitative care is explored. Case studies and patient education are incorporated into the teaching process.

**AHPA 5313 Clinical Medicine IV** (3:3:0) 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.

**AHPA 5403 Clinical Medicine I (4:4:0)** 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. Case studies and patient education are incorporated into the teaching process.

**AHPA 5404 Clinical Medicine II (4:4:0)** 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.

**AHPA 5406 Physiology (4:4:0)** 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.

**AHPA 5407 Pathology (4:4:0)** 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.

**AHPA 5501 Human Anatomy (5:4:2)** 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. Students participate in human cadaver prosection laboratory sessions held at TTUHSC in Lubbock on 4 days during the semester. The lecture portion is a combination of distance-learning and onsite activity taught in part by interactive teleconferencing from the TTUHSC campus in Lubbock and partly at the PA program main facility in Midland.

**AHPA 5502 Physical Examination (5:3:2)** This is a lecture / laboratory series in which the pediatric, adult, geriatric and trauma 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. Integration of the medical history (AHPA 5310 – Medical Interviewing) with the physical examination is reviewed and rehearsed. The laboratory experience utili1 5niques8t8.1(y s)4.14aTJicay

of each clinical rotation, the students are instructed and monitored in the stages of developing a text suitable for publication.

AHPA 6501 Clinical Medicine V (5:4:2) 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. A summative evaluation of clinical skills will be administered near the end of the clinical curriculum. PACKRAT (Physician Assistant Clinical Knowledge Rating and Assessment Tool) will be administered as a summative evaluation at the end of the didactic phase, and then administered again at the end of the clinical phase to document the students' progress in developing a medical data base. Case studies and patient education are incorporated into the teaching process.

**AHPA 6601 Family Medicine Clerkship** (6:0:40) This clerkship provides experience with common diseases and chronic illnesses in the family practice setting and is composed of one sixweek rotation. The learning experience includes the family medicine approach to direct care, initial care, comprehensive care and continuity of care. The student participates in the promotion and application of preventive medicine and wellness maintenance techniques as an important aspect of family practice.

**AHPA 6602 Internal Medicine Clerkship (6:0:40)** 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.

**AHPA 6603 Prenatal Care and Gynecology Clerkship** (6:0:40) This clerkship provides a sixweek 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.

**AHPA 6604 Pediatrics Clerkship (6:0:40)** 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 op.000g:0:40)

**AHPA 6607 Psychiatry Clerkship (6:0:40)** 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.

**AHPA 6608 General Surgery Clerkship (6:0:40)** The six-week clerkship in surgery 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 preoperative, intra-operative, and postoperative phase of care.

budgeting processes, information systems, and management control systems.

AHCM 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.

**AHCM 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, em

AHCM 4314 Quality Assurance and Risk Management (3:3:0) The course provides an overview of legal requirements and ethiattsaerequaninclud:3:enthdes incip:3:19557eae9.04607 TD533005 Tc0.6287 Tw361vervieTotalyme

to enhance their knowledge within the clinical support service management field by application of the concepts, principles and tools learned in the classroom.

**AHEM 3300 Emergency Medical Services in the Healthcare System (3:0:0)** History of prehospital emergency medical services; federal, state, and local authority for delivery of services; models for state, regional, and local systems; resources for and constraints to EMS systems development; relationship to and impact on public safety and healthcare delivery systems; interface of public and private organizations; current and future issues.

**AHEM 4310 Emergency Operations Management (3:0:0)** Prerequisite: AHCM 3300. Issues concerning the daily operations in prehospital emergency medical services involving unit hour management; staffing and scheduling; fleet management; preventive maintenance systems; maintenance vendor contracting; medical protocol development; risk management and loss control; models for quality assurance; clinical audit and review. Also addresses community service programs; media relations and crisis communicau18(c)-1 TD0n8

# **Program in Athletic Training**

An Athletic Trainer is "an educated and skilled professional specializing in the prevention,

# ADMISSION TO THE PROGRAM

The athletic training program begins the Tuesday after Memorial Day each year. The Admission process is very competitive. Applicants must have earned a degree from an accredited college or university, complete the application process (outlined below), and have completed or plan to complete all prerequisites prior to enrollment.

PREREQUISITE COURSES	Semester Hours	
Required courses include:		
Anatomy (4) & Physiology (4) {or A&P I and II (8)}	8	
Exercise Physiology	3	
Statistics	3	
Nutrition	3	

observation/experience (optional), essay, letters of recommendation and interviews. A maximum of twenty (20) full-time students will be admitted into the MAT program each year.

#### ESSENTIAL FUNCTIONS (TECHNICAL STANDARDS)

A list of the essential functions for the MAT program and the Department of Rehabilitation Sciences can be found in the Department of Rehabilitation Sciences Student Handbook or obtained from the MAT program director. Please familiarize yourself with the essential functions document. These are established minimum physical and mental guidelines necessary for the MAT program.

#### HEALTH CONCERNS

Each student must provide the MAT program director with a copy of a complete health evaluation by an appropriate healthcare provider upon his/her enrollment into the Master of Athletic Training program.

## TEXAS TECH UNIVERSITY EQUIVALENT COURSES

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. The courses listed below are the Texas Tech University Equivalent of the prerequisite courses required to apply for admission into the Athletic Training program.

Biologie	cal Scien	ices	Credit Hours	
ZOOĽ	2403	Human Anatomy & Physiology I	4	
ZOOL	2404	Human Anatomy & Physiology II	4	
			Required Hours = 8	
Statistic	es		Credit Hours	
MATH	2300	Statistical Methods or	3	
PSY	3403	Statistical Methods	3	
			Required Hours $= 3$	
Exercis	e Physio	logy		
ESS	3305	Exercise Physiology	3	
			Required Hours $=3$	
Nutritic	on			
F&N	1325	Nutrition, Foods, and Healthy Living Or	3	
F&N	1410	Science of Nutrition	4	
			Required Hours =3	
Health,	Physica	l Education, & Recreation	<b>Credit Hours</b>	
ESS	3301	Mechanical Kinesiology or	3	
ESS	3305	Scientific Basis of Exercise	3	
			Recommended Hours =	

#### PROFESSIONAL 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 MAT Program Director.

3

## FIRST YEAR

Summer Semester	Course	Credit Hours
AHAT 5500	Human Anatomy	5
AHAT 5204	Principles of Kinesiology	2

AHAT 5200 AHAT 5122 Research Methods in Athletic Training Introduction to Clinical Education 2 1 Total Hours = 10 practicum is designed to meet the individual needs of the student.

**AHAT 5099 Independent Study in Athletic Training** Designed to meet the professional student's particular needs. May include a structured review of previously presented classroom and/or laboratory experiences, literature review and discussion. Additionally, anatomy teaching assistants may enroll in a structured independent study.

**AHAT 5105 Research Seminar (1:1:0)** This course focuses on the application of information introduced in Research Methods (AHAT 5200). Emphasis will be placed on becoming good consumers of the literature.

**AHAT 5120 Research-Directed Study I (1:0:3)** Completion of a research project including preparation of a manuscript suitable for publication in the sports healthcare literature. Course requirements include a literature review and demonstration of satisfactory progress as determined by the student's project advisor.

**AHAT 5122 Introduction to Clinical Education (1:0:3)** This course is an introduction to basic skills necessary to practice as an athletic training student. The main concept to be covered are medical terminology, basic documentation, OSHA training, first responder responsibilities, taping techniques, safe modality application and identification of common general medical conditions.

AHAT 5124 Seminar in Athletic Training (1:0:3) Graduate seminar focusing on current events

clinical applications associated with patient management.

AHAT 5529 Musculoskeletal Evaluation and Management II (5:3:6) Theory, principles, literature review and clinical applications associated with athletic training evaluation, assessment and management of musculoskeletal conditions within the lower extremity and spine.

# **Program in Physical Therapy**

Physical therapy is a health profession that assists people in regaining and maintaining health and functional independence after illness or injury. Physical therapists evaluate, prevent and limit physical disability and pain, promote healing, and restore/maintain functional ability. Physical therapy management involves direct patient treatment, education of the patient, family and staff consultation and community advisement.

Physical therapists treat people of all ages and with various types of disabilities, such as premature infants, children with birth defects or special education needs, and adults recovering from injuries and illnesses. Individualized treatment plans are designed by the physical therapist according to the specific needs and goals of each patient. Therapists also work to help restore emotional well being through the building of self-confidence in new and relearned skills. A wide range of employment opportunities in a number of different settings are available for the physical therapist. As integral members of the healthcare team, physical therapists work with physicians other rehabilitation professionals (such as occupational therapists, athletic trainers and speech therapists). Physical therapists practice within traditional medical settings, such as hospitals and rehabilitation centers, and also in less traditional, more community-oriented settings such as public and private schools, sports medicine centers, home health agencies, health clubs and birthing centers. Additionally, physical therapists are often active in preventive health endeavors such as public education programs, physical fitness, athletic screening, postural screening and high-risk infant clinics. Physical therapists are involved as investigators in basic and clinical research, and serve as both academic and clinical faculty members. In the community, physical therapists act as consultants in local, state and federal health-planning activities and in special recreational programs.

After graduating from an accredited professional education program, physical therapists must pass a state administered licensure examination in order to legally practice physical therapy. Additional licensure requisites for physical therapy vary from state to state according to physical therapy practice acts and state regulations that govern physical therapy.

## PROGRAM DESCRIPTION

The Master of Physical Therapy program at TTUHSC (with campuses in Amarillo, Lubbock and Odessa) is fully accredited by the Commission on Accreditation in Physical Therapy (CAPTE) through the year 2007.

Expanding services offered in the field of physical therapy and the needs of the West Texas area have promoted the development of an innovative, modern educational program in the School of Allied Health Sciences at the Texas Tech University Health Sciences Center. The three-year professional program of instruction includes over 1,100 hours of clinical experience. Student clinical education settings include facilities for acute care, pediatric care, orthopedic care and neurologic rehabilitation. Classroom, clinical laboratory and clinical experiences are integrated throughout the professional curriculum. By providing clinical experience early in the professional education, the program enables continuous integration of clinical skills in the classroom. The program is housed on three campuses within the TTUHSC system: Lubbock, Odessa, and Amarillo. Successful completion of the professional curriculum leads to a Masters degree in Physical Therapy.

Class sizes are restricted to ensure optimal student/instructor ratios and to enable each student to receive comprehensive instructional and clinical experience. Faculty and students on all campuses communicate with each other in person, via state of the art interactive multimedia environments, through the Internet, as well as by phone and fax. Students entering the program should have ready access to a computer, and be familiar with basic internet skills, including the use of e-mail, searching the World Wide Web, and use of word processing programs. Students without computers are encouraged to purchase one and b

program.

#### ADMISSION TO THE PROGRAM

The professional phase of physical therapy education begins in late May each year. A minimum of 90 semester hours of credit, including the courses listed below, is required prior to enrollment and may be completed in any regionally accredited college or University.

Prerequisite Courses	Semester Hours
Psychology/Sociology	6
English or Technical Writing	6
Math	3
Statistics	3
General Biology (for majors, lab required)	8
A&P I and II (one course must be upper level)	6-8
General Chemistry (for majors, lab required)	8
General Physics (for majors, lab required)	8
*Electives	40-42
Total Hours	90

\* Recommended courses: Additional English and technical writing, speech, developmental and general psychology.

#### **GPA REQUIREMENTS**

Competitive cumulative and prerequisite science GPA's are required for consideration for admission. Individuals already holding baccalaureate and graduate degrees are eligible for admission with the same competitive GPA and prerequisite requirements.

#### EXPERIENCE

Applicants are expected to have some knowledge of the profession. This can be acquired in several ways including volunteer work, paid employee, and/or observations in clinical settings. Applicants must have completed at least 50 clock hours of experience in a physical therapy setting prior to May 1 of the year of matriculation. Applicants are encouraged to get as much experience as possible. Higher experience levels will strengthen an application.

#### THE APPLICATION PROCESS

Applications are considered twice a year for acceptance into the professional program. Applicants should complete and submit the online application by October 15<sup>th</sup> to be considered for early acceptance to the class that begins in May of the following year. Applicants not seeking early acceptance should complete and submit the online application no later than February 1<sup>st</sup> to be considered for acceptance into the class that will begin in May. Applicants will be expected to have completed all prerequisites prior to the start of PT Program courses. Applicants to the physical therapy program should understand that students admitted to the program are assigned to a specific campus, and no campus changes are anticipated. Students who are unable or unwilling to accept assignment to a specific campus should not accept admission to the Physical Therapy program. All students spend the first summer session on the Lubbock campus.

Two letters of recommendation are required as part of the application, and should be completed by the following: one from professional personnel who has observed you during any related volunteer or paid work, and one from a previous or present instructor and/or counselor, previous or present employers.

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. Applicants who meet the above listed requirements, and are deemed to be suitable candidates for admission, will be invited to TTUHSC for interviews. Those selected will be contacted to arrange interview

times. Applicants should

# $\frac{3}{\text{Required Hours}} = 6$

In addition to the prerequisites listed above, at least 46-48 hours of elective coursework must be earned by the applicant. Although the selection of these elective hours is the student's option, recommended electives include technical writing, speech and developmental and general psychology.

# PROFESSIONAL CURRICULUM

The following courses are offered once each year during the semester listed and must be taken in sequence.

# FIRST YEAR

Summer Semester*	Course	Credit Hours
AHPT 5200	Introduction to Patient Management	2
AHPT 5202	Principles of Kinesiology	2
AHPT 5500	Human Anatomy	5
	·	Total Hours = 9
*All students attend the f	first summer session at the Lubbock campus.	
Fall Semester	Course	Credit Hours
AHPT 5205	Neuroscience 1	2
AHPT 5305	Clinical Kinesiology	3
AHPT 5405	Pathophysiology	4
AHPT 5505	Patient Evaluation and Management 1	5
		Total Hours = 14
Spring Semester	Course	<b>Credit Hours</b>
AHPT 5104	Clinical Education	1
AHPT 5231	Clinical Reasoning 1	2
AHPT 5204	Healthcare Issues and Ethics	2
AHPT 5206	Pharmacology	2
AHPT 5304	Clinical Applied Physiology	3
AHPT 5506	Patient Evaluation & Management 2	5
		Total Hours = 15
SECOND YEAR		
Summer Semester	Course	Credit Hours
AHPT 5122	Residual Limb Care and Prosthetics	1
AHPT 5220	Musculoskeletal Evaluation and Management 1	2
AHPT 5336	Clinical Experience 1	3
		Total Hours $= 6$
Fall Semester	Course	Credit Hours
AHPT 5232	Clinical Reasoning 2	2
AHPT 5227	Current Medical Diagnosis and Treatment 1	2
AHPT 5223	Research Process 1	2
AHPT 5321	Adult Development and Aging	3
AHPT 5529	Musculoskeletal Evaluation and Management 2	5
		Total Hours $= 14$

upcoming clinical education experience are included topics.

**AHPT 5122 Residual Limb Care and Prosthetics (1:1:0)** Prerequisite: AHPT 5505, 5506 Study of technological materials and devices used in rehabilitation of patients with residual limbs. Includes in-depth study of materials, biomechanics, and proper fit of upper and lower extremity prostheses. Selection criteria for prosthetics, gait disturbances, and physical therapy management for persons with recent amputations are also included.

**AHPT 5124 Research Process 2 (1:1:0)** Prerequisite: AHPT 5223 This course will focus on developing skills in critically reading the peer-reviewed scientific literature.

**AHPT 5128 Research Process 3 (1:1:0)** Prerequisites: AHPT 5223 and 5124 This course will continue research related activities of preceding research process courses.

**AHPT 5142 Current Medical Diagnosis and Treatment 2 (1:1:0)** Corequisite: AHPT 5444 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.

**AHPT 5150 Women's Physical Therapy (1:1:0)** Prerequisite: AHPT 5529 Physical therapy prevention, examination, evaluation and intervention for conditions with special relevance for women. Developmental issues of special relevance in adolescence, during the childbearing and child-rearing years, and in later life will be covered. At the student's option, observation in labor and delivery may be arranged.

**AHPT 5152 Seminar in Physical Therapy 1 (1:1:0)** A seminar course examining current clinical and environmental issues in the field of physical therapy. Specific subject matter will change year to year.

**AHPT 5156 Seminar in Physical Therapy 2 (1:1:0)** A seminar course examining current clinical and environmental issues in the field of physical therapy. Specific subject matter will change year to year.

AHPT 5158 Seminar in Physical Therapy 3 (1:1:0) A seminar course examining current clinical and environmental issues in the field of physical therapy. Specific subject matter will change year to year.

**AHPT 5200 Introduction to Patient Management (2:1:3)** Introduction to basic clinical skills in the field of physical therapy, medical terminology and basic documentation. Includes transfer techniques, gait training, massage, vital signs, emergency procedures and use of special equipment.

**AHPT 5202 Principles of Kinesiology (2:1:3)** Course will provide an in-depth study of applied human anatomy and basic kinesiology with emphasis on normal gross form and function as it relates to Physical Therapy practice. Hands-on surface anatomy and palpation labs are utilized.

**AHPT 5204 Healthcare Issues and Ethics (2:2:0)** Includes the study and application of legal guidelines and ethical principles as they relate to healthcare practice. Special emphasis is placed on ethical dilemmas relevant to the practice of physical therapy including current issues and problems affecting healthcare.

**AHPT 5205 Neuroscience 1 (2:2:0)** This course provides an introduction to nervous system function and pathophysiology. An emphasis is placed on axon physiology and its relevance to electrical modalities, synaptic neurotransmission, and nervous system anatomy. Students are introduced to pathologies of the nervous, and the corresponding neurorehabilitative physical therapy treatments.

**AHPT 5206 Pharmacology (2:2:0)** Study of pharmacology and its relationship to pathophysiology, emphasizing the implications for the practice of physical therapy. Basic principles of pharmacology and pharmacokinetics are addressed with focus on the mechanism of action and effects of specific drugs on the musculo-skeletal, cardiovascular and central nervous system.

**AHPT 5208 Management of Acute Injuries (2:1:3)** Focus on introducing the physical therapy student to the field of athletic training and the management of acute injuries.

AHPT 5220 Musculoskeletal Evaluati
business and professional growth are the hallmarks of this course.

**AHPT 5240 Personnel Management (2:2:0)** Prerequisite: AHPT 5204 Provides initial personnel management perspectives needed by the entry-level physical therapist in a clinical setting.

AHPT

the direct supervision of a licensed professional. The student performs all aspects of patient care and other professional duties, and may practice in an inpatient or outpatient setting. All prior coursework prepares the student, and additional information and skills are gained in the clinic.

**AHPT 5341 Developmental Evaluation and Management (3:2:3)** Prerequisites: AHPT 5320, 5444 Introduction to the modification of physical therapy examination, evaluation and management for the special developmental needs of children with orthopedic or neuromuscular conditions. Includes consideration of the requirements for physical therapy practice in specialized settings such as neonatal intensive care, Birth to Three programs, and public schools. Treatment approaches are integrated from various sources including motor control theory, neurodevelopmental treatment, sensory integration and applied research.

**AHPT 5343 Cardiopulmonary Evaluation and Management (3:2:3)** Prerequisite: AHPT 5304 Scientific basis, rationale and application of assessment, prevention and treatment principles and techniques for patients with acute and chronic cardiopulmonary disorders. Comprehensive and indepth physical therapy evaluation and management of patients with multi-system disorders will be discussed.

**AHPT 5405 Pathophysiology of Body Systems (4:4:0)** This course will focus on general physiological principles of diseases and disorders that affect organ systems of the body, with an emphasis on integrating the interrelationship between different organ systems in the context of clinical correlations relevant to physical therapists. Neuromusculoskeletal, cardiopulmonary, endocrinology, body fluids and electrolytes, immune system, neoplasia and genetic disorders will be discussed from molecular and systems perspectives.

**AHPT 5420 Neuroscience 2 (4:3:3)** Prerequisite: AHPT 5205 This course consists of an examination of the human nervous system, with an emphasis on the functional relationships of neuroanatomical structures. Topics to be covered include the organization of the nervous system in terms of development, mechanisms of processing of sensory and motor information (including receptors and reflexes), and pathological conditions of the nervous system.

**AHPT 5444 Adult Neurological Assessment and Rehabilitation (4:3:3)** Prerequisite: AHPT 5420 This course examines physical therapy examination, evaluation, prognosis, intervention, and outcomes for adult clients with neurological disorders based on current research, evidence, and practice guidelines.

AHPT 5446 Clinical Experience 3 (4:0:12) Prerequisite: AHPT 5444, 5341 This eight-week full-

**AHPT 5500 Human Anatomy (5:3:6)** 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 integumentary, musculoskeletal, nervous, circulatory and respiratory systems.

**AHPT 5505 Patient Evaluation and Management 1 (5:3:6)** Prerequisite: AHPT 5200 Includes basic evaluation skills such as history-taking in the acute care and outpatient settings, chart review, goniometry, manual muscle testing, and sensory testing. It also includes beginning level treatment skills utilizing therapeutic exercise theory and prescription, and principles of care in the ICU. Beginning-level problem solving skills are developed using multiple case studies.

**AHPT 5506 Patient Evaluation and Management 2 (5:3:6)** Prerequisite: AHPT 5505 Theory, principles, literature review and clinical applications associated with Physical Therapy evaluation assessment and management. The course emphasizes the use of physical agents, biofeedback, early balance differential assessment and the care of burns and wound. This course will also include an introduction to orthopedic assessment.

**AHPT 5529 Musculoskeletal Evaluation and Management 2 (5:3:6)** Prerequisite: AHPT 5220 Theory, principles, clinical applications, and literature review associated with physical therapy evaluation, assessment, and management of musculoskeletal conditions within the lower extremity and spine.

	Course	Credit Hours
AHPT 7000	Clinical Research/ Education Project	2
AHPT 7104	Clinical Research/ Education Project Presentation	1
AHPT 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: POST-PROFESSIONAL CURRICULUM

AHPT 6201 Advanced Clinical Practice for Shoulder Afflictions (2 credits) Examination and treatment of dysfunction in the shoulder complex. Lecture components include advancements in patho-anatomy, biomechanics, interpretation of functional examination, pathology, and treatment approaches to arthritis / arthrosis, impingement, instability, labral afflictions, and soft tissue lesions. Clinical laboratory sessions include surface anatomy, basic functional examination and special tests, soft tissue treatments, and joint-specific treatment measures. This course includes management approaches to. Case studies will be discussed and mock clinic sessions will be conducted.

AHPT 6202 Advanced Clinical Practice for Elbow & Forearm Afflictions (2 credits) Examination and treatment of dysfunction in the elbow / forearm complex. Lecture components include advancements in patho-anatomy, biomechanics, interpretation of functional examination, pathology, and treatment approaches. Clinical laboratory sessions include surface anatomy, basic functional examination and special tests, soft tissue treatments, and joint-specific treatment measures. Management approaches to arthritis / arthosis, 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.

AHPT 6203 Advanced Clinical Practice for Wrist & Hand Afflictions (2 credits) Examination and treatment of dysfunction in the wrist / hand complex. Lecture components include advancements in patho-anatomy, biomechanics, interpretation of functional examination, pathology, and treatment approaches. Clinical laboratory sessions include surface anatomy, basic functional examination and special tests, soft tissue treatments, and joint-specific treatment measures. 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.

AHPT 6204 Advanced Clinical Practice for Hip Afflictions (2 credits) Examination and treatment of dysfunction in the hip complex. Lecture components include advancements in pathoanatomy, biomechanics, interpretation of functional examination, pathology, and treatment approaches. Clinical laboratory sessions include surface anatomy, basic functional examination and special tests, soft tissue treatments, and joint-specific treatment measures. Management approaches to arthritis / arthrosis, instability, peripheral nerve mobility limits and entrapment, labral afflictions, and soft tissue afflictions (including tendinitis and bursitis). Case studies will be discussed and mock clinic sessions will be conducted.

AHPT 6205 Advanced Clinical Practice for Knee Afflictions (2 credits) Examination and treatment of dysfunction in the knee complex. Lecture components include advancements in pathoanatomy, biomechanics, interpretation of functional examination, pathology, and treatment approaches. Clinical laboratory sessions include surface anatomy, basic functional examination and special tests, soft tissue treatments, and joint-specific treatment measures. Management interpretation of functional examination, pathology, and treatment approaches. Clinical laboratory sessions include surface anatomy, basic functional examination and special tests, soft tissue treatments, treatment to 1° disc afflictions, and joint-specific treatment measures to the sacroiliac joint. Management approaches to 1° disc afflictions, as well as sacroiliac joint hypomobilities and hypermobilities. Case studies will be discussed and mock clinic sessions will be conducted.

AHPT 6212 Advanced Clinical Practice for Lumbar Secondary Disc Afflictions (2 credits) Examination and treatment of 2° Disc related disorders in the Lumbar Spine. Lecture components include advancements in patho-anatomy, biomechanics, interpretation of functional examination, pathology, and treatment approaches. Clinical laboratory sessions include surface anatomy, basic **AHPT 6302 Issues in Orthopaedic Physical Therapy and Manual Therapy 2 (3 credits)** Survey of selected topics in Basic and Applied Science as they relate to orthopaedic Physical Therapy and manual therapy. The discussions will highlight topic areas that include neurophysiology, histology, exercise physiology, and applied medical science.

**AHPT 6303 Basic and Applied Science in Orthopaedics (3 credits)** Prerequisite: AHPT 7302 or consent of the instructor. Addresses select basic science processes associated within the musculoskeletal system. Topics include histology and physiology of bone, cartilage, tendons, and ligaments. Muscle physiology will be discussed as it relates to orthopaedic dysfunction.

**AHPT 6304 Orthopaedic Physical Therapy Screening (3 credits)** Enhances knowledge and clinical skills designed to assist in the screening of patients for orthopaedic conditions which require examination by a physician. Experiences should strengthen professional communication between physical therapists and physicians. Radiology and laboratory screening are presented as special topics to further the therapist's understanding of pathology and the clinical implications of patient presentation.

**AHPT 6305 Updates in Orthopaedic Surgical Management (3 credits)** Evaluation of 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 Sc.D.,PT courses.

AHPT 6311 Clinical Studies in Anatomy; a Lab Course (3 credits) Evaluation of prosected

managed care systems, insurance regulations, and 3<sup>rd</sup>-party reimbursement. Evaluation of cost control, cost benefit analysis, financial ratio analysis, and business plan analysis.

**AHPT 6316 Marketing in Outpatient Physical Therapy (3 credits)** Addresses fundamental and contemporary issues in marketing, as they apply to outpatient Physical Therapy services. Topics include epidemiology, market analysis, managerial economics, financial planning, marketing strategy decisions, structural relationships, marketing tactics, forecasting, marketing ethics, and entrepreneurship.

**AHPT 7000 Clinical Research / Education Project (2 credits)** Student's independent clinical project. Project will center on either a clinical research or teaching design. Content and goals will be established through mutual consent between the student and his or her Project Committee.

**AHPT 7104 Clinical Research / Education Project Presentation (1 credit)** Student presents the development and findings from the clinical project (with either a research or teaching emphasis) before the Sc.D.,PT faculty, other students and clinicians from the community.

AHPT 7301 Seminar in Clinical Research Design (3 credits) Study of methods in clinical research. Processes of obtaining, processing, interpreting, and using clinic

Master of Athletic Training/ Master of Physical Therapy

**MPT Only Courses** 

**Credit Hours** 

# **Program in Occupational Therapy**

Occupational therapy is a challenging profession that calls on the therapist to use creative abilities

These courses may be completed at any regionally accredited college or university.

The professional phase of the program begins in late May. Students will be involved in clinical experiences during the second and third year in the program. Following completion of all academic coursed, students undertake 6 months of full-time clinical fieldwork.

This program prepares the student to enter the field of occupational therapy with a background in basic sciences, research, theory, application, and clinical education. The curriculum covers life span from birth to aging, reflecting a broad perspective on physical, emotional, social and biological issues affecting the quality of daily living for persons with unique abilities. Additionally, the courses are sequenced from normal to abnormal, function to dysfunction, and professional foundation to professional leadership. Lectures, case studies, laboratory experiences and clinical education provide opportunities to integrate prior knowledge with new learning and develop competent professional behaviors. As this is a program to not only educate but to foster professional behaviors and commitment, occupational therapy students will exceed usual classroom hours in order to engage in clinical education, complete community assignments, and participate in professional development and leadership experiences, both assigned and voluntary.

Successful completion of the professional curriculum leads to a Master of Occupational Therapy degree. During professional studies, students are required to adhere to all program, departmental, School of Allied Health Sciences and Texas Tech University Health Sciences Center policies and academic and behavioral guidelines as outlined in the student handbook, fieldwork manual, and course outlines.

Class sizes are restricted to insure optimal student/instructor ratios and to enable each student to receive comprehensive instructional and clinical experience.

Students entering the program should have ready access to a 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. Students without computers are encouraged to purchase one and become familiar with it prior to beginning the program. You may be able to include this purchase in your financial aid package.

#### **CLINICAL EDUCATION**

Clinical education is an integral aspect of the program. Level I fieldwork experiences are scheduled throughout the professional program and allow students to reinforce and test the knowledge and attitudes presented in the classroom. Upon completion of the academic portion of the curriculum, the student is required to participate in a minimum of six months fieldwork in situations assigned by the academic fieldwork coordinator. These fieldwork situations are full time and will often require the student to relocate outside the immediate geographic area. Available assignments are determined by contractual arrangements between the department and facility. Students pay regular tuition and fees for enrollment in fieldwork. Optional fieldwork rotations in many specialty areas such as pediatrics, administration, hand therapy, and work hardening are also available.

#### ADMISSION TO THE PROFESSIONAL PROGRAM

To be considered for admission, the applicant must complete and submit the online application and complete the application procedure, which includes a personal interview. A minimum cumulative GPA of 2.7 on a 4.0 scale is required. A grade of C or better is necessary in each required preprofessional course. At the time of application, all science coursework should be completed within the last seven years. Applicants whose science coursework is more than seven years old should contact the academic advisor in the Office of Admissions and Student Affairs for decisions concerning course acceptability. Individuals already holding a baccalaureate or graduate degree in other fields are eligible for admission. They must have a 2.7 GPA in the last 90 semester hours and meet the same prerequisite requirements as all other applicants. Provisional admission may be offered to applicants with a GPA less than 2.7. Such applications will be reviewed on an individual basis.

The applicants are expected to have some knowledge of the occupational therapy profession. This can be acquired in several ways; volunteer work, paid employment and/or observations in occupational therapy settings/services. Applicants must have completed a minimum of 40 clock hours of experience, preferably in two different settings, prior to the deadline for application to the program. Applicants are encouraged to become familiar with the occupational therapy professional literature, and current issues in the profession.

At the time of application, the student must demonstrate the ability to complete all prerequisite coursework prior to enrollment in his/her first professional curriculum course, provide verification of work or volunteer experience in a healthcare setting, and submit 2 completed reference forms.

The curriculum includes the following main components:

Human Sciences (17 credits) Human Anatomy Principles of Kinesiology Human Physiology Human Neurosciences Current Medical Diagnosis and Treatment Professional Concepts and Skills (15 credits) **O.T.** Professional Concepts Professional Skills I and II Adaptations and Technology Clinical Assessment and Reasoning Advanced Clinical Reasoning Occupational Function/Dysfunction (37 credits) Neurodevelopment Sequences Psychosocial Aspects of Illness and Disability Occupational Function/Dysfunction: Children and Adolescents, I, II and III Occupational Function/Dysfunction: Adults I and II Occupational Function/Dysfunction: Older Adults I Rehabilitation of the Hand and Upper Extremity Community Health Psychosocial Treatment and Group Dynamics Inquiry Skills (5 credits) Introduction to Research Research Methods: Quantitative and Qualitative **Research Seminar** Practice Organization and Administration (3 credits) Health Organization Management Fieldwork (21 credits) Fieldwork I: 1 and 2 Fieldwork II: 1, II: 2 Elective Courses (variable credits) Fieldwork II Optional Specialization Special Topics in Occupational Therapy Individual Project

#### **FIELDWORK (AHOT 5931, 5932)**

Students must be approved for fieldwork placement by the program director. Considerations in this recommendation include student's academic performance, completion of program requirements, demonstration of adequate professionalism and behaviors indicating ability to be effective and productive during clinical training, including problem solving ability and critical thinking. Students on fieldwork assignments should be able to follow safety procedures of the institution, plus any other requirements deemed important for fieldwork. Behaviors observed during the professional curriculum are evidence of a student's readiness for this level of fieldwork.

#### GRADUATION

Level II fieldwork must be completed within 24 months following the completion of academic preparation.

#### CERTIFICATION

Graduates of the program will be able 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). Most states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination. A felony conviction may affect a graduate's ability to sit for the certification examination or attain state licensure.

#### FIRST YEAR

Summer Semester	Course	<b>Credit Hours</b>
AHOT 5500	Human Anatomy	5
AHOT 5202	Principles of Kinesiology	2
AHOT 5104	OT Professional Skills I	1
		Total Hours = 8
Fall Semester	Course	Credit Hours
AHOT 5401	Human Physiology	4
AHOT 5312	OT Professional Concepts	3
AHOT 5300	Current Medical Diagnoses and Treatment	3
AHOT 5336	OT Professional Skills II	3
		Total Hours = 13
Spring Semester	Course	Credit Hours
AHOT 5302	Human Neurosciences	3
AHOT 5304	Clinical Assessment & Reasoning	3
AHOT 5308	Psychosocial Aspects of Illness & Disability	3
AHOT 5205	Neurodevelopmental Sequences	2
AHOT 5323	Community Health	3
AHOT 5110	Rehabilitation of the Hand & Upper Extremity	1
		Total Hours = 15
SECOND YEAR		

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#### THIRD YEAR

Summer Semester	Course	Credit Hours
AHOT 5931	Fieldwork II: 1	9
		Total Hours $= 9$
Fall Semester	Course	Credit Hours
AHOT 5932	Fieldwork II: 2	9
		Total Hours $= 9$

#### COURSE DESCRIPTIONS: PROFESSIONAL CURRICULUM

**AHOT 5071 Fieldwork II: Specialization (3-6:0:3-6)** Prerequisite: AHOT 5631, 5632 Optional additional full-time, supervised clinical experience in an area/facility of the student's choice.

**AHOT 5072 Special Topics in Occupational Therapy** (1-3:1-3:0) Selected topics of interest to occupational therapy. Please note that this course is not offered every year.

**AHOT 5073 Individual Projects (1-3:1-3:0)** Prerequisite: approval of instructor and Program Director. Provides an opportunity for students to undertake a special project in an area of interest.

AHOT 5104 Occupational Therapy Professional Skills I (1:0:3) Introduction to key practice skills in occupational therapy. Course includes self-paced learning and testing for medical terminology.

**AHOT 5106 Fieldwork I: 1 (1:0:3)** Prerequisite: AHOT 5104, 5312, 5203 Part-time, supervised, opportunity to observe clinical practice and to participate, within limits, in the occupational therapy process with individuals and groups. Students will complete treatment notes and a case study on clientele seen on Fieldwork I: 1.

**AHOT 5110 Rehabilitation of the Hand and Upper Extremity (1:0:3)** Prerequisite: AHOT 5500, 5202, 5336. This course includes a review of basic anatomy with a study of examination skills including special tests, specific treatment techniques, basic treatment planning, and intermediate splinting skills for common injuries and/or conditions in the shoulder, elbow, forearm, wrist, and hand.

**AHOT 5200 Fieldwork I: 2 (2:0:3)** Prerequisite: AHOT 5106, 5421, 5423, 5425 Part-time, supervised, opportunity to observe clinical practice and to participate, within limits, in the occupational therapy process with individuals and groups. As possible, this will allow students to explore occupational therapy contributions in "non traditional" or "role emerging" settings. Students will complete treatment notes and a case study on a client seen during Fieldwork I: 2.

**AHOT 5202 Principles of Kinesiology (2:1:3)** Corequisite: AHOT 5500 Study of human motion with emphasis on biomechanics fundamental to understanding the clinical application of musculoskeletal evaluation, posture and gait assessment, and exercise.

**AHOT 5205 Neurodevelopmental Sequences (2:2:2)** Study of skill progressions in typical and atypical development and neurological recovery; including the sequences for key occupational tasks (ADL, school learning) and performance components (sensory, motor, cognitive).

**AHOT 5221 Introduction to Research (2:2:0)** Introduction to the research process with an overview of research design, measurement, ethics, proposal development, and support resources specific to research in occupational therapy.

**AHOT 5224 Research Methods: Quantitative and Qualitative Approaches (2:2:0)** Prerequisite: AHOT 5221 Exploration of research methods, with an emphasis on quantitative and qualitative approaches. Evaluation and use of professional literature relevant to clinical practice.

AHOT 5232 Advanced Clinical Reasoning (2:2:0) Prerequisite: AHOT 5304, 5312, 5236, 5423 Capstone course including opportunities that will include multiple case studies of various conditions and therapy settings to promote reasoning skills in identifying proper assessments, treatment plans, medical record review, and planning for activities and treatment procedures throughout the continuum of a patient's care. Opportunities will also include preparing a continuing education event for area clinicians.

**AHOT 5300 Current Medical Diagnoses and Treatment (3:3:0)** Prerequisite: AHOT 5500 Etiology, differential diagnosis, prognosis, and medical-surgical management of disorders and injuries in children and adults relevant to occupational therapy practice.

AHOT 5302 Human Neurosciences (3:3:0) Prerequisite: AHOT 5500, 5301 A study of the

development of interviewing skills, and gaining knowledge of various clinical opportunities for occupational therapists.

**AHOT 5336 Occupational Therapy Professional Skills II (2:1:3)** Prerequisite: AHOT 5104 Introduction to key practice skills in occupational therapy including basic evaluation skills, basic documentation skills, and introduction to various modalities and splinting.

AHOT 5401 Human Physiology (4:4:0) Prerequisite: AHOT 5500 Study of the normal function

# **Program in Rehabilitation Sciences**

The mission for the Master of Science in Rehabilitation Sciences (MSRS) is to provide master's-

#### POST-PROFESSIONAL CURRICULUM

The following courses are offered at least once every year. MSRS students entering the program with a bachelor's degree in OT, PT, or an approved BS in a health related field will be required to complete 36 semester hours to meet degree requirements. They will include 18 hours of core class requirements and 18 hours of elective courses.

#### CLINICAL COURSEWORK

Year One: Core Work	Credit I	Iours
Fall Semester		
AHRS 5301	Foundations of Rehabilitation	3
AHRS 5304	Qualitative Research Methods	3
Spring Semester		
AHRS 5303	Quantitative Research Methods	3
AHRS 5302	Social and Cultural Dimensions of Rehabilitation	n 3
Summer Semester		
AHRS 5305	Medical Aspects of Rehabilitation	3
AHRS 5306	The Healthcare Delivery System	3
Year Two: Electives	Credit I	Iours
Fall Semester		
AHRS 5307	Healthcare Finance and Resource Management	3
AHRS 5309	Coding and Rehab Law	3
AHRS 5316	Independent Study	3
Spring Semester		
AHRS 5310	Professional Development Seminar	3
AHRS 5312	Strategic Planning & Marketing	3
AHRS 5316	Independent Study	3
Summer Semester		
AHRS 5308	Business Statistics	3
AHRS 5317	Public Policy	3

#### COURSE DESCRIPTIONS: POST-PROFESSIONAL CURRICULUM

AHRS 5301 Core (3 credits) Foundations of Rehabilitation (Principles and Practice) Foundations in Rehabilitation Designed to expose the learner to the history and underlying evolution of rehabilitation. Issues associated with the evolving position that rehabilitative providers face are addressed in this course. Rehabilitative Theory and Practice consists of current practice patterns, paradigms, and theoretical treatment models. Additionally, the driving forces that make up our clinical models are discussed and evaluated for effectiveness.

AHRS 5302 Core (3 credits) Social and Cultural Dimensions of Rehabilitation This course is

AHRS 5303 Core (3 credits) Quantitative Research Methods This course is designed to provide the learner understanding in the basic statistical and methodological principles underlying clinical and theoretical research, and techniques and methods of conducting appropriate literature reviews.

AHRS 5304 Core (3 credits) Qualitative Research Methods Qualitative Research Methods One Designed to assist the learner in creating a clinical, outcome, or practice-based research proposal or literature review.

AHRS 5305 Core (3 credits) Medic

### **Program in Rehabilitation Counseling**

Work and working are highly valued in our society. Rehabilitation Counselors provide and coordinate services for individuals with a range of physical, psychiatric, 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 client's to cope effectively with their environment and function as independently as possible.

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.

The last few decades have seen an increasing recognition of the need and right of persons with disabilities to access meaningful work and employment. Federal legislation, changes in the labor market, and an increasing awareness of the skills and abilities possessed by persons with disabilities has resulted in excellent employment opportunities. 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.

#### 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.

#### 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 welltrained graduates who are considered valued em

- 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.

#### ACCREDITATION

The Masters of Rehabilitation Counseling Program is accredited by the Council on Rehabilitation Education (CORE). Graduates of the TTUHSC program enjoy full benefits of CORE accreditation and may sit for the CRC examination.

#### PROGRAM DESCRIPTION

The Master of Rehabilitation Counseling (MRC) degree program is a distance education, 48 semester credit hour graduate program 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. Texas Tech University Health Sciences Center (TTUHSC) uses a variety of methods and technologies to maximize the students' educational experience, including web and internet based technologies, teleconferencing, hard copy, videotape/audiotape, and onsite practicum experiences.

for advanced credit for certain courses. Persons with disabilities are strongly encouraged to apply.

#### THE APPLICATION PROCESS

The online application must be completed by July 1 for Fall semester and November 15 for Spring semester.

Students will submit a completed application form, transcripts, a letter from the applicant outlining their rationale for applying to the program, 3 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 deadline. Application materials and detailed information on application procedures and admission criteria can be accessed via the Texas Tech University Health Sciences Center, School of Allied Health Sciences' website at www.ttuhsc.edu/sah. 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.

#### PROFESSIONAL CURRICULUM

#### **CORE COURSEWORK**

	Course	Credit Hours
AHRC 5301	Foundations of Rehabilitation Counseling	3
AHRC 5302	Counseling Theories	3
AHRC 5303	Medical Aspects of Disability	3
AHRC 5304	Vocational and Career Development	3
AHRC 5305	Case Management	3
AHRC 5306	Psycho-Social Aspects of Disability	3
AHRC 5308	Research Methodologies &	
	Interpretation of Research Findings	3
AHRC 5321	Vocational Assessment	3
AHRC 5322	Employment Development & Placement	3
AHRC 5346	Psychiatric Rehabilitation	3
		Total Hours $= 30$

#### PRACTICAL EXPERIENCE

	Course	Credit Hours
AHRC 5416	Clinical Internship I	4
AHRC 5517	Clinical Internship II	5
AHRC 5611	Practicum	6
		Total Hours $= 15$

<b>ELECTIVES</b> (3 credit hours	are required, additional elective credits are option	al)
	Course	<b>Credit Hours</b>
AHRC 5310	Special Topics/Seminars in Vocational	
	Rehabilitation	3
AHRC 5342	Rehabilitation and Substance Abuse	3
AHRC 5344	Assistive Technology	3
AHRC 5348	Life Care Planning	3
AHRC 5345	Practice in Multi-Cultural &	
	Rural Environments	3
AHRC 5350	Professional Orientation	3
AHRC 5351	Human Growth and Development	3
AHRC 5354	Group Process and Practice	3

#### CERTIFICATION

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).

#### COURSE DESCRIPTIONS: PROFESSIONAL CURRICULUM

AHRC 5301 Foundations of Rehabilitation Counseling (3 credits) Introduction to the history and philosophy of rehabilitation, and the legislative and policy background underpinning the modern delivery of rehabilitation counseling services. Exploration of the organizational structure of current rehabilitation counseling services, and the legal and ethical standards which guide them. Discussion of societal issues, trends, and developments in rehabilitation, and their impact upon consumer review, choice, and personal responsibility.

AHRC 5302 Counseling Theories (3 credits) Introduction to the principles of behavior, personality, and human development. Exploration of individual, group, and family counseling

identification and integration of assessment information from a multi-disciplinary perspective. The strengths and weaknesses of assessment information in the rehabilitation counseling process are discussed within the context of the overall role of assessment in assisting the individual.

AHRC 5322 Employment Development and Placement (3 credits) The roles and techniques

Note: contributes towards the mandatory 600-hour clinical internship requirements as outlined for CORE accreditation and CRCC certification. (AHRC 5416 is 4 graduate credit hours; AHRC 5517 is 5 graduate hours) Courses may be repeated if the 600 hour requirement is not met, and may be taken simultaneously.

AHRC 5517 Clinical Internship II (5 credits) Supervised rehabilitation counseling internship located in a rehabilitation counseling services setting. Internship activities will include an orientation to program components, policies and procedures; an introduction to staff and their role and function; review of confidentiality and ethical standards; observation of all aspects of rehabilitation counseling services; work assignments encompassing the tasks of regularly employed rehabilitation counselors from intake to placement and/or discharge; reporting/charting and all documentation requirements as set forth by the organization, evaluation of student performance (including self-evaluation, field site supervisor evaluation, and faculty supervisor evaluation). Note: contributes towards the mandatory 600-hour clinical internship requirements as outlined for CORE accreditation and CRCC certification. (AHRC 5416 is 4 graduate credit hours; AHRC 5517 is 5 graduate hours) Courses may be repeated if the 600 hour requirement is not met, and may be taken simultaneously.

**AHRC 5611 Practicum (6 credits)** Supervised rehabilitation counseling practicum fostering personal growth, skills development, and insights into the rehabilitation counseling process and issues that affect service delivery. Includes both on-campus and classroom experiences (audio/videotape and individual/group interactions) and off-campus 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 (AHRC 5416 and AHRC 5517).

## SCHOOL OF ALLIED HEALTH SCIENCES FACULTY

**AMLANI, Amyn,** Assistant Professor of Speech, Language and Hearing Sciences, 2002; B.A. University of the Pacific, 1993; M.S. Purdue University, 1995; Ph.D., Michigan State University, 2003.

**AOYAMA, Katsura**, Assistant Professor of Speech, Language and Hearing Sciences, 2002; B.A., Kansai University, Japan, 1995; M.A., University of Hawaii, 1997; Ph.D., University of Hawaii, 2000.

**BOGSCHUTZ, Renee,** Assistant Professor of Speech, Language and Hearing Sciences, 2001; B.A., Eastern New Mexico University, 1993; M.S., Eastern New Mexico University, 1995; Ph.D., University of Iowa, 2000.

**BORDER, Barbara G.,** Professor of Molecular Pathology, 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.

**BRISMEE, Jean-Michel**, Assistant Professor of Physical Therapy, 1997; B.S., Catholic University of Louvain, Belgium, 1982; M.S., Texas Tech University, 1996.

**BROOKE, Paul P.,** Dean, 1998; B.A., St. Joseph's Seminary & College, 1964; M.H.A., Baylor University, 1976; M.M.A.S., U.S. Army Command & Staff College, 1979; Ph.D., University of Iowa, 1986.

**BROOKS, David J.,** Assistant Professor of Rehabilitation Counseling, 2001; B.A., Northeastern Oklahoma State, 1969; M.S., Oklahoma State University, 1975.

**CHESTNUTT, Jacqueline,** Academic Instructor and Lab Manager in Clinical Laboratory Science, 2002; B.S., Texas Tech University Health Sciences Center, 1997.

**CLOPTON, Nancy Ann,** Associate Professor of Physical Therapy, 1983; B.S., University of Kansas, 1970; M.S., Texas Woman's University, 1983; Ph.D., Texas Tech University, 1989.

**COLE, Robert P.,** Assistant Professor of Physician Assistant Studies, 2004; B.S., University of Oklahoma Health Science Center, 1984; M.P.A.S., University of Nebraska Medical Center, 2000.

**COLLINS, Robert, F.,** Assistant Professor in Clinical Laboratory Sciences and Molecular Pathology, 2001; B.S., Texas Tech University Health Sciences Center, 1996; M.S. Texas Tech University Health Sciences Center, 2003.

**CORWIN, Melinda D.,** Assistant Professor of Speech, Language and Hearing Sciences, 1994; B.S., Texas Tech University, 1987; M.S., Texas Tech University, 1989.

**DANIEL, John**, Associate Professor of Physical Therapy, 1991; B.A., University of Delhi, India, 1975; BLS, Iowa State University, 1990; M.A., University of Iowa, 1991; Ed.D, Texas Tech University, 1999.

**DEDRICK, Greg,** Associate Professor of Physical Therapy, 2003; B.S., University of North Texas, 1994; B.S., University of Texas Medical Branch El Paso, 1994; M.P.T., University of Texas at El Paso, 1996.

ELLIOTT, Loree, Adjunct Professor of Clinical Servi

**KELLER, Judith P.,** Assistant Professor of Speech, Language and Hearing Sciences and Clinical Coordinator, 1993; B.S., Texas Tech University, 1987; M.S., Texas Tech University, 1990.

KNOTTS, Valerie,

**SANCIBRIAN, Cheryl L.,** Associate 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.

**SATTERWHITE, Robin,** Assistant Professor and Regional Dean of Odessa, 1998; A.S., South Plains College, 1990; B.B.A., Texas Tech University, 1992; M.B.A., Texas Tech University, 1997.

**SAWYER, Steven F.,** Chair, Department of Rehabilitation Sciences, 2003; Program Director, Master of Physical Therapy program, 2002; Assistant Professor of Physical Therapy, 1994; B.S., University of California at Irvine, 1980; Ph.D., University of California at San Diego, 1988; MPT, Texas Tech University Health Sciences Center, 1997.

SC

of Oklahoma Health Science Center, 1982; M.P.A.S., University of Nebraska Medical Center, 1997.

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.

**WILLIAMSON, Elizabeth,** Assistant Professor of Physical Therapy, 2002; B.S., University of Texas Health Sciences Center San Antonio, 1981; M.A., Texas A&M University - Corpus Christi, 1993.

**ZHANG, Ming,** Assistant Professor of Speech, Language and Hearing Sciences; 2001; M.D., Shanghai Medical University II, 1980; Advanced M.D., Shanghai Medical University, 1988; M.S., Shanghai Medical University II, 1988; Ph.D., University of Iowa, 1995.
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