Texas Tech University Health Sciences Center

School of Pharmacy

Doctor of Pharmacy Program

2010-2011

Academic Year Bulletin

SCHOOL OF PHARMACY CAMPUSES:

Abilene	**Amarillo**	**Dallas/Ft. Worth**	**Lubbock**
1718 Pine Abilene, TX 79601 (325) 676-7948 Telephone (325) 676-1412 Facsimile	1300 S. Coulter Amarillo, Texas 79106 (806) 354-5463 Telephone (806) 356-4613 Facsimile	VA Medical Center Building 7 4500 Lancaster Road Dallas, TX 75216 (214) 372-5300 Telephone (214) 372-5020 Facsimile Southwest Campus 5920 Forest Park, Suite 400 Dallas, TX 75235 (214) 654-9404 Telephone (214) 654-9707 Facsimile	3601 4th Street, MS 8162 Lubbock, Texas 79430 (806) 743-4200 Telephone (806) 743-4209 Facsimile

BULLETIN

This bulletin is a publication of Texas Tech University Health Sciences Center School of Pharmacy containing information concerning policies, regulations, procedures, programs, courses, schedules, and fees.

The University reserves the right to change curricula, rules, fees, admission requirements, and other requirements without notice. The provisions for this Bulletin do not constitute a contract, express or implied, between any applicant, student, faculty member, or any other person and Texas Tech University Health Sciences Center (TTUHSC).

Texas Tech University Health Sciences Center is open to all persons regardless of race, religion, gender, lifestyle, sexual orientation, disability, or national origin who are otherwise eligible for admission as students.

Once admitted, students need to keep themselves apprised of rules and regulations pertaining to the School of Pharmacy found in the Bulletin and to Texas Tech University, found in the Texas Tech University Health Sciences Center Student Affairs Handbook.

This Bulletin is published by Texas Tech University Health Sciences Center School of Pharmacy, Amarillo, Texas 79106.
Aug 1, 2010

TEXAS TECH SYSTEM

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Mission Statement of the Health Sciences Center

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

Vision Statement of the Health Sciences Center

Texas Tech University Health Sciences Center will be recognized nationally as a top-ranked health sciences university.

School of Pharmacy Administration

Arthur A. Nelson, Jr., R.Ph., Ph.D., Dean

Thomas J. Thekkumkara, Ph.D., Regional Dean, Amarillo
Virgil Van Dusen, R.Ph., J.D., Regional Dean, Abilene
Richard D. Leff, Pharm.D., Regional Dean, Dallas
Charles F. Seifert, Pharm.D., Regional Dean, Lubbock

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Summer W. Balcer, M.Ed., Assistant Dean for Student Services
David K. Watson, Assistant Dean for Finance and Administration

Roland A. Patry, R.Ph., Dr.P.H., Chair, Pharmacy Practice
Cynthia L. Raehl, Pharm.D., Chair, Pharmacy Practice
Quentin R. Smith, Ph.D., Senior Associate Dean for Sciences
Ruiwen Zhang, M.D.,Chair Pharmaceutical Sciences

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Dean's Message

The residents of the Texas Panhandle worked for many years to build a pharmacy school. It was the vision of a dedicated group of pharmacists, citizens, and legislators to provide pharmacy education in West Texas.

Today that vision has become evident on the horizon of Amarillo in the lower plain of Lubbock, and the busy streets of Dallas/Fort Worth, and in 2007 the citizens of Abilene dedicated the new campus. The Texas Tech School of Pharmacy has made a significant impact on the health and well-being of many Texas' citizens.

Faculty, staff and, yes, doctoral candidates have come together to provide for the future of pharmacy and patient care. We offer an innovative curriculum. We have progressive teaching methods and technologies that will prepare students for pharmacy practice today and for the years to come. I can assure you that you will be intellectually challenged over the next four years.

I invite you to join in the excitement of the Texas Tech School of Pharmacy. You will partner with other health care professionals to provide patient care. *You* will make a difference and we want to provide you with the knowledge and skills to make that difference be the very best.

Arthur A. Nelson, Jr., R.Ph, Ph.D.

SCHOOL OF PHARMACY PHILOSOPHY

Traditionally, the pharmacist's role has been that of a dispenser of medications. However, this traditional method of practice is no longer adequate to ensure safety and effectiveness in the use of medications and health devices. The focus of practice must change from one of product distribution to a more expansive duty; assuming the responsibility for our patients' outcomes from the medications we dispense.

Health care reform has put an emphasis on primary health care. This emphasis coupled with a lack of access, increasingly rising costs, and a concern for quality is placing the pharmacist in an important role as a member of the primary health care delivery team.

Pharmacists are located in most rural communities and throughout inner cities and urban sprawl across the country. This physical placement of the pharmacist, who is trained in delivering comprehensive care to the public, allows access to primary health care where it is critically lacking. The role of the pharmacist as a member of the primary health care team does not replace the physician, physician assistant or nurse practitioner, but enhances their effectiveness. The pharmaceutical services provided in this changing arena include participatin*g* in the drug therapy decision process through recommending therapeutic objectives, selecting the most appropriate drug product to achieve the desired therapeutic outcomes given the patient's unique characteristics, determining dose and dosage schedule, selecting the drug product source of supply and drug preparation, and monitoring the patient's response to the therapy so that the patient receives the optimal benefits with minimal adverse drug effects. Texas Tech University Health Sciences Center School of Pharmacy offers the degree of Doctor of Pharmacy (Pharm.D.) with this expanded role of the pharmacist in mind. The effective delivery of essential primary health care services requires a greater responsibility of the pharmacist and a greater depth and breadth of education to support it.

It is a goal of all educators to foster within students the desire to learn and the ability to discover. Our curriculum has been designed to encourage intellectual development and help the student become a competent and skilled professional pharmacist. This is accomplished through conceptual competence, technical competence, integrated competence and career marketability.

Pharmaceutical education must provide students a fundamentally strong science base enabling them to understand the progression of diseases and how drug therapy can influence or reverse this process. Pharmacists evaluate clinical studies and use data to reach conclusions regarding a variety of issues. Graduates must be mathematically competent in the resolution of problems related to drug therapy. Analytical thinking must be cultivated allowing today's pharmacy pharmacist to be effective in decision making. Communication skills are essential in preparing the student to be an effective pharmacist. Graduates must have an understanding of the social context in which their profession is practiced. They must learn to first listen in order to effectively convey information regarding drug therapies. There must also be sensitivity to patients of all socio-economic levels and cultural backgrounds whose native language is not English.

TTUHSC School of Pharmacy's program is student centered, focusing on problem-based educational strategies. The curriculum provides an integrated course context of pathophysiology, pharmacology, medicinal chemistry and therapeutics, built on a solid understanding of the biomedical sciences. It offers expanded practice management instruction and clinical experiences early and throughout the four-year professional program. Each of the curricular and instructional strategies has been precisely balanced to give the academic and clinical preparation to optimally succeed in any pharmaceutical profession.

MISSION STATEMENT

Our mission is to enhance the lives of the diverse people of Texas and beyond, through excellence and innovation in: educating health-care practitioners, researchers, and educators, providing pharmaceutical care and service, and advancing knowledge through scholarship

VISION STATEMENT

Our vision is to become internationally recognized for expanding the pharmacist's role as a leader in healthcare by developing models and excellence in patient-centered care and collaborative drug therapy management. Our vision includes cutting-edge research from bench to bedside through unique collaborations between basic and pharmaceutical scientists to advance healthcare.

CULTURE STATEMENT

Our culture -the way we live and act -is created by a strong commitment to a set of core values based on mutual respect, professionalism and integrity. As a community of learners, we are committed to…

- A student-centered, positive learning community. We foster a personal dedication to the pharmacy profession and excellence in education, practice and research.
- Collaborative interpersonal relationships—defined as mutual learning, open communication and shared responsibility among faculty, administration and students.
- Compassionate care, an unwavering dedication, to each patient's pharmaceutical care needs.
- This care is supported by sound biological and behavioral understanding of healthcare.
- Community involvement and serving the healthcare needs of the citizens of Texas. Our outreach

projects enrich our community and provide students with a sense of public responsibility. Life-long learning and a willingness to change, be progressive, make timely and vigilant decisions, and evaluate our performances against stated goals.

OUTCOMES

The results of embracing and living the Texas Tech School of Pharmacy values are excellence; innovative pharmaceutical education; preparation of professionals with an unwavering ethical foundation; a positive, rewarding and stimulating work environment; and a noticeable and positive impact on the communities in which we work, study, and live.

Academic and healthcare environments that encourage open debate and dialogue, the introduction of new ideas and practices, innovation through collaboration, and an unwavering commitment to self-improvement.

ACCREDITATION

The Doctor of Pharmacy Program of the Texas Tech University Health Sciences Center is fully accredited by the Accreditation Council for Pharmacy Education (ACPE). Questions about the accreditation status of the Texas Tech University Doctor of Pharmacy Program may be directed to the Accreditation Council for Pharmacy Education at 20 North Clark Street, Suite 2500, Chicago, Illinois 60602-5109 (telephone 312-664-3575).

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

PURPOSES AND FUNCTIONS

The purpose of the program is to prepare entry-level pharmacy practitioners with minimum competencies in the following areas:

1. Provide patient centered care which is defined as the ability to design implement, monitor, evaluate and adjust pharmacy care plans as well as manage a patient-centered practice to include establishing, marketing and being compensated for medication therapy management and patient care services rendered.
2. Manage human, physical, medical, informational, and technological resources, which is defined as the ability to ensure efficient, cost-effective use of resources in the provision of patient care.
3. Manage medication-use systems which is defined as the ability to apply patient- and population-specific data quality improvement strategies, medication safety and error reduction programs, and research processes to minimize drug misadventures and optimize patient outcomes; to participate in the development of drug use and health policy; and to help design pharmacy benefits.
4. Promote the availability of effective health and disease prevention services and health policy, which is defined as the ability to apply population-specific data, quality improvement strategies, informatics, and research processes to identify and solve public health problems and to develop health policy.

5. Provide population based care, which is defined as the ability to develop and implement population-specific, evidence based disease management programs and protocols.

GENERAL IN FORMATION

The Texas Tech University Health Sciences Center was created with the establishment of the School of Medicine by the 61st Texas Legislature in May, 1969 as a multi-campus system; establishing Lubbock as the central administrative unit, with other regional campuses. The School of Medicine formally opened in 1972. The Amarillo campus accepted medical residents as follows: 1974 -Family Medicine, 1978 -Pediatrics, 1979 -OB, 1982 -Internal Medicine and Psychology/Neurology, 1988 -Internal Medicine/ Pediatrics. The first medical students entered class in Amarillo in 1978.

The School of Nursing was initiated with the first class in 1981. Nursing education is focused in Lubbock and Odessa. West Texas A&M University and Amarillo College offer nursing programs at the associate, baccalaureate and masters level in the Panhandle.

In 1993, the 73rd Texas Legislature approved an expansion of the School of Allied Health, which was established in 1983, and a new School of Pharmacy. Pharmacy is the first academic program of the University to be administratively based outside the main campus in Lubbock. These two schools have expanded the missions of Texas Tech University Health Sciences Center at Amarillo.

The Allied Health curriculum at Amarillo currently is divided into two programs, physical therapy and occupational therapy. Other programs offered by the school at other campuses include Medical Technology, Communications Disorders, and Emergency Medical Technology.

The School of Pharmacy

The School of Pharmacy accepted its first class of 64 full-time students into the professional program beginning Fall, 1996. Currently, 130 students are now admitted once each year in the fall semester. Students may be admitted to the Amarillo campus or the Abilene campus. If admitted to the Amarillo campus, students spend their first two years on the Amarillo campus, then complete their third and fourth years on one of the regional campuses – Amarillo, Dallas/Fort Worth, or Lubbock. If assigned to Abilene, students will stay for the duration of their pharmacy education. The School of Pharmacy has more than 445 students enrolled in professional and postgraduate programs. The School of Pharmacy employs approximately 90 full-time equivalent faculty, 23 post-doctoral pharmacy residents, and 38 graduate teaching and research assistants; approximately 113 staff serve the students and programs of the School.

The School of Pharmacy is based in a 102,000 sq. ft. building on the Amarillo campus of the Texas Tech University Health Sciences Center. The building was provided through funds donated by the people of Amarillo. The Pharmacy building features: a 240-seat lecture center and five classrooms offering interactive video conferencing capabilities and network capabilities. These classrooms allow students to interactively view and respond to off-site based instruction while also having computer access to images via the Internet. Other facilities include a Drug Information Center, multiple small group conference rooms, museum, teaching laboratory, and student

lounge.

The Pharmacy Building is located directly across Coulter Drive from Northwest Texas Hospital. The campus is comprised of the School of Pharmacy, the Texas Tech Clinic and the schools of Medicine and Allied Health Sciences, and Library of the Health Sciences Center.

The Abilene campus is housed in a 35,000 building located adjacent to the Hendrick Medical Center. It offers two video conferencing classrooms outfitted with high speed data ports for each student, two flexible seating classrooms, a drug information center, six case study rooms, teaching laboratory for compounding and dispensing drugs, a patient counseling practice room, a physical assessment laboratory, student lounge and study areas, and a 4,600 research laboratory.

The Dallas/Fort Worth campus is centered on the campus of the Dallas Veterans Affairs Medical Center. The Pharmacy School building is approximately 10,000 sq. ft. and houses a P3 classroom linked to the other campus, administrative and faculty offices, small group rooms and a student lounge. Students have rotations among numerous hospitals, clinics and community pharmacies throughout the Metroplex, working on teams of medical students and other health professionals throughout their two years.

The Lubbock campus is part of the 1+Million TTUHSC complex on the Texas Tech University campus. Lubbock students have access to all facilities and programs that and a comprehensive health sciences center and major academic campus of more than 30,000 students offer. Pharmacy students share classrooms, clinics, and hospitals with medical, nursing and other allied health sciences students.

Affiliated Teaching Hospitals

School of Pharmacy faculty and students provide patient care in the following hospitals:

Amarillo VAMC

The Amarillo Department of Veterans Affairs Medical Center is a 254 bed General Medicine and Surgery facility employing 850 people. It offers health services to a large geographic area encompassing the Texas Panhandle as well as parts of New Mexico, Oklahoma, Colorado and Kansas. The medical center has a highly complex pharmacy offering a wide variety of service to include: total computerization, unit dose, I.V. admixture, oncology preparation, drug information, investigational drugs, and an open front outpatient pharmacy. Special programs are pharmacist-directed lipid, ulcer and anticoagulant clinics.

Baptist/Saint Anthony's Healthcare System

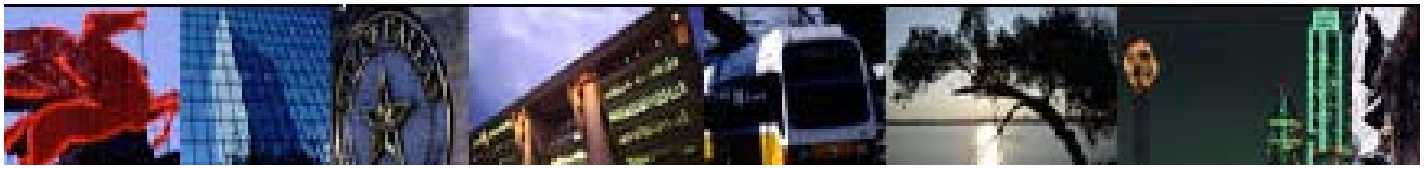
This combined healthcare facility is jointly licensed as a 746-bed acute care medical surgical facility. Current pharmacy practice includes the traditional aspect of unit dose distribution as well as clinical services such as target-drug monitoring, a decentralized pharmacy, drug information, clinical

interventions, creatinine-clearance estimations and dosage adjustment recommendations. Staff pharmacists also participate in patient teaching programs.

Northwest Texas Healthcare System

Northwest Texas Hospital is a 300 bed general acute care hospital with services in Pediatrics, Pediatric Intensive Care, Labor & Delivery, Neonatal Intensive Care, Amarillo Emergency Receiving Center, medical and surgical services including, Medical and Surgical Intensive Care, Coronary Intensive Care and Level II Trauma Center Services. Pharmacists are actively involved in drug information counseling, patient profile review and drug monitoring, pharmacy and therapeutics functions, medication use evaluation, adverse drug reaction reporting, improving the quality of drug therapy, cost containment, assisting in Code Blue responses, documenting their impact on drug therapy, and continuous quality improvement and total quality management team activities.

ABILENE



DALLAS/FORT WORTH

VA North Texas Health Care System

The primary teaching site of Texas Tech Health Sciences Center School of Pharmacy (Dallas/Ft. Worth Regional Center) is the VANTHCS hospital. The School of Pharmacy's Regional Center classroom building is physically located on the campus of the VANTHCS and many clinical pharmacy faculty practice and teach at the VA facilities. The mission of the VANTHCS is to provide quality patient care to veterans; facilitate an environment for excellence in education; establish a climate which enhances research; and support the Department of Defense in a national emergency.

Baylor Health Care System

The Baylor Health Care System has facilities located in Dallas, Fort Worth, Garland, Grapevine, Irving, Waxahachie, and Plano. All of these sites are exemplary experiential clerkship sites utilized by the School of Pharmacy. Baylor Dallas has exemplified excellence in patient care, medical education, research, and community service. *U.S. News & World Report* has ranked Baylor Dallas among the best hospitals in the United States. Baylor Dallas is ranked among the 50 top hospitals in each of the following six specialties; digestive disorders (ranked 18); gynecology (19); heart & heart surgery (26); kidney disease (39); neurology & neurosurgery (34); and orthopedics (20).

Texas Health Resources

Texas Health Resources (THR) is one of the largest faith-based, nonprofit health care delivery systems in the United States. The system serves more than 6.2 million people living in 29 counties in north

central Texas. In 2003, more than one in five area residents receiving in-patient care sought treatment at a THR hospital. THR was formed in 1997 with the merger of Fort Worth-based Harris Methodist Health System and Dallas-based Presbyterian Healthcare Resources. Later that year, Arlington Memorial Hospital joined the THR system. THR has 13 hospitals with 2,405 licensed hospital beds, employs more than 17,300 people and counts more than 3,200 physicians with active staff privileges at its hospitals. Experiential clerkship sites are highly sought by Texas Tech Health Sciences Center School of Pharmacy students.

Methodist Health Systems

Methodist Health System offers health and hope to more than 300,000 people a year at our hospitals and family health centers in North Texas. From education and health screenings to multi-organ transplants and advanced cancer treatment and care, we serve our community with some of the latest in preventive, diagnostic, and treatment technology. Every program and treatment is part of our resolve to be an active and compassionate partner in the good health of the entire community. School of Pharmacy students seek unique experiential clerkship sites at Methodist Health System.

Children's Medical Center Dallas

Children's is a private, not-for-profit institution. It is the only Dallas healthcare facility that deals exclusively with a variety of diseases and disorders among children from birth to age 18. The center is licensed for 406 beds, including a 52-bed pediatric intensive care. The hospital also has more than 50 outpatient clinics and a state-of-the-art emergency center designed specifically for children. Children's is one of only 14 national pediatric research centers sanctioned by the National Institutes of Health. Faculty members of the University of Texas Southwestern Medical Center at Dallas are members of the Children's medical staff. They conduct research that is instrumental in developing treatments, therapies and greater understanding of pediatric diseases. This research is nationally recognized for programs devoted to cancer, cardiothoracic, neonatology, kidney disease, infectious disease, pharmacology, sickle cell disease and psychiatry. Specialized training in pediatric pharmacy is critical to School of Pharmacy students.

Cook Children's Health Care System

Cook Children's Hospital is a private, not-for-profit institution. It is the only Fort Worth healthcare facility that deals exclusively with a variety of diseases and disorders among children from birth to age 18. The medical center is licensed for 282 beds designed specifically for children. Cook's provides quality health care to children through an integrated system which oversees a continuum of services ranging from simple preventive checkups at pediatrician's offices to highly specialized hospital-based critical care. Specialized training in pediatric pharmacy is critical to School of Pharmacy students.

Covenant Health System

Covenant Health System is the largest healthcare institution in the West Texas and eastern New Mexico region, with 1338 licensed beds, 4,500 employees and more than 600 admitting physicians at its cornerstone facilities in Lubbock including Covenant Medical Center, Covenant Medical Center-Lakeside, and Covenant Children's Hospital. Led by Covenant Hospital Levelland and Covenant Hospital Plainview, Covenant has a network of 18 leased, managed and affiliated community hospitals and eight Covenant Family Healthcare Centers as well as physician offices offering primary medical care in the region.

Mildred and Shirley L. Garrison Geriatric Education and Care Center

Mildred and Shirley L. Garrison Geriatric Education and Care Center is a state of the art 120-bed teaching nursing home. It is the only teaching nursing home of its kind in the country located on a Health Sciences Center campus. There are 60 beds devoted to progressive Alzheimer's care with 20 beds each devoted to mild, moderate, and severe dementia. There are 60 beds devoted to medical care with a 30-bed skilled nursing facility. The Garrison Center is also equipped with state of the art telemedicine equipment and a distance learning classroom.

University Medical Center University Medical Center is a 416 bed tertiary care teaching hospital which provides 21.8 million dollars annually in charity care to Lubbock and surrounding counties. It is home to the only burn unit, Level-I trauma center and bone marrow transplant unit in the region. It also houses a 42-bed NICU, 24-Bed PICU, 24-bed SICU, 14-bed MICU, and brand new cardiac care floor. It is also home to the Children's Miracle Network hospital for the city of Lubbock and the newly renovated Southwest Cancer and Research Center.

Veterans Affairs Outpatient Clinic The Veterans Affairs Outpatient Clinic in Lubbock is an outreach center from the Amarillo Veterans Affairs Health Care System. The clinic is a brand new 40,000 square foot facility with over 60,000 outpatient visits per year. There are three pharmacist-run clinics including medication referral (diabetes and hypertension), lipid lowering, and anticoagulation.

The Program

The School of Pharmacy offers the Doctor of Pharmacy (Pharm.D.) as its single professional degree. The 4-year professional program, requiring at least two years of pre-professional studies that may be completed at any accredited college or university.

Doctoral Candidates are admitted once each year for enrollment in the fall semester, which starts in early August. Studies must be on a full-time basis. Doctoral Candidates will spend the majority of each weekday in classes, laboratories, or clinical experiences.

Texas Pharmacy Museum Tucked away in the basement of the Texas Tech School of Pharmacy building, the 3,000 square-foot Texas Pharmacy Museum is the only site in the state that specializes in collecting, preserving and laying items that document the history of pharmacy. The museum's

collection consists of approximately 10,000 items including pharmacy art books, containers, laboratory glassware and various other commercial remedies, products, and tools of the trade dating as far back as the Civil War. Since it opened in 1998, these pieces of drugstore history have made their way to the museum from 90 different donors in Texas, California and Pennsylvania.

Personal images may be captured during events organized and hosted by the University using film photography, digital photography, video or other mediums and may be used on the Website, University prospectus or course brochures, other publicity material (such as internal and external newsletters), exhibition of student work or graduation ceremony brochure and may be provided to the media for publication in local or national newspapers or educational magazines. At no time will the School or University sell a personal image.


DALLAS ZOO

ACADEMIC CALENDAR FOR 2010-2011

	Summer 2010	Fall 2010	Spring 2011
Registration			
Early Registration for Returning Students	April 5-May 1, 2010	April 5-July 15, 2010*	Expected dates November, 2010*
Regular Registration for New Students	NA	June 1-July 15, 2010*	NA
Regular Registration for Returning Students	April 5-May 1, 2010	April 1-July 15, 20010	Expected dates November, 2010*
Bootcamp for P1's	NA	August 2 – 13, 2010 White Coat Ceremony Aug. 1 (Sunday) Amarillo and Abilene campuses	NA
Classes Begin	May 17, 2010	P1's August 2, 2010 P2-P4's August 16, 2010	January 3, 1010
12th Day of Semester	June 1, 2010	August 31, 2010	January 18, 2010
Rotation 1	May 17-June 25, 2010		
Rotation 2	July 5-August 13, 2010		
Rotation 3		August 16-September 24, 2010	
Rotation 4		September 27-November 5, 2010	
Rotation 5		November 8-December 17, 2010	
Rotation 6			January 3-February 11, 2011
Rotation 7			February 14-March 25, 2011
Rotation 8			April 4-May 18, 2011
Special Activities			
White Coat Ceremony		August 1, 2010 1:30 pm in Amarillo & Abilene – Location TBA	
Annual Assessment Day			January 22, 2011
Assessment Meetings		P1 Required Convocation Hr. – Introduction and summary of Assessment Program Sept. 17 All Pharmacy Convocation Hr – Assessment Mandatory Meeting Dec. 3	
Career Fair		Scheduled in Lubbock November 5	
Graduation			Hooding –May 20, 2011 Graduation—May 21, 2010
P3 Transition Meeting			TBA
Recognition of Excellence Awards			April 29, 2011 Excellence Awards – Convocation Hour
Class Closings			
Student Holidays	June 26, 2010-July 5, 2010	September 6, 2010	January 17, 2011 Martin Luther King Day
Thanksgiving		November 24-26, 2010	
Winter Break		December 19-January 2, 2011	
Spring Holiday			TBD March, 2011 (Faculty, Staff and Students) Spring Break Student Spring Break March 27-April 3, 2011
Memorial Holiday	May 31, 2010		May 30, 2011

*Dates subject to information yet to be received from the Bursar's Office. Please refer to the Billing Schedule when received.

PHARMACY LICENSURE

Graduates from the Texas Tech University Health Sciences Center School of Pharmacy will be eligible to apply for licensure in any state or territory of the United States. Licensure as a pharmacist is administered by boards of pharmacy in each state. Every state and territory requires graduates to complete the North America Pharmacy Licensure Examination (NAPLEX), as well as a state prepared examination on laws and rules for pharmacy practice within the state. The NAPLEX is administered throughout the country at testing centers using testing procedures. Scores may be reported to any state. Many states require some internship experience after completing the degree requirements. Students are advised to contact the board of pharmacy in the state they desire to apply for licensure for more detailed information on requirements. In Texas, the Board of Pharmacy may be contacted as follows:

Texas State Board of Pharmacy
333 Guadalupe
Tower 3, Suite 110
Austin, Texas 78701
(512) 305-8000

TEXAS RESIDENCY

Texas Tech University Health Sciences Center School of Pharmacy gives preferential admission status to residents of the state. This means that when competing for admission, a Texas resident will be admitted before a student of equal qualifications with non-resident status. The rules and regulations for determining residence status are pursuant to the Title 3, Texas Education Code, Statute/Sections 54.052 and 54.055.

Contact the Office of Student Affairs in the School of Pharmacy if you have any questions.

HEALTH SCIENCES CENTER STUDENT SERVICES

Services common to the students on all campuses for the Schools of Pharmacy, Medicine, Allied Health, and Nursing are under one office. The basic elements of this office are:

Office of the Registrar (806) 743-2300

As custodian of the students' permanent academic records, the Registrar's Office is also responsible for registration, grade reports, transcript requests, enrollment and veteran certification. Questions related to Texas residency status are also resolved in this office.

Office of Financial Aid (806) 743-3025

Students desiring financial assistance or information regarding loans and scholarships find assistance within this office. Federal, state and local programs are available to students who appropriately demonstrate financial need.

1. Office of Student Services in Lubbock (806) 743-2300 Student needing information about

TTUHSC's health insurance, student organizations, graduation application, graduation dates, and graduation regalia.

2. Student Affairs in Amarillo (806) 354-5418; students needing assistance with campus issues, application, academic issues, and personal counseling should seek help here.

A. Health Insurance. You are not REQUIRED by Texas Tech University Health Sciences Center (TTUHSC) to pay a Medical Services Fee per semester. With this fee, you can access healthcare in the clinic and see a nurse or physician at no charge for minimal or limited minor problems. Health insurance is not required to obtain services from the Family Practice Clinic which are located on each campus. Health plan coverage is strongly recommended for all students to cover major medical, emergency care, specialty care, and pharmacy as these services can be expensive and are not covered by the health care provided by TTUHSC. TTUHSC highly encourages and strongly recommends that each student possess medical insurance for emergency situations, and for basic medical care needs, especially since students may be exposed to disease during clinical training. You may obtain suitable coverage from the following provider at a very competitive price if you do not have other insurance.
http://www.ttuhsc.edu/studentservices/studenthealth.htm

B. Commencement Coordination of graduation exercises for the School of Pharmacy is provided by Office of Student Services in Lubbock.

3. Student Affairs in the School of Pharmacy (806) 354-5457 Amarillo office

A. Extracurricular Events Information about tickets to cultural events in the community is available through the Office of Student Services.

B. Recreation Center Each campus has information regarding the facilities at each location.

C. Amarillo HSC Student Senate The Office of Professional Affairs serves as sponsor and provider of staff support to School of Pharmacy Senators to the Amarillo HSC Student Senate, which was established to foster better relationships between the students in all three schools.

4. The following are contact numbers for additional offices with the School of Pharmacy.

A. Amarillo

Dean's Office (806) 354-5457

Department of Pharmacy Practice (806) 356-4000 Ext. 238

Department of Pharmaceutical Sciences (806) 356-4015 Ext. 245

Instructional Services (Computers) – (806) 356-4000 Ext. 266

Financial Administration (806) 354-5463

Drug Information Center (806) 356-4008

Managed Health Care (806) 356-5375

B. Abilene

Regional Dean's Office (325) 676-7948

B. Lubbock

Regional Dean's Office (806) 743-4200

C. Dallas/Ft. Worth

Regional Dean's Office (214) 654-9404

You are urged to contact the School of Pharmacy, Office of Student Affairs at (806) 354-5418 with questions pertaining to any of these areas.

HEALTH SCIENCES CENTER HEALTH SERVICES

Counseling Services Confidential mental health services are available for students. These services include help in stress management, crisis, relationships, family problems, anxiety, depression, and any other situations with potential to interfere with academic success. Psychologists provide the needed free sessions. Psychiatric referral is available when needed. They are available for consultation and counseling regarding personal, academic, and career issues. *These services are structured in such a manner as to provide and maintain strict confidentiality.*

Immunizations

- Updated information about immunizations will be provided during your school's orientation. If you require an immunization administered by the Family Medicine clinic, you will be required to pay a fee.
- For an immunization, it is not necessary to be seen by a physician, but a nurse appointment is required. Female students must have a nurse appointment for a pregnancy test prior to an MMR immunization.
- Please bring your immunization records with you at the time of your first visit.
- Please contact the Office of Student Services for the most up-to-date information on immunizations.

Pharmacy

The Student Health Fee does not include a prescription benefit; thus, students are responsible for medication costs. However, a discounted option for pharmacy services includes Wal-Mart's $4 Generic Drug program. The Family Medicine clinic should be able to provide more information.

Confidentiality

All medical records are strictly confidential. By federal law, information cannot be released to anyone without the written consent of the patient, except as required by a court. You may have copies of your immunizations upon request. We will be happy to send copies of laboratory tests or other information to your physician of choice, upon your written release.

Clinic Locations

Texas Tech Physicians of Amarillo
Family & Community Medicine
1400 Coulter, Suite 5100, Amarillo, TX 79106
Phone: 806-351-3777
8-5, Monday-Friday
Emergencies: BSA Hospital

Texas Tech Physicians of El Paso
Family & Community Medicine
Texas Tech Family Medicine Center
9849 Kenworthy, El Paso, TX 79924
Phone: 915-757-2581
8-5, Monday-Friday
Emergencies: Thomason Hospital

Texas Tech Physicians of Lubbock
Family & Community Medicine
TTUHSC Building, 1st Floor, Medical Pavilion
3601 4th Street, Lubbock, TX 79430
Phone: 806-743-2757
8-5, Monday-Friday
Emergencies: University Medical Center

Texas Tech Physicians of Odessa
Family & Community Medicine
Health Center, 1st Floor
701 W. 5th Street, Odessa, TX 79763
Phone: 432-335-5333
8-5, Monday-Friday
Emergencies: Medical Center Hospital

Health Services *for* TTUHSC Students

Allied Health • Medicine
Nursing • Pharmacy
Graduate School of
Biomedical Sciences

Texas Tech Physicians
Amarillo
El Paso • Lubbock
Permian Basin

Department *of*
Family & Community
Medicine

rev. 5/10

Health Services for TTUHSC Students

Eligibility

The Texas Tech Physicians Family & Community Medicine clinic provides health services to TTUHSC students who are currently enrolled and have paid the Student Health Fees as part of tuition and fees. To receive health services, you must present a Student I.D. card at the time of the appointment. If you also have private insurance in addition to Student Health Services, you will need to submit your receipt for the co-pay to your insurance company for reimbursement.

The Student Health Fee covers only those services provided by the Family & Community Medicine clinic and specific laboratory and radiology service performed at cooperating locations. ***All other charges incurred are your responsibility.***

Clinic Appointments

- Please call to make an appointment. If you need to be seen for a sudden illness, please call that day as early as possible.
- If you need to be seen after clinic hours, call your campus's clinic phone number and ask to leave a message for the on-call physician.
- When you check in, please inform the receptionist that you are a TTUHSC student. If you come to the clinic without an appointment, it may be necessary for you to wait for a physician.

Immunizations, paper work, and routine procedures are not ordinarily considered urgent care, and may not be taken care of on the same day as requested.

Staff

The medical staff of the Texas Tech Physicians Family & Community Medicine clinic is composed of faculty and resident physicians and a nursing staff.

Emergencies

If you have a health emergency that requires you to be seen at a hospital emergency room, go to the hospital listed for your campus under "Clinic Locations." *Visits to an emergency room that generate a charge from either TTUHSC or the hospital are your responsibility.*

Fees

Effective 9/1/2007, TTUHSC students are required to pay the following fees:

Physician Visit..... $10

Physician Visit with Pap Test and/or STD* testing..... $25
*testing for chlamydia, gonorrhea or syphilis

Physician Vist with Colposcopy Procedure $60

Services Covered

Medically Necessary Laboratory Services *(ordered by Family Medicine Clinic)*

Chemistry
- Glucose, Random/Fasting
- Amylase
- Lipase
- Potassium
- Total Protein
- Total Bilirubin
- Calcium

Profiles
- Chemistry Profile
- Lipid Profile
- Liver Profile
- Thyroid Function Panel

Microbiology
- Strep Screen
- Throat Culture
- Urine Culture
- Urinalysis
- GC Testing

Virology
- Chlamydia testing
- Hematology
- CBC w/diff
- CBC w/o diff
- Sed Rate

Immunology
- RPR (syphilis)
- Monospot
- Pregnancy Test (Qualitative Only) Blood or Urine

Radiology Services

• Chest	• Ribs	• Spine
• Pelvis	• Hips	• Shoulder
• Humerus	• Elbow	• Forearm
• Wrist	• Hand	• Finger
• Femur	• Knee	• Tibia/Fibula
• Ankle	• Foot	• Abdomen

All covered laboratory and radiology services must be ordered by the Family Medicine physician. Any additional lab tests or radiology services, consultations, visits to other departments at TTUHSC, or visits to an emergency room that generate a charge from either the Texas Tech Physicians Family & Community Medicine clinic or the hospital will be your responsibility.

If you receive a bill from TTUHSC for services covered by the Student Health Fee, please bring the bill to the Texas Tech Physicians Family & Community Medicine clinic as soon as possible.

Services NOT Covered

- Emergency room visits
- Hospitalizations
- Laboratory (other than listed)
- Radiology (other than listed)
- Procedures (other than colposcopy)
- Immunizations
- TB & AIDS tests
- Antibody Titers
- Durable medical equipment (DME)
- Medications administered in clinic

The Health Services provided to you as a TTUHSC student do not constitute a health insurance policy. For questions about services, please contact the Office of Student Services 806-743-2300

Health Services for TTUHSC Students

Campus Parking

Limited parking facilities are available. Any student wishing to park on any of the campuses will be required to obtain a permit and pay the Parking Permit Fee.

Student Housing

The School of Pharmacy does not furnish living quarters for its students. Housing is individual and each student makes his/her own arrangements. Most students live in apartments or houses in the community. Apartment guides may be obtained from the School of Pharmacy, Office of Student Affairs.

FINANCIAL INFORMATION

Tuition and fees are established each year by the Board of Regents. In addition to tuition and fees, students are responsible for their books, supplies, travel and personal expenses associated with completing their clinical experiences. A laptop computer, compatible with the School's system is also required. Contact the Office of Student Affairs to receive the specifications. A $100 application fee must be submitted with the application for admission. The application fee is non-refundable. Applications will not be processed without this fee. The fee is waived for TTUHSC employees on at least a 9-month appointment, their spouses and dependent children under age 25. Upon acceptance of an offer of admission, the student pays an additional $100 nonrefundable placement guarantee fee.

Financial Aid

Texas Tech University Health Sciences Center believes the primary responsibility for financing education lies first with the student and his/her family. When the total resources they can provide do not meet expenses, it is the objective of the financial aid program at TTUHSC to provide financial assistance to students who, without such assistance, would not be able to pursue advanced education.
Financial Aid at TTUHSC comes from many sources. Although qualifications for each funding program might differ, no student shall be excluded from participating in or be denied the benefits of any financial aid program on the basis of age, sex, race, color, religion, national origin, or disability.

For specific information contact the TTUHSC Financial Aid Office at (806) 743-3025. Students enrolled in the pharmacy program in Amarillo may use the phone in the Office of Student Affairs to make a toll free call to the Financial Aid Office in Lubbock. Inquire in the Student Affairs Office. Information regarding step-by-step instructions for completion of financial aid can be found on our website.

Scholarships

Awards distributed by the School of Pharmacy are based on academic achievement, leadership, extra-curricular activities, and financial need. Scholarship recipients are selected by the School of Pharmacy Faculty Scholarship Committee, a subcommittee of the Student Affairs Committee. Award decisions are made in the summer for the following academic year.

To be considered for scholarships for the upcoming school year, students must submit an online application no later than May 23rd. Currently enrolled students with a minimum cumulative GPA of 80.0% and entering students with a minimum GPA of 3.0 (GPA calculated using only required prepharmacy course grades) are eligible. Entering students' transcripts must be on file with the Office of the Registrar by June 1st. To be considered for awards based upon financial need, the applicant must submit a copy of his Texas Tech University Health Sciences Center Office of Student Financial Aid Initial Award letter by May 23rd to:

TTUHSC School of Pharmacy Scholarships Attention: Linda Goldstein 1300 S. Coulter Amarillo,

Texas 79106

For additional information, contact the Office of Student Affairs at: 806-354-5418 or linda.goldstein@ttuhsc.edu

Scholarships available to TTUHSC Center School of Pharmacy students include:

SOP Academic Achievement
J.V. Adcox Memorial
Amarillo Area Foundation Community
Bexar County Pharmaceutical Association
Bill Wehner Memorial
Byrd Family
CVS
Cardinal Health
Ashlyn B. Cox Memorial
Dean's Leadership
Gary Collins
James A. “Buddy” Davidson
Norman J. Dozier Memorial
Eckerd
HEB Pharmacy
Lonnie and Nancy Hollingsworth
Katelyn Jill Turner Memorial
MedcoHealth Solutions
Michael Patry Memorial Scholarship
National Association of Chain Drug Stores Foundation
Pharmacists Mutual
Purdu Pharma
Reinhaus Family Foundation
Reverend Arthur Nelson, Sr. and Anne Nelson Memorial
Roberta High Memorial
Scholarship for Disadvantaged Students
SOP Academic Excellence
Sybil B. Harrington Foundation
Tarrant County Pharmaceutical Association
Texas Federation of Drug Stores
Tom Thumb/Randalls/Safeway
United Supermarkets
Walgreens Diversity
WalMart
Weinstein Family
West Texas Pharmaceutical Association

Emergency Tuition Loan Program

Resident and non-resident students as well as students that do not apply for financial aid may be eligible for an emergency loan.

This loan is used exclusively for payment of current tuition and fees. There is no minimum hour requirement. Students may apply for this loan through the Financial Aid Office. A promissory note must be signed and funds will be applied to the student's account. The loan amount will cover the cost of tuition and fee charges for the currently enrolled classes. The loan is of 90-day duration or the close of the semester (whichever comes first) and is payable in full no later than the established due dates. The interest rate is five percent per annum and is calculated from the loan origination date. This loan **program may not be available for summer sessions.**

Academic Year 2010-2011 Estimated Tuition

Tuition		
State Tuition	TX Resident	Non-TX Resident
41 credit hours @$150/credit hour (Texas Resident)	$6,150.00	
41 credit hours @$428/credit hour; (Non-Resident)		$17,548.00
Institutional Tuition		
41 credit hours @$135/credit hour	$5,535.00	
41 credit hours @$135/credit hour		$5,535.00
Total Tuition	**$11,685.00**	**$23,083.00**
ESTIMATED FEES		
Malpractice Insurance (each fall semester/per year)	$17.00	$17.00
Medical Services Fee ($70.00/semester)	$140.00	$140.00
Student Services Fee ($11.00/cr hr, max $132	$264.00	$264.00
Course Fees (14 @ $45 max)	$630.00	$630.00
Lab Fees (3 courses @ $30.00/course)	$90.00	$90.00
Drug Information and Materials Fee (each fall)	$155.00	$155.00
Clinical Simulation Center Fee P1 Spring, P2 Fall and Spring	$75.00	$75.00
Clinical Immunization Fee ($40.00/fall semester)	$40.00	$40.00
Identification Card Maintenance Fee ($5.00/semester)	$10.00	$10.00
Information Technology Fee ($10.00/cr. hr.)	$410.00	$410.00
Record Processing Fee ($5.00/semester)	$10.00	$10.00
Annual Assessment Fee (spring only)	$60.00	$60.00
Transportation Fee (Fall only)	$122.00	$122.00
Parking Fee	$65.00	$65.00
Graduation Fee	$50.00	$50.00
International Student Fee		$30.00
Total Fees for First Year	**$2,138.00**	**$2,168.00**
Estimated Books and Supplies for First Professional Year		
Text books	$500.00	$500.00
Lab jacket/name badge	$45.00	$45.00
Laptop computer (range $2,500 - $4,000)	$3,250.00	$3,250.00
Estimated Total for Outside Expenses for First Year	**$3,795.00**	**$3,795.00**
Total Estimated First Year Expenses Books/Supplies/Computer	**$5,933.00**	**$5,963.00**
Total of Tuition, Fees & Expenses for First Year	**$17,618.00**	**$29,046.00**
APPLICABLE CHARGES		
Installment Payment of Tuition/Fees Option Fee	$25.00	$25.00
Late Charges on Loans	$25.00	$25.00

Late Payment Fees (after the 2nd working day following the billing due date, $50.00 per due date	$50.00	$50.00
Late Registration Fee (beginning 1st class day)	$50.00	$50.00
Returned Check Charges (per occurrence)	$30.00	$30.00
Post Census Day Matriculation Fee	$200.00	$200.00

ADMISSION FEES

Placement Guarantee Fee (Non-Refundable)	$100.00
Application Fee (Non-Refundable)	$100.00

Tuition, fees and expenses are subject to change at anytime without notice.

Tuition is set by Texas State Statute and fees are set by the Texas Tech University Health Sciences Center Board of Regents each year. Students are also responsible for their books, supplies, laptop computer, materials and personal expenses, including travel and housing during their clinical experiences.

Refund of Tuition and Fees

A student who officially withdraws from the Texas Tech University Health Sciences Center School of Pharmacy may be entitled to a refund of tuition and fees, if the withdrawal occurs within the time frame below.

Withdrawal

Prior to first class day	100 percent
During the 1st five class days	80 percent
During the 2nd five class days	70 percent
During the 3rd five class days	50 percent
During the 4th five class days	25 percent
Anytime after	None

Financial Information

Tuition and fees will be established each year by the Board of Regents. In addition to tuition, students are responsible for their books, supplies, travel and personal expenses associated with completing their clinical experiences. A laptop computer, compatible with the School's system is required.

DOCTOR OF PHARMACY ADMISSIONS POLICY

Admission to the Texas Tech University Health Sciences Center School of Pharmacy is open to all individuals who have permanent U.S. residency status. Applicants who are residents of Texas and adjacent counties in New Mexico, Oklahoma and Arkansas are given preference over equally qualified out-of-state applicants. Applicants must have completed at least two years of pre-professional studies at any regionally accredited U.S. college or university and must present official transcripts of having completed 72 hours of designated courses with a grade of C or better. Students that have attended Texas Tech University are not required to submit official transcripts since they are part of the Texas Tech University System. Applicants must complete the application form, request three letters of reference from individuals who can attest to the applicant's morals, ethics, academic and life experiences. Applicants are provided the opportunity, through the consideration of personal statements, recommendations, and essays to demonstrate their potential contributions to diversity. Applicants must also complete the Pharmacy College Admissions Test (PCAT) with a composite score of 50% or better.

THE ADMISSION PROCESS

The Admission Process begins in early September each year and continues through the regular admission

deadline. During the spring, prior to fall admissions each applicant will have a staff review of their application reviewed upon receipt. Applications will be assessed on the following criteria. To be eligible for review, each applicant must have a minimum pre-pharmacy grade point average (GPA) of 3.0 on a 4-point scale on the list of prerequisite courses completed by the published deadline date each year. The pre-pharmacy grade point average (GPA) is calculated by considering only the last grade received for designated courses taken in the general requirements. Students making application shall have completed, or expect to complete at least two full academic years of pre-pharmacy before entering the Pharm.D. program in August. Completion of all prerequisite courses should be within the last seven (7) years, i.e., Fall 2011 minus 7 = Fall 2004, and will require a written request to have the Dean's approval for older course work. Courses will vary somewhat, based on the curriculum offered at various schools. General requirements are as follows:

General Chemistry (for majors), with lab 8 SCH**
Organic Chemistry, with lab 8 SCH**
General Physics (trig or calculus based), 4 SCH**
General Biology (for majors), with lab 8 SCH**
Microbiology, with lab 4 SCH**
Calculus 3 SCH**
Statistics 3 SCH**
Speech (public speaking) 3 SCH**
Economics, macro 3 SCH**

New elective effective for class Fall of 2011

A three thousand level course is required in the broad field of human-based sciences. Specific branches may include anatomy, biology, biochemistry, bioengineering, bioinformatics, biomechanics, biomedical research, biophysics, biotechnology, developmental biology, genetics, histology, microbiology, molecular biology, neurobiology, pathophysiology, pharmacology, physiology, and virology.

- A three thousand level course is based on the Texas Common Course Numbering System (TCCNS). Some schools may use a three digit numbering system. A three hundred level course may not qualify as a three thousand level TCCNS course equivalent.
- Applicants wishing to have a course evaluated for approval may submit a request to the Office of Student Services. **

*English Comp I 3 SCH
*English Comp II 3 SCH
*English Literature 3 SCH
*Humanities/Social Sciences 15 SCH***
*If you have earned a bachelor's degree from an accredited college or university in the United States prior to enrolling in the School of Pharmacy, you are exempt from the English and Humanities/Social Sciences requirements

**Used in the calculation of the pre-pharmacy GPA (grade point average).
***Humanities/Social Sciences: Courses may be selected from any mix of Anthropology, Communications (excluding Public Speaking which is a prerequisite), Economics (excluding Economics prerequisite), Ethnic Studies, Family Living/Human development, Geography, History, Journalism, Philosophy, Political Science (Government), Psychology, and Sociology. Performing and Fine Arts (including Music, Physical Education, and Foreign Languages. Computer Sciences or similar courses will not meet this requirement. Prerequisite groupings for Humanities/Social Sciences, e.g., 6 hours of history and 6 hours of government are not required by the TTUHSC School of Pharmacy. Advanced Placement (AP), CLEP, and Dual Credit are accepted if documented on your transcript from an accredited U.S. college or university.

PCAT (Pharmacy College Admission Test)

The Pharmacy College Admission Test also known as the PCAT is required of all applicants who apply for admission to the School of Pharmacy. This test is given three times a year. It is highly recommended that you take the October when applying to TTUHSC School of Pharmacy. All applicants who are interested in taking the PCAT should go to the link on our website for further information. The link to the website contains most of the information in their Candidate Information Booklet. This website contains the PCAT on-line application.
http://harcourtassessment.com/haiweb/Cultures/en-US/Harcourt/Community/PostSecondary/Products/PCAT/PCATHome.htm

THE PHARM D. ADMISSIONS PROCESS - REVIEW OF APPLICATION AND ADMISSIONS CRITERIA

All of your application materials are important and will be reviewed by the Admissions Committee as part of the overall process. Once you have completed the application on-line, paid your application fee, submitted your transcripts, given your references their forms to complete, and taken the PCAT with your grades having been received at the SOP, your application will go through a 6-step review process.

Step 1 – Staff Review

The admissions staff will review your completed application to determine whether all documents are complete and whether you meet the minimum admissions requirements. We will compute your adjusted Pre-pharmacy GPA, using the last grade you received in your courses and we will also determine that none of the Pre-pharmacy courses were more than 7 years prior to the date your would start classes. If all these checks are cleared, the status of your application will be posted on-line and verifying that your application is complete. We recommend you first review the on-line posting since your records will be updated there.

Step 2 – Admissions Committee Review

The Admissions Committee is composed of a cross section of faculty members and advanced students who review each application to determine which applicants will be invited to the Amarillo or Abilene campus for an interview. To select those to interview, we compute each applicant's probability of successfully completing the curriculum (4 years of pharmacy studies with a composite GPA above 75% and no course failures), by a regression formula that includes your Pre-Pharmacy GPA (as computed on your application), and the Composite, Biology, Chemistry and Reading scores on your PCAT. Through statistical analysis of our previous students' success in the curriculum, we have found that these elements are highly predictive of an applicant's success or failure in the program. Once the probabilities are computed, we then invite those with the highest probability of being academically successful for an interview.

The academic rigor of the program is significant and every student must be able to handle the demands of the courses, but we know that academic abilities alone are not the only factors that determine overall success as a pharmacist. Therefore, we typically extend interview offers to about 2.5 times as many applicants as we have slots in the class, to allow you to demonstrate your personal strengths beyond your academic abilities. Those abilities, like communication skills, critical thinking skills, ability to work in teams, etc., typically cannot be measured accurately by GPA and PCAT scores alone. Thus, we want to be sure to admit applicants who we know can be both academically successful and also have the basic abilities that will make them leaders in pharmacy and caring practitioners for their patients.

If you are not offered an opportunity for an interview, it doesn't mean that we believe you wouldn't be a good student; we simply have so many applications that it is impossible to spend a day with every person who meets the minimum requirements. We must focus on those applicants who we determine have the best chance to be successful in a very difficult academic program. If you are not extended an interview invitation, please call to make an appointment with one of our counselors after May 1 to meet face-to-face and review your application. We can explain why you fell short and make suggestions on how you could enhance your application for the next year if you wish to re-apply.

Step 3– Adjustments to Your Interview Invitation

Your Interview Invitation Score will be adjusted by subtracting points for each "F" and "D" previously made in the prepharmacy course requirements. An "F" will reduce your score by ten points, and a "D" will reduce your score by 5 points.

Step 4 – On Campus Interview

If you receive a letter extending you an interview opportunity, the letter will give more directions on how to set-up the interview and possible dates. You will need to come to the campus in Amarillo or Abilene for your interview.

Preparing for the Interview...

is the hardest part of the process. This is a challenging day, but we try to help you through it. Some suggestions:

- Dress Professionally. When you look professional, you act it....but be sure it is comfortable and you feel good about the way you look.

- Be on Time. If you feel rushed or start late, it sets you up to feel frazzled. Get a good night's sleep the night before.

- Be Honest. If you do not know an answer, say "I don't know." Faculty interviewing you will know the difference. If it is a question about you or your wanting to be a pharmacist, have something to say.

- Smile. Be cheerful and positive.

- Look People in the Eye.

- Relax. This day will be very hectic and by the end, you will feel drained. You will participate in group problem solving, be interviewed by faculty members, take a cognitive thinking test, and have a session on the technology used for classes and the required hardware and software students must have. Remember, we haven't lost anyone yet.

- Ask Questions. This day will also include a tour of our facilities and an opportunity for you to ask questions of students, faculty, and our staff.

- Good Luck!

During the Interview…

You will participate in several different assessments of your abilities. You cannot really prepare anything…just be relaxed and do your best on everything you are asked to do.

- The interview will start with welcome and general directions for the day. It is not an assessment, simply a time to get to know you and for you to get to know the other applicants that will be with you for the day. Your performance in other activities during the day will be assessed to determine an overall Interview Score.

- You will be asked to complete a creative writing exercise on a topic that you will be given for that day. We will be assessing your grammar, spelling, punctuation, and sentence structure. Most importantly, we will be looking to see if you develop a logical argument for your points and whether you present a comprehensive analysis. You should also come to a conclusion about what you think about the topic.

- You will take a standardized test to assess your critical thinking abilities. Pharmacy requires you take information from multiple sources and critically analyze the information relative to a specific patient's problem with their medication. This test will allow us to assess your basic abilities to accomplish these ends. Again, the content is not important and you cannot prepare for the test.

- As a pharmacist, you will be required to work effectively with a team of physicians, nurses and other pharmacists to solve patient and operational problems. To allow us to determine your basic teaming skills, you will be in a group of 5-6 other students and asked to group problem solving on a potential pharmacy problem. You do not need to know anything about pharmacy beyond what you have learned in your pre-pharmacy courses; we are most interested in your abilities to work within a group in reaching a solution.

- The final assessments come from one-on-one interviews with faculty members, pharmacists who assist in evaluating students and one of our existing students. They will be interested in why you want to be a pharmacist, any experiences you have had with pharmacy, your extracurricular activities while in college, your interpersonal abilities, your strengths, and weaknesses. You will be able to really "tell your story" in these sessions, so think about these types of general questions before you come, not to have a "predetermined answer" – we can always spot an

answer that is not genuine – but rather your real thoughts and ideas. There will be two individuals interviewing you. Be prepared to discuss some of your life's experiences; we want to get to know you.

- Finally, we will give you a tour of the school, some time to ask questions about anything you have not received full information, and get a general feel about whether TTUHSC SOP is the right place for you. You will also be given information on how to determine your overall status in the admissions process and how to get any further information you may desire.

Yes, the day is full and you will be anxious over the outcome, but the interview is the best way for you to understand what the SOP is about and to give you the opportunity to demonstrate that you would be successful in the program and as a pharmacist.

Step 5 – Ranking of Applicants

Once all the data are compiled, the Admissions Committee rank-orders the students based on the Interview Scores.

Step 6 – Diversity Factors

The Texas Tech Board of Regents have instructed all programs to identify and use diversity factors to ensure that our classes reflect the cross-section of factors that are reflective of the population of Texas. The U.S. Supreme Court has given guidelines for professional programs to use diversity factors in their admissions process and TTUHSC SOP fully complies with these guidelines. For example, there are no quotas or target percentages of the class that must meet any or all of these diversity factors, factors are not weighted in the admissions formula, and diversity factors will not move an applicant into the class admitted without fully meeting the requirements for admissions. We are required to give a full review of each application and only apply diversity factors when individuals with these factors enrich the qualities of the class.

The diversity factors (in no priority order) considered by the Admissions Committee are as follows:

a) Is the applicant's official residency in an area classified by Texas as underserved with health professionals? These are typically a socio-economically depressed area or from a rural county (population less than 50,000).

b) Is the applicant fluent in Spanish and English language skills?

c) Has the applicant distinguished themselves in extracurricular activities directed to health care or community service?

d) Other special considerations as presented by the applicant.

This step gives the Admissions Committee the opportunity to ensure appropriate diversity in the class beyond a priority rating as determined in Step 5.

Step 7 – Establishing the class and alternate list

When we have finished steps 1-6, the Admissions Committee will identify those applicants who are extended offers and those that will be retained on an alternate list. We complete what is termed

"rolling admissions" meaning that we admit some students throughout the admissions and interview process, but hold a number of positions until the final interviews are completed and the Committee can consider the full applicant pool. At the time we have completed all reviews, typically in early May, within 48 hours we will post your status on the SOP Admissions WEB page, and within 7-10 working days, send you a letter notifying you that you have either been admitted or have been placed on the alternate list. A nonrefundable placement guarantee fee of $100.00 is required with your acceptance.

If you do not make the first admissions list, please don't give-up on being admitted to the SOP. We encourage applicants to consider several pharmacy schools. The number of applicants interested in studying pharmacy is so great you need to give yourself the opportunity to be successful by applying to several programs. Therefore, we always have applicants that we offer admission who select other schools that are closer home or is a better match to their career goals. As we learn that an applicant has accepted a position in another school, we will select from the alternate list and offer them admissions. If you are in this situation, we will change your status on the WEB page and send you a letter notifying you of your admissions. If you are an alternate, keep monitoring the Admissions WEB page to see how you may move-up and be accepted for the fall class.

Please be sure to contact the Office of Student Affairs if you have any questions about how your application was reviewed. Best wishes.

Felony Conviction

One additional criterion for admission to the SOP is not having any felony convictions. Most hospitals, clinics and many community pharmacies will not accept students for professional practice experiences if s/he has been convicted of a felony. Therefore, we are not able to place a convicted felon in the required professional practice experiences, thus s/he cannot meet the requirements for graduation. Students with felony convictions will not be admitted. If you have any questions, please do not hesitate to contact Student Affairs. If a matriculated student has a felony conviction during their studies, s/he will be disenrolled from the School and TTUHSC. A Criminal Background Check is required prior to matriculation into our program.

Required Application Documents:

All prerequisite courses must be completed with a grade of "C" or better. Note: Prerequisites and the completion of the PCAT do not have to be completed prior to submitting and finalizing an application. However, these must be completed prior to matriculation. A bachelor's degree is not required. Refer to "Important Dates and Deadlines" on the web for specific deadlines for the completion of prerequisites. The following admission documents must be submitted to the School of Pharmacy by the required deadline for students to be eligible for fall admissions:

1. Completed Online Application Form
2. Pharmacy Experience Essay
3. Official Transcript(s) documenting the completed pre-pharmacy and general education requirements with a grade of "C" or better sent directly to the Office of the registrar in Lubbock, Texas by the institution where you took a course. Transcripts are required for all college courses taken, regardless of grade or part of the pre-pharmacy requirement. Official transcript(s) documenting prerequisites that are completed after the deadline date should be submitted immediately upon

completion of the course and received within two weeks after the end of the semester but no later than July 31. Students who do not submit transcripts of all college courses taken are subject to disenrollment when discovered at a later date.
4. Application Fee of $100, nonrefundable. Applications will not be processed without this fee. The fee is waived for employees of TTUHSC on at least a 9-month appointment, their spouses and dependent children under age 25.
5. Three Letters of Recommendation on Texas Tech School of Pharmacy forms. Pharmacy College Admissions Test (PCAT) scores or proof that the test will be taken prior to enrollment in the school and preferably by the January test date.
6. Completed and clear Criminal Background Screen.
7. Immunizations and CPR Certification

The pharmacy experience essay and the reference letters are used to evaluate the overall qualifications of the candidate. The School of Pharmacy application is an online document that can be found on our web site at http://www.ttuhsc.edu/sop/ Please go to our website for the online application, PCAT information, course matrix information, and Important Dates information.

Technical Standards Required for All TTUHSC Pharmacy Students

To complete the required School of Pharmacy curriculum, students must be able to perform the following minimum technical functions:

Visual Acuity – Required to Dispense Medications

- Accurately read 6-point type with the assistance of a magnifying glass or lenses
- Distinguish the markings on typical commercially prepared tablets and capsules
- Hand, Finger, Eye Manipulations – Required to Compound Medications
- Accurately measure liquids with a syringe
- Accurately measure liquids and powders with typical measuring devices required by Texas State Board of Pharmacy regulations to be standard compounding equipment in a pharmacy
- Mix liquids and powders in a mortar and pestle
- Ambulate – Required to Monitor Patients
- Move within and among patient care areas minimally with the assistance of a wheel chair and/or personal assistant

Foreign Student Information

As an international applicant, you are required to complete an International Student Application. This document is available on our web site and download the word document for Admission to the Texas Tech University Health Sciences Center School of Pharmacy in addition to completing the online application for the School of Pharmacy. You will find a Checklist of Documents Required that you can print to help guide you through the process. Please send all application materials and fees to the address listed on the applications. The deadline for the International Student Application and the online application for foreign students is December 15. A Foreign transcript evaluation is required for any course being considered as a prerequisite.

The School of Pharmacy accepts applications only for the fall semester. Before an application can be considered, you must have the Pharmacy College Admission Test (PCAT) results and TOEFL scores reported to us. The PCAT booklet explains procedures that must be followed by foreign students to obtain testing. Applicants who have demonstrated significant achievement through PCAT scores and grade point average and who will complete both the pre-pharmacy and general education requirements may receive an admission interview. The purpose of the interview is to give you an opportunity to personally present your unique qualifications and see if our program will meet your needs.

You are responsible for your own transportation, accommodations and meals if invited for an interview. An interview does not guarantee admission, but you cannot be admitted without an interview.

Transfer Credits and Pre-Pharmacy Equivalencies

Admission of transfer students is based on receipt of required documentation of credits earned and selective admission factors. Students are required to submit official transcripts from all colleges or universities attended. Evaluation of transfer credit for each student is completed upon receipt of all documents required for admission. The SOP maintains a separate matrix of accepted prerequisite courses and corresponding course numbers for most colleges and universities in Texas. Courses on the matrixes are equivalent to the pre-pharmacy courses required by Texas Tech School of Pharmacy. The matrixes may be accessed from a page on our website linking each school to its specific information.

Advanced Placement

Students who have been granted credit through successful completion of the subject examination in the College Level Examination Program (CLEP), the International Baccalaureate Program or the Advanced Placement Examination Program and who have evidence of these credits on their college or university transcripts, may meet prerequisite requirements.

Experiential Learning

Credit for Life Experiences gained through employment and other activities may be granted by the Dean. A portfolio documenting learning and life experiences as they relate to specific courses is required. The learning experiences must be equivalent to what would otherwise be achieved at the college or university level.

Foreign or International Institution Evaluation

Official records are original signed documents issued by the institution or duplicate copies of the original which bear an original seal of the issuing institution and registrar's signature or some person who is an official of the issuing school. Conferral of degrees, diplomas, certificates, or professional titles must be verified by official copies of same, dated entries of the academic record, or official statements from the institution or governmental agency granting the degree, certificate, or title. Date of formal conferral must be shown. The certificate of conferral must refer to the degree, diploma, certificate, or title in its exact original designation. Unless academic records and diplomas, degrees, or certificates are issued in English by the institute itself, authorized English translations must accompany the official documents in their original language. All translations must be literal and complete renditions of the original documents.

Regular Admission Review

The deadline for regular admission review is a published date each year (see SOP web page). Applications will not be considered unless all documents have been received in the School of Pharmacy, Office of Student Services by the required deadline. All prerequisite course work must be completed by July 31.

PHARM D. / MBA PROGRAM

Inception of the Program:

The idea of a Pharm.D-MBA program was born in early 2006 in discussions between several faculty at the Texas Tech University Rawls College of Business and the Texas Tech University Health Science Center, School of Pharmacy. The central theme to the discussions was the need to develop and train the future leaders of the profession. The Health Organization Management concentration within the MBA program matched what the pharmacy faculty believed were the necessary areas of focus to develop strong leaders in health care organizations.

The curriculum emerged after several rounds of negotiation between the programs keeping in mind the accreditation requirements of business and pharmacy. The curricular design model was determined after reviewing other Pharm.D-MBA programs matched with the teaching schedules and course prerequisites. Rather than adopting the various models currently in use throughout the U.S., the faculty chose to use a dual-degree approach and integrate both programs into a typical 4-year course of study. Since the program was structured to be a dual-degree, it was essential that all of the approved content for both degree plans be met.

The initial plan was to create several tracks for Pharm.D students to obtain the MBA. The first track would be to offer the opportunity of taking the MBA coursework to rising P-2 and rising P-3 students with the goal to phase out the P-3 program and only retain the rising P2 program. This track required the development of separate curricula to ensure that all requirements for both the Pharm.D and MBA were met. The first students began class in the summer 2009. This track will end with the graduation of this first class.

The second track was viewed as the most desired by the faculty at both colleges. This involved offering the program to P0-P1 students (accepted into pharmacy school but not currently enrolled in pharmacy courses) as well as rising P2 students. The P0 students would begin MBA coursework in the summer prior to enrollment in the pharmacy school. The rising P2 students would begin their MBA program in the summer between the P1 and P2 years. The summer 2010 class will be the first under this track. The third track was viewed as a future development and would involve the creation of a post-Pharm.D graduate program that might, if the student chose, involve a concurrent 2-year management residency program. A start date for this track has not been identified.

The Pharm.D-MBA program at Texas Tech is the 31st program in the country and is the only program between Georgia and Arizona. The HOM program at the College of Business is one of the few accredited programs for health organization management in the country.

Applicants for the PharmD-MBA Dual Degree program MUST have a prior baccalaureate or higher degree to be admitted into the program.

The TTUHSC School of Pharmacy will require completion of a PharmD-MBA Application form by February 15 of each year. A PharmD/MBA selection committee will review the academic achievement of each candidate and forward a recommendation to the Rawls College of Business and HOM program. Students should delay completing the Rawls College of Business applications until a determination of an SOP recommendation has been made. If the Committee does not recommend a student apply to the MBA program, the SOP program coordinator will counsel the student. The Rawls College of Business and the School of Pharmacy may limit the number of pharmacy students that are allowed to enroll in the MBA.

Texas Tech University Health Sciences Center School of Pharmacy Notice of Intent

1. P-0 students desiring to enroll in the PharmD-MBA program must sign an acknowledgement or disclosure form, signifying an understanding of special curricular requirements for enrolling in the program.
2. Complete a PharmD-MBA application

PharmD-MBA P0 Acknowledgement Form http://www.ttuhsc.edu/sop/mba/

PharmD-MBA Application Form http://www.ttuhsc.edu/sop/mba/

Please send completed forms to: Dr. Roland Patry at roland.patry@ttuhsc.edu or

Fax to (806) 356-4018

Rawls College of Business Application

The following applications are due by **April 1** of the year of admission. The admission process for the Rawls College of Business MBA program (HOM) is comprised of three seperate applications.

Graduate School Application

1. Paper or electronic application at: http://www.depts.ttu.edu/gradschool/admissions/
2. Requires a $50.00 fee ($60.00 for international students)
3. Official transcripts for all schools attended
4. GMAT scores: WAIVED FOR PHARMD-MBA APPLICANTS

Rawls Business School Application

1. Complete on-line application at: http://grad.ba.ttu.edu/Rawls_Application/Application_Online.asp
2. Submit current resume as an attachment to mba@ttu.edu
3. Two letters of recommendation that can be the same letters used for the PharmD application

Health Organization Management (HOM) Program Application

- MBA-HOM Application

ONCE ADMITTED…

Financial Aid

Texas Tech University Health Sciences Center believes the primary responsibility for financing education lies first with the student and his/her family. When the total resources they can provide do not meet expenses, it is the objective of the financial aid program at TTUHSC to provide financial assistance to students who, without such assistance, would not be able to pursue advanced education.

Financial Aid at TTUHSC comes from many sources. Although qualifications for each funding program might differ, no student shall be excluded from participating in or be denied the benefits of any financial aid program regardless of race, gender, lifestyle, sexual orientation, disability or national origin.

TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER
SCHOOL OF PHARMACY
STUDENT HEALTH RECORD POLICY

BACKGROUND

Students involved in patient-care activities are at higher risk than the general population for acquiring communicable diseases such as measles, mumps, rubella, chicken pox, and tuberculosis. A pharmacy student who has one of these diseases may, in turn, infect other personnel and patients. Such infections established in any health care facility are serious in their potential for medical and possible legal complications. Therefore Texas Tech University Health Sciences Center has a policy of immunization that all pharmacy students must follow. This policy conforms with the Texas Statute Title 25 Health Services, SS97.61-97.77 of the Texas Administrative Code that requires all students to be fully immunized during their patient care experiences.

PROCEDURE

Prior to enrollment in the School of Pharmacy, Candidates are required to obtain a history of their immunizations and vaccinations. Documentation of immunizations and vaccinations must be provided by written documentation of a health care provider (physician, nurse, or pharmacist), and must include the type of immunization/vaccination received, the date, and the signature of the health care provider who administered the immunization/vaccination. High school transcripts with medical record, baby records from parents, Visa documents and similar documents are acceptable for documentation. Documentation must be provided for the following:

TTUHSC Undergraduate Students, Medical Students, Interns, Residents, and Fellows	
Tetanus/Diphtheria:	Tetanus/Diphtheria toxoid (Td) is required for students enrolled in health- related courses. Students enrolled in health-related courses must have received one dose of Td within the past ten years.
Measles:	All students born after January 1, 1957, must show proof of either: (1) two doses of measles vaccine administered since January 1, 1968, and on or after their first birthday and at least 28 days apart; or (2) at least one dose of measles vaccine administered on or after their first birthday. Completion of the measles requirement must be accomplished as rapidly as is medically feasible, or serologic confirmation of measles immunity

	or serologic evidence of infection must be shown. Many times this vaccine is administered as a MMR dose. If you have the MMR (mumps, measles, rubella), you must have two doses.
Rubella:	All students enrolled in health-related courses must show proof of either: (1) one dose of rubella vaccine administered on or after their first birthday; or (2) serologic confirmation of rubella immunity, or (3) serologic evidence of infection.
Mumps:	All students who were born on or after January 1, 1957 must show prior to patient contact, proof of either: (1) one dose of mumps vaccine administered on or after their first birthday; or (2) serologic confirmation of mumps immunity, or (3) serologic evidence of infection.
Hepatitis B:	All medical students, residents, and interns shall receive a complete series of Hepatitis B vaccine or show serologic confirmation of immunity to Hepatitis B virus. All students who are incompletely immunized to Hepatitis B virus prior to the start of direct patient care shall complete the series as rapidly as is medically feasible, show serologic confirmation of immunity to Hepatitis B virus, or show serologic evidence of infection.
Varicella:	Varicella vaccine is required of students enrolled in health-related courses. One dose of vaccine is required for students who received this vaccine prior to 13 years of age; two doses are required for students who were not vaccinated before their thirteenth birthday. All doses of this vaccine must have been received on or after the first birthday. A history of varicella illness (chickenpox) validated by the student, the student's parent, or the student's physician, or serologic confirmation of varicella immunity is acceptable in lieu of vaccine.
Flu:	Each year during flu season (generally available in October) all students will be required to obtain the flu vaccine. Any student who is allergic or has some other medical condition which prevents you from having this vaccine must provide a doctor's statement declaring the medical condition which prevents the injection.

CPR—It is the responsibility of the student to maintain CPR certufication. The CPR certification is a requirement for all students in patient-care related activities. Your CPR certification must remain current at all times.

Tuberculosis Screening—All students shall participate in annual TB screenings.

All new students shall have an initial TB screening pre-matriculation (prior to enrollment in the School of Pharmacy).

Continuing Students without a previous positive reaction previously to a PPD skin test must have a follow-up PPD skin test each year. Those who have had a positive reaction must complete a TB Questionnaire annually and chest films will be ordered as needed, based on TB Questionnaire results.

Enrollment requirements--Students involved in patient-care related activities are required to maintain current

student health records and CPR certification. Prior to each enrollment period, a review will be made of the students health records by Student Services. If a student has any immunizations, screenings, shots or CPR certification that may fall due during the next enrollment period, the student will be required to update their health record **at least one week prior to the start of the semester**. Any student who is not current with immunizations on the first day of the semester shall not be permitted to participate in any patient-related activities. The student will be automatically dropped on the first day of the semester from any patient-related course, rotation, and or activity and will not be allowed to complete any patient-care related courses during the entire semester. Students may enroll in patient care courses for the following semester if all immunizations, CPR, flu vaccine, if applicable, and TB screening are completed by the first day of the following semester. Patient-related activities are provided throughout all four-years of pharmacy school.

Immunization records are maintained for each student on the Pharmacy web site, Student Page, Student Health Records. To view your personal records, the student must have an eraider account.

Student Health Insurance

Students are not required to have health insurance coverage, but it is highly recommended. Health care services are provided by the Center for Family Medicine. All questions concerning coverage can best be answered by calling the Center for Family Medicine directly at 212-3500.

Criminal Background Checks

Once a student has been offered admissions, the University will conduct a criminal background check on the applicant before finalizing admission. The background check is only conducted on an applicant who signs a consent form, but those applicants who are fully admitted must have documented records of no felony convictions or a deferred adjudication for a felony before admission is final. You will be provided a printed copy of the University policy detailing your rights and responsibilities during the on-campus interview. Please contact the office of student services if you have any questions.

Drug Screen

Many of the facilities that accept students for professional practice experiences require a clean drug screen prior to the first day on service. Students will be informed if a drug screen is required and given a list of certified laboratories in each community where the screen may be performed. If you are required to have a clean drug screen, you will be given further directions, including a description of your rights and responsibilities. The cost of a drug screen is paid by the student, who must submit the report to the clerkship office prior to the first scheduled day, as described in the clerkship manual.

THE PROFESSIONAL PROGRAM

Grading

Courses are graded on a numerical scale with a grade of 75% considered as a satisfactory score and 70% as minimal acceptable score for a single course. Students must maintain a cumulative average grade of 75% to progress. No letter grades will be recorded on official transcripts.

The Dean's List will be calculated on an overall GPA of 95% or above each semester.

It is the policy of Texas Tech University Health Sciences Center School of pharmacy to issue grades of “I” (Incomplete) when a course requirement such as an exam or a report has not been completed. The student has

the responsibility of contacting the faculty member about an exam or a report that has not been completed to determine the validity of an incomplete grade being given. The faculty member may allow up to a maximum of one year for a student to complete the course. If it is not completed within this time, the "I" will be changed to a "0%." The student is responsible for completing the work that will remove the "I."

Progressions

At the end of each semester, any student who has not successfully completed one or more courses will be placed on academic probation. First academic probation is defined as a student's failure in a course or courses in a single semester, when that student has not failed any previous courses while enrolled in the School of Pharmacy. Second academic probation is defined as a student's failure in a course or courses in a single semester, when that student has failed a course or courses in only a single prior semester while enrolled in the School of Pharmacy. Second academic probation prohibits enrollment in new required classes until all deficiencies/failures are removed. Third academic probation is defined as a student's failure in a course or courses in a single semester, when that student has failed a course or courses in two prior semesters while enrolled in the School of Pharmacy and on academic probation. Third academic probation will result in disqualification from the School of Pharmacy. Additionally, any student who does not successfully complete each course each semester may be required by the Credentialing Subcommittee to remediate any deficiencies identified.

The Student Credentialing Subcommittee will review every student's academic performance, as measured by grades in courses attempted and achievement on the Annual Assessment of Progress (Outcomes Assessment Test) in mastering defined curricular outcome expectations. These performance measures will serve as the basis for annual progression recommendations. The Student Credentialing Subcommittee may recommend to the Dean full progression, remediation activities in areas where the student has documented deficiencies, academic probation, or dismissal. This progression will serve as the determination of a student's class standing for purposes of course pre-requisites, e.g. P2 standing.

Course Failures Resulting from Sanctions Secondary to Academic or Professional Misconduct

A first course failure resulting from sanctions enforced due to academic or professional misconduct will result in the student being placed on academic probation. If the student is in good standing at the time, then the student will be placed on first probation. If the student is already on academic probation, then the failure will raise the student's probation by 1 level (ie 1st to 2nd or 2nd to Dismissal).

A second course failure resulting from sanctions due to academic or professional misconduct, regardless of semester, will result in student dismissal from the school.

Campus Assignment Policy

To access the SOP's policy on campus reassignment, please link to the School's website.

http://www.ttuhsc.edu/sop/current/students/PolicyonCampusAssignment.pdf

Withdrawal (from courses) Policy

For semester-long courses. In order to be assured of an official withdrawal from a professional school course, the student must have completed and submitted a course withdrawal request to the Office of Student Services before the beginning of the 12th day of the term.

For 8-week courses. In order to be assured of an official withdrawal from a professional school 8-week course, the student must have completed and submitted a course withdrawal request to the Office of Student Services before the beginning of the 6th weekday following the first day of class.

For rotations. In order to be assured of an official withdrawal from a professional school rotation, the student must have completed and submitted a course withdrawal request to the Office of Student Services before the end of the 4th weekday following the first day of the rotation.

For 6-week courses. In order to be assured of an official withdrawal from a professional school 6-week course, the student must have completed and submitted a course withdrawal request to the Office of Student Services before the end of the 4th weekday following the first day of class.

For 4-week courses. In order to be assured of an official withdrawal from a professional school 4-week course, the student must have completed and submitted a course withdrawal request to the Office of Student Services before the end of the 3rd weekday following the first day of class.

For 2-week courses. In order to be assured of an official withdrawal from a professional school 2-week course, the student must have completed and submitted a course withdrawal request to the Office of Student Services before the end of the 2nd weekday following the first day of class.

Students who do not complete a course and who do not officially withdraw from that course will receive the grade calculated for their performance had they remained in the course.

Second Chance Policy

The Second Chance Policy applies to all courses except case studies and clerkships. A doctor of pharmacy student, if eligible, may take a single comprehensive examination to demonstrate competency in that course providing that:

1) The student has passed 50% or more of the major assessments in that course[1]
2) The student has earned a final grade of 66-69% in the course, and
3) The student has not exceeded the number of second chance attempts as outlined below.

A student may invoke the Second Chance Policy in a maximum of two courses per semester, and no more than four times total in his/her career at the School. No student may invoke the second chance exam for the same course twice. The second chance assessment shall occur in a timely fashion, the timing at the discretion of the course team.

Prerequisites

The curriculum is designed to follow a logical and academically sound sequence of courses. P-2 courses may not be taken without the permission of the Subcommittee on Credentialing or until the student is formally advanced to P-2 standing. P-3 courses may not be taken without the permission of the Subcommittee on Credentialing or until the student is formally advanced to P-3 standing. P-4

rotations may not be taken until all previous P-1 through P-3 course work is satisfactorily completed.

Enrollment Without Credit - Course Audit

Persons who wish to audit a course for no grade must obtain written permission from the dean of the pharmacy school. Those who audit a course do so for the purpose of hearing or seeing only; they do not have the privilege of participating in class discussions or laboratory or field work, of turning in papers, or of receiving a grade or credit in the course. Students who audit a course will not be listed on the class roll, and no notation of the audit will be made on the student's transcript.

Students who are enrolled for 12 semester hours or more may audit a course without paying an additional fee. Persons who are enrolled for fewer than 12 hours must pay a $10 fee for auditing a course.

Code of Professional Conduct

You are expected to subscribe to the Code of Ethics of the American Pharmaceutical Association and the School of Pharmacy Code of Student Conduct. Students who have been found to be in violation of this code of ethics will be disciplined. The Code of Ethics and Code of Student Conduct is printed in the *Texas Tech University Health Sciences Center Student Affairs Handbook*, which can be found at the Texas Tech University Health Sciences Center web site.

Attendance

Regular attendance is necessary for satisfactory achievement. Therefore, it is the responsibility of the student to attend class in accordance with the requirements of the course as established by the faculty of Texas Tech University Health Sciences Center School of Pharmacy

Computer Literacy

Pharmacy is an information intensive profession and its practice relies heavily on tools such as the computer. These are the minimal computing skills required while in the School of Pharmacy:

- loading and running an application software package such as word processing;
- typing a document into a word processing program;
- saving and printing a document.
- navigating the internet (e.g., email, accessing web pages).

Academic Support Services

You are encouraged to seek assistance from the faculty. This assistance is free and faculty are a valuable resource. In addition, the Office of Student Services can be contacted by students demonstrating any indication of academic difficulty and explore possible areas of appropriate counseling or referral for resolution. Academic difficulty resulting from personal problems may be resolved through a variety of available resources, including professional counseling services provided as part of student health services.

Curriculum Competencies and Assessment

The faculty has identified the set of competencies that you must possess to graduate with the Doctor of Pharmacy degree. Overall curricular competencies are further defined as to level of mastery expected upon the completion of each course within the curriculum.

Annually, your progress in developing mastery will be assessed in a school-wide assessment program. The purposes of the program are to help you evaluate your personal and professional development, help you identify areas of needed remediation, and help the faculty monitor the overall performance of the curriculum in achieving the expected outcomes. In cases where individual students have not successfully remediated their deficiencies after repeated attempts, the results of the annual assessment may serve as documentation in support of academic probation.

Student Course Catalog Entry:
The academic program is designed to provide PharmD candidates with opportunities to develop the knowledge, skills, and behaviors required of a competent and ethical practicing pharmacist. The program's fourth academic year is designed to provide candidates with opportunities to: 1) practice acquired skills, 2) use learned pharmacy knowledge, and 3) exhibit professional behaviors. Basic drug knowledge is considered essential to candidate success during these experiences and opportunities. To ensure that each candidate is equipped with the basic drug knowledge to succeed in the fourth year of the program, all candidates enrolled within the third year of the academic program (P3 candidate) will be assessed for basic drug knowledge (starting 2011). This High Risk Drug Knowledge Assessment (HRDKA) will be administered each year during the School's Annual Assessment program. Each P3 candidate must provide proof of drug knowledge competency through achievement of 75% or greater score upon the HRDKA. P3 candidates failing to meet or exceed the HRDKA's criterion will be required to successfully complete remediation exercises and to pass the HRDKA prior to enrollment within the program's Advanced Pharmacy Practice Experiences (P4 clerkships).

The HRDKA will cover the following domains:

- Drug name identification (brand and generic)
- Normal dosing
- Indication
- Contraindications
- Mechanism of action
- Drug interactions
- Side effects
- Lab assessment
- Pharmacokinetics/Pharmacodynamics

The HRDKA will be approximately 180 items in length, with the 9 domains assessed in equal proportions. Assessed will be the top 200 name brand and generic medications, and the top 100 medications dispensed within representative Health-Systems found on the Abilene, Amarillo, Dallas, and Lubbock campuses. A listing of these medications will be made available to the candidates each year prior to the Annual Assessment date.

TTUHSC CANDIDATE ABILITY SET- Professional Competencies

The following are the categories defining the seven basic abilities of TTUHSC Candidates:

- Communication
- Use of Basic Science in the Practice of Pharmacy
- Problem Prevention and Solving
- Dispensing Pharmaceuticals
- Providing Patient Specific and Population Based Pharmaceutical Care
- Professionalism
- Social and Administrative Science

For a complete description of each ability, please use the hyperlink to access.

http://www.ttuhsc.edu/sop/current/studentServices/documents/default.aspx

PATIENT-CENTERED CARE

1. Design, implement, evaluate, monitor, adjust, and document patient-specific and evidence-based pharmacotherapeutic plans in order to identify, prevent, and resolve health issues and drug-related problems.

2. Prospectively review medication orders and patient health records to evaluate a drug regimen's efficacy, appropriateness, potential toxicity, and cost-effectiveness.

MEDICATION USE SYSTEMS

3. Prepare, dispense, and administer safe and rational medication regimens.

4. Evaluate pharmacy business models and pharmacy services with respect to financial, human, and technological resources and strategies.

PUBLIC HEALTH/POPULATION-BASED OUTCOMES

5. Evaluate population-based data utilizing principles of outcomes research, quality improvement, and informatics in order to assess healthcare outcomes and disparities amongst various populations.

6. Devise and implement strategies to improve population-based outcomes, through engagement in activities that promote public health, risk assessment, and disease prevention.

CORE ABILITIES

7. Retrieve, analyze, and interpret lay and scientific literature to provide drug information to patients, caregivers, and other healthcare providers.

8. Communicate and collaborate with patients, caregivers, healthcare providers, and other stakeholders using an interdisciplinary team approach to solve healthcare problems.

9. Demonstrate professional attitudes and behaviors in all activities through performance of duties according to institutional policy, applicable laws, and ethical and social guidelines.

10. Demonstrate the skills needed to engage in continuous professional development activities used in maintaining professional competence.

Graduation

Students are eligible for graduation upon successful completion of all academic and clinical (Professional Practice Experiences) requirements and documented competency in the P4 annual assessment. The student will earn a minimum of 169 credit hours, a minimum grade point average of 75, and is responsible for knowing and satisfying degree and graduation requirements. Students must be enrolled in the term in which they plan to graduate.

Program of Study

Year 1

Students will be taught basic biomedical and pharmaceutical sciences. Pharmaceutical sciences include the study of physical, chemical and biological aspects of drug dosage forms; drug action; and pharmacotherapy. Students also begin developing their pharmacy practice and patient care knowledge and skills through several courses and the first of a longitudinal Professional Practice Experience clerkship that will continue through the second year.

Year 2

The focus is on studies of disease states and pharmacotherapy. Students learn special skills in therapeutically dosing and monitoring patients with potentially toxic therapeutic agents. Clinical practice knowledge and skills are developed through studying the use and potential problems with commonly prescribed medications. Basic physical assessment skills for therapeutic drug monitoring are introduced. Students continue the development of their practice knowledge and skills through the longitudinal Introductory Professional Practice Experience clerkship in community pharmacy practice.

Year 3

This year continues studies of disease states and pharmacotherapy. Drug distribution and control skills within community and institutional practices are a major focus in Professional Practice clerkships. Skills for managing drug therapy and providing case management are provided through clerkships in patient care facilities. The third year may be based at any of the Texas Tech University Health Sciences Center campuses at Amarillo, Abilene, Dallas, Lubbock. Relocation travel, and living expenses are the student's responsibility.

Year 4

Devotes 48 weeks to full-time clinical pharmacy experiences in various patient care sites. These rotations are as follows: six weeks adult medicine, six weeks pediatrics, six weeks geriatrics, six weeks general primary care, six weeks rural practice, and two electives of six weeks duration each; and one six week selective rotation in community or institutional pharmacy practice, depending on the student's practice interests. The fourth year may be based at any of the Texas Tech University Health Sciences Center campuses at Amarillo, Dallas, Abilene, and Lubbock. Relocation travel, and living expenses are the student's responsibility.

NEW CURRICULUM SCHEDULE EFFECTIVE WITH FALL 2010 P1 CLASS

P1 Fall Semester - 18 SCH			
2 weeks before semester - Phar 1100 - 1 SCH Pharmacy Practice, Education and the Sciences ***NEW***			
16 Wk Block	Phar 1512 - 5 SCH		Biochemistry
Phar 1414 - 4 SCH		Anatomy & Cell Biology	
Phar 1321 - 3 SCH		Drug Delivery Systems I	
Phar 1320 - 3 SCH		Immunology	
Phar 1170 - 1 SCH		Drug Information Clerkship	
Phar 1101 - 0 SCH		IPPE 1 Clerkship (No Credit This Semester - Clerkship Runs All Year)	
8 Wk Blocks	***1st 8-Weeks***		***2nd 8-Weeks***
Open	Phar 1131 - 1 SCH		Clinical Immunizations & Admin
P1 Spring Semester - 21 SCH			
16 Wk Block	Phar 2513 - 5 SCH		Physiology
Phar 2325 - 3 SCH		Principles of Drug Action	
Phar 1401 - 4 SCH		P'therapy: Non Prescription Medications ***NEW***	
Phar 2322 - 0 SCH		Drug Delivery System Laboratory (SCH's assigned to Course)	
Phar 1101 - 1 SCH		IPPE 1 Clerkship (SCH This Semester - Clerkship Runs All Year)	
8 Wk Blocks	***1st 8-Weeks***		***2nd 8-Weeks***
Phar 2322 - 3 SCH	Drug Delivery Sys II	Phar 2223 - 2 SCH	Drug Delivery Systems III
Phar 1221 - 2 SCH	Principles of Disease	Phar 3159 - 1 SCH	P' Therapy: Integumentary
P2 Fall Semester - 22 SCH			
16 Wk Block	Phar 2340 - 3 SCH		Pharmacokinetics
Phar 2451 - 4 SCH		P'therapy: Infectious Disorders ***NEW***	
Phar 2203 - 2 SCH		Pharmaceutical Care Laboratory	
Phar 2104 - 1 SCH		Parenterals with Laboratory	
Phar 2101 - 0 SCH		IPPE 2 Clerkship (No Credit This Semester - Clerkship Runs All Year)	
8 Wk Blocks	***1st 8-Weeks***		***2nd 8-Weeks***
Phar 1241 - 2 SCH	Clinical Research & Lit	Phar 3257 - 2 SCH	P'Therapy: Endocrine
Phar 1231 - 2 SCH	Pharm Care Systems	Phar 2202 - 2 SCH	Pharmaceutical Care II
Phar 2153 - 1 SCH	P'Therapy: Blood & Ret	Phar 3256 - 2 SCH	P'Therapy: Respiratory
Phar 4161 - 1 SCH		P'Therapy: Bone & Joint	
P2 Spring Semester - 20 SCH			
16 Wk Block	Phar 2352 - 3 SCH		P'Therapy: Cardiovascular
Phar 3361 - 3 SCH		Case Studies 1	
Phar 3240 - 2 SCH		Patient Assessment Laboratory	
Phar 4161 - 1 SCH		IPPE 2 Clerkship (Credit This Semester - Clerkship Runs All Year)	
8 Wk Blocks8 Blocks	***1st 8-Weeks1st 8Weeks***		***2nd 8-Weeks2nd 8Weeks***
Phar 3232 - 2 SCH	Practice Mgt: Personal Leadership	Phar 4233 - 2 SCH	Practice Mgt: Financial Manageme
Phar 3158 - 1 SCH	P'Therapy: Reproduction	Phar 2231 - 2 SCH	Practice Mgt: Law
Phar 31xx - 1 SCH	P'Therapy: Patient Dosing ***NEW***	Phar 3254 - 2 SCH	P'Therapy: Renal
Phar 4166 - 1 SCH		P'Therapy: Pharmacogenetics	
P3 Fall Semester - 11 SCH + Electives + P3 Clerkships			
16 Wk Block	Phar 3462 - 4 SCH		Case Studies 2
Phar 3355 - 3 SCH		P'Therapy: GI, Hepatic and Nutrition ***NEW***	
Phar 3461 - 4 SCH		P'Therapy: Neurosensory and Psychiatry ***NEW***	
6 Wk Blocks	***1st 6-Weeks***	***2nd 6-Weeks***	***3rd 6-Weeks***
Elective 1	Elective 3		Elective 5
Elective 2	Elective 4		Elective 6
IPPE Clerkships	IPPE Clerkship		IPPE Clerkship
P3 Spring Semester - 11 SCH + Electives + P3 Clerkships			
16 Wk Block	Phar 4463 - 4 SCH		Case Studies 3
8 Wk Blocks	***1st 8-Weeks***		***2nd 8-Weeks***
Phar 4264 - 2 SCH	P'Therapy: Oncology	Phar 4267 - 2 SCH	P'Therapy: Clinical Toxicology
Phar 4235 - 2 SCH	Practice Mgt: Community ***OR***	Phar 4165 - 1 SCH	P'Therapy: Special Populations
Phar 4234 - 2 SCH Practice Mgt: Institutional			
Selective	Phar 4204 - 2 SCH		Drug Review (Remediation/Electiv

6 Wk Blocks	*1st 6-Weeks*	*2nd 6-Weeks*	*3rd 6-Weeks*
	Elective 7	Elective 9	Elective 11
	Elective 8	Elective 10	Elective 12
	IPPE Clerkships	IPPE Clerkship	IPPE Clerkship
P4 Year Advanced Professional Practice Experiences			

Pharmacy Year Four (P4) Summer/Fall/Spring

Phar 4675 Adult Medicine	6
Phar 4677 Pediatrics	6
Phar 4678 Geriatrics	6
Phar 4676 General Primary Care	6
Phar 4681 Rural Practice	6
Electives 2 Rotations @ 6 credits each	12
Phar 4142 Grand Rounds - Fall	2
Phar 4242 Grand Rounds - Spring	2
Selective - Choose only one	6
Phar 4673 - Advanced Community Pharmacy Prac Clk.or	
Phar 4674 - Advanced Institutional Pharmacy Practice Clk	
Total	52

PharmD-MBA Dual Degree Program for students classified as P0-P1 for 2010-2011

P0 Summer Sessions: 17 credit hours

MGT 5391	3 SCH		Strategic and Global Mgt
ISQS 5345	3 SCH		Statistical Concepts for Business Mgt
ISQS 5360	3 SCH		Marketing Concepts and Strategies
HOM 5371		3 SCH	Managing OB and OD
ACCT 5301	3 SCH		Financial and Managerial Accounting
FIN 5219	2 SCH		Financial Mgt Tools *(substituted for PHAR 4233)*

Plus: 10 orientation units
All classes held in residence in Lubbock

P1 Fall Semester - 18 SCH

2 weeks before semester - Phar 1102 - 1 SCH Pharmacy Practice, Education and the Sciences

	Phar 1512 - 5 SCH		Biochemistry
Phar 1414 - 4 SCH		Anatomy & Cell Biology	
Phar 1321 - 3 SCH		Drug Delivery Systems I	
Phar 1320 - 3 SCH		Immunology	
Phar 1170 - 1 SCH		Drug Information Clerkship	
Phar 1101 - 0 SCH		IPPE 1 Clerkship (No Credit This Semester - Clerkship Runs All Year)	
	1st 8-Weeks		***2nd 8-Weeks***
Open	Phar 1131 - 1 SCH		Clinical Immunizations & Admin

P1 Spring Semester - 21 SCH

	Phar 2513 - 5 SCH		Physiology
Phar 2325 - 3 SCH		Principles of Drug Action	
Phar 1401 - 4 SCH		P'therapy: Non Prescription Medications	
Phar 2322 - 0 SCH		Drug Delivery System Laboratory (SCH's assigned to Course)	
Phar 1101 - 1 SCH		IPPE 1 Clerkship (SCH This Semester - Clerkship Runs All Year)	
	1st 8-Weeks		***2nd 8-Weeks***
Phar 2322 - 3 SCH	Drug Delivery Sys II	Phar 2223 - 2 SCH	Drug Delivery Systems III
Phar 1221 - 2 SCH	Principles of Disease	Phar 3159 - 1 SCH	P' Therapy: Integumentary

P1-P2 Summer Sessions: 13-16 credits

	PHAR (HOM) 5307	3 SCH	Healthcare, Network, Sys. & Org. Ops
FIN 5320	3 SCH		Financial & Managerial Concepts

ISQS 5231		2 SCH	IT for Managers: Healthcare App
[redacted]	ISQS 5343	3 SCH	Operations Mgt and Mgt Sciences
ISQS 5230		2 SCH	Decision Theory: Hlth Sys. Managers
BA 7000		3 SCH {a}	Domestic/Global Bus. Cond. Hlth Care

{a} BA 7000 can be taken in the Summer, Fall or Spring on-line
{b} MGT 5372, Leadership and Ethics currently in discussion using PHAR 3232 as substitute
{c} All courses for remaining MBA program to be delivered either by distance live class or on-line

P2 Fall Semester - 22 SCH

[redacted]	Phar 2340 - 3 SCH	Pharmacokinetics
Phar 2451 - 4 SCH		P'therapy: Infectious Disorders
Phar 2203 - 2 SCH		Pharmaceutical Care Laboratory
Phar 2104 - 1 SCH		Parenterals with Laboratory
Phar 2101 - 0 SCH		IPPE 2 Clerkship (No Credit This Semester - Clerkship Runs All Year)

[redacted]	***1st 8-Weeks***	***2nd 8-Weeks***
Phar 1241 - 2 SCH	Clinical Research & Lit	Phar 3257 - 2 SCH P'Therapy: Endocrine
Phar 1231 - 2 SCH	Pharm Care Systems-*(substitute for HOM 5306)*	Phar 2202 - 2 SCH Pharmaceutical Care II
Phar 2153 - 1 SCH	P'Therapy: Blood & Ret	Phar 3256 - 2 SCH P'Therapy: Respiratory
Phar 4161 - 1 SCH		P'Therapy: Bone & Joint

P2 Spring Semester - 18 SCH

[redacted]	Phar 2352 - 3 SCH	P'Therapy: Cardiovascular
Phar 3361 - 3 SCH		Case Studies 1
Phar 3240 - 2 SCH		Patient Assessment Laboratory
Phar 2101 - 1 SCH		IPPE 2 Clerkship (Credit This Semester - Clerkship Runs All Year)

[redacted]	***1st 8-Weeks***	***2nd 8-Weeks***
Phar 3232 - 2 SCH	Practice Mgt: Leadership and Ethics (see above Summer 2)	Phar 4233 - 2 SCH Practice Mgt: Financial Management
Phar 3158 - 1 SCH	P'Therapy: Reproduction	*(substituted by FIN 5219)*
Phar 3101 - 1 SCH	P'Therapy: Therapeutic Dosing	Phar 2231 - 2 SCH Practice Mgt: Law *(substitute for BA 5290)*
Phar 4166 - 1 SCH	P'Therapy: Pharmacogenetics	Phar 3254 - 2 SCH P'Therapy: Renal

P2-P3 Summer Sessions: 0 credits mandated

PharmD/MBA students may elect to take available MBA courses offered on-line or distance live during summer

P3 Fall Semester - 14 SCH + P3 Clerkships

[redacted]	Phar 3462 - 4 SCH	Case Studies 2
Phar 3355 - 3 SCH		P'Therapy: GI, Hepatic and Nutrition
Phar 3461 - 4 SCH		P'Therapy: Neurosensory and Psychiatry
PHAR (HOM) 5308		Health Care Quality: Design, Implementation & Acceptance

[redacted]	***1st 6-Weeks***	***2nd 6-Weeks***	***3rd 6-Weeks***
Elective 1 DO NOT TAKE {d}	Elective 3 DO NOT TAKE {d}		Elective 5 DO NO TAKE {d}
Elective 2 DO NOT TAKE {d}	Elective 4 DO NOT TAKE {d}		Elective 6 DO NOT TAKE {d}
IPPE Clerkships *(substitute for HOM 5382)*	IPPE Clerkships *(substitute for HOM 5382)*		IPPE Clerkships *(substitute for HOM 5382)*

P3 Spring Semester - 11 SCH + P3 Clerkships

[redacted]	Phar 4463 - 4 SCH	Case Studies 3
PHAR (HOM) 5309		Compliance & Performance Mgt
PHAR (HOM) 5199		PharmD/MBA Capstone Course

[redacted]	***1st 8-Weeks***	***2nd 8-Weeks***
Phar 4264 - 2 SCH	P'Therapy: Oncology	Phar 4267 - 2 SCH P'Therapy: Clinical Toxicology
Phar 4235 - 2 SCH	Practice Mgt: Community ***OR {both substituted by PHAR/HOM 5309}***	Phar 4165 - 1 SCH P'Therapy: Special Populations
Phar 4234 - 2 SCH	Practice Mgt: Institut. Selective	Phar 4204 - 2 SCH Drug Review (Remediation/Elective)

[redacted]	***1st 6-Weeks***	***2nd 6-Weeks***	***3rd 6-Weeks***
Elective 7 DO NOT TAKE { d}	Elective 9 DO NOT TAKE {d}		Elective 11 DO NOT TAKE {d}
Elective 8 DO NOT TAKE {d}	Elective 10 DO NOT TAKE {d}		Elective 12 DO NOT TAKE {d}
IPPE Clerkships *(substitute for HOM 5382)*	IPPE Clerkships *(substitute for HOM 5382)*		IPPE Clerkships *(substitute for HOM 5382)*

{d} All elective hours in the PharmD curriculum are substituted by PHAR 5307 and PHAR 5308

COURSE DESCRIPTIONS FOR THE DOCTOR OF PHARMACY PROGRAM

Key To Class Numbers	Determination of course credits
The second digit refers to the semester credit hours. The third digit refers to the discipline or area for (xx0x general professional courses; xx1x for biomedical science courses; xx2x for pharmaceutical sciences courses; xx3x for pharmacy administration courses; xx4x for clinical sciences courses; xx5x & xx6x for pharmacotherapy courses; xx7x, xx8x, & xx9x for clerkships) The fourth digit refers to the sequence of the course within the discipline.	The following schedule is followed in semester credit hours. Lecture -16 contact hours per semester credit hour Recitation/Tutorial -32 contact hours per semester credit hour Laboratory -48 contact hours per semester credit hour Clerkship - 64 contact hours per semester credit hour A contact hour is defined as a 50 minute instructional period.

Course Descriptions
Pharm D. and MBA Program

PHAR 1001 - Annual Assessment

The School's Annual Assessment program is a method of assessing student progression toward degree attainment and providing curricular quality assurance. The 4-year, longitudinal program is designed to assess student knowledge, skills, and behaviors necessary for successful performance of the School's 10 terminal outcomes. The program consists of course embedded assessments and a day-long assessment held on a Saturday in January. The day-long assessment consists of one or more Objective Structured Clinical Exams (OSCEs) and a 150 to 300 item multiple-choice test. OSCEs are performance tests targeted at assessing student competency with pharmacist skills such as patient counseling, medical chart review, performance of pharmacokinetic calculations, and other skills students will gain while progressing within the pharmacy program. All assessment rubrics and a table of specifications for the multiple choice test are made available to the students approximately 1 month prior assessment dates. Please note, fourth year students must pass the Annual Assessment during their

final year to be eligible for graduation.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 1101 - INTRODUCTION TO PHARMACY PRACTICE I

Basic practice concepts and skills for all areas of pharmacy practice; professional service learning and effective patient education and presentation skills; care of patients in drug distribution and control; ethical practices of pharmacists. Discussion; observation; service learning; group presentations; and patient care experiences longitudinally throughout both semesters in the first professional year; credit will be awarded in the spring semester.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 1102 - Pharmacy Practice, Education, and the Sciences

This course is designed to develop foundational skills and behaviors necessary for success within the curriculum. This course introduces the topics of professional responsibility and team work. The concepts of professionalism, patient care, ethical dilemmas, team building, and conflict resolution will be introduced and students given opportunities for application of these concepts during numerous discussion and laboratory sessions.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 1131 - CLINICAL IMMUNIZATION & ADMINISTRATION

Fundamentals, epidemiology and prevention of vaccine preventable diseases. Develops knowledge and skills to administer vaccines, provide informed consent and maintain appropriate immunization record management. PREREQ: CPR certification and qualify for intern licensure at end of first year.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture, No Credit Lab
All Sections for this Course

Pharmacy Department

PHAR 1171 - Early Experiences in Drug Information

Practical experience in retrieving drug information, preparing written responses to drug information inquiries, and learning medical terminology.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture, No Credit Lab
All Sections for this Course

Pharmacy Department

PHAR 1221 - PRINCIPLES OF DISEASE

Concepts and mechanisms of the basic processes underlying diseases. Pathophysiology and clinical presentation of common immune disorders; chemistry, pharmacology and toxicology of common therapeutic agents used to treat inflammatory diseases; therapeutic management of patients. PREREQ: PHAR 2513 (concurrently).
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 1231 - PHARMACUETICAL CARE SYSTEMS

Principles of medical sociology applicable to professional practice; communications; health and illness behaviors; roles of health professionals; and pharmacy ethics.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 1241 - CLINICAL RESEARCH AND DRUG LITERATURE EVALUATION

The fundamentals of experimental design, implementation and data analysis pertinent to pharmaceutical clinical investigations. PREREQ: Statistics.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 1320 - IMMUNOLOGY

The structural components of the human immune system; the cellular and molecular basis of immunological function; diagnostic tests using immunological reagents; mechanisms of resistance against microbial and neoplastic diseases; transplantation immunology; pathology of immune-mediated diseases; prevention of disease by vaccines; pharmacotherapeutic intervention in immunological processes; contemporary topics in immunology.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 1321 - DRUG DELIVERY SYSTEMS I

Pharmaceutical principles of dosage forms and pharmacy calculations based on different routes of administration: Physical-chemical properties; biopharmaceutics; stability; packaging; and formulation of various dosage forms. PREREQ: PHAR 1300.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 1401 - Non-Prescription Medicines

The pharmacology and clinical use of common non-prescription medications, herbals, and medical devices used in ambulatory pharmacy practice to treat minor medical problems. Emphasis placed on the pharmacist's professional role in patient consultation, assessment, communication, and monitoring as well as the effectiveness, safety, drug interactions, adverse effects, and legal/professional issues regarding the use of non-prescription drugs and herbal products.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 1414 - ANATOMY AND CELL BIOLOGY

General systemic anatomy with emphasis on microscopic and gross structures following the human organ systems. One three-hour laboratory each week. Five day-long laboratory sessions require cadaver prosections held in Lubbock.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture, No Credit Lab
All Sections for this Course

Pharmacy Department

PHAR 1512 - BIOCHEMISTRY

Chemical and molecular aspects of biological processes, including the chemistry of biomolecules, enzymology, bioenergy, biochemical control mechanisms, and molecular genetics. Discussions of metabolic diseases and fundamentals of human nutrition.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 2101 - INTRODUCTION TO PHARMACY PRACTICE II

Continuation of Pharm 1101. Discussion; observation; service learning; and patient care experiences longitudinally throughout both semesters in the second professional year; credit will be awarded in the spring semester. PREREQ: 2nd professional year standing.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 2104 - PARENTERALS

This course consists of one 50-minute pre-lab session and one 2-hour laboratory session per week. Laboratory exercises in the performance of aseptic technique, preparation of small volume parenterals, large volume parenterals, safe handling of chemotherapy, and quality assurance and documentation. This course is designed

to culminate in the candidate being proficient in compounding of sterile products. PREREQ: P-2 standing.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture, No Credit Lab
All Sections for this Course

Pharmacy Department

PHAR 2153 - PHARMACOTHERAPY III - BLOOD & RETICULOENDOTHELIAL

Pathophysiology and clinical presentation of common diseases of the blood and reticuloendothelial systems; chemistry, pharmacology and toxicology of common therapeutic agents used to treat blood and reticuloendothelial diseases; therapeutic management of patients.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 2202 - PHARMACEUTICAL CARE II

Integration of skills and knowledge necessary for providing pharmaceutical care; emphasis on the development of interviewing and counseling skills, patient data base assessment, clinical laboratory medicine, and creation of pharmaceutical care plans and dispensing of common prescription drug products. PREREQ: PHAR 1301 and P-2 standing.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 2203 - PHARMACEUTICAL CARE LABORATORY

Laboratory exercises in interviewing and counseling; prospective drug reviews; prescription dispensing; and physical assessment. Two laboratories of 3-hours each week.
Levels: Pharmacy-Doctoral
Schedule Types: Laboratory, No Credit Lab
All Sections for this Course

Pharmacy Department

PHAR 2223 - DRUG DELIVERY SYSTEMS III

Continuation of PHAR 1321 and 2322. PREREQ: PHAR 2322.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 2231 - PRACTICE MANAGEMENT - LAW

The study of federal and Texas statutes and rules, which regulate the practice of pharmacy and drug distribution.

Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 2322 - DRUG DELIVERY SYSTEMS II

Continuation of PHAR 1321. One 3-hour laboratory each week. PREREQ: PHAR 1321.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture, No Credit Lab

Pharmacy Department

PHAR 2325 - PRINCIPLES OF DRUG ACTION

Basic principles of pharmacokinetics, pharmacodynamics and toxicology. This introductory course is designed to facilitate understanding of fundamental concepts relating to the drug action in relation to these general topics.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 2340 - CLINICAL PHARMACOKINETICS

The application of pharmacokinetic principles to the rational design of individualized drug dosage regimens. PREREQ: PHAR 2325.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 2351 - Infectious Disorders

Pathophysiology and clinical presentation of common infectious diseases; chemistry, pharmacology, and toxicology of common anti-infective agents; therapeutic management of patients with common infectious diseases.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 2352 - PHARMACOTHERAPY II - CARDIOVASCULAR

Pathophysiology and clinical presentation of common diseases of the cardiovascular system; chemistry, pharmacology and toxicology of common therapeutic agents used to treat cardiovascular diseases; therapeutic management of patients.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 2513 - PHYSIOLOGY

Functions and mechanisms of human organ systems. This course explores the integration of multiple physical and chemical events at various levels of biological organization; events that are required for biological systems to function. The material covers all levels of organization from the functioning of individual molecules to the interplay of widely separated organs in the body. PREREQ: PHAR 1514.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 3101 - Infectious Disorders

The application of pharmacokinetic and pharmacodynamic principles to the rational design of individualized drug dosing regimens incorporating patient-specific, disease-specific, and drug-specific factors.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 3158 - PHARMACOTHERAPY VIII - REPRODUCTIVE

Concepts of preventing conception; pathophysiology and clinical presentation of common diseases of the reproductive system; chemistry, pharmacology and toxicology of common therapeutic agents used to treat reproductive system diseases; therapeutic management of patients.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 3159 - PHARMACOTHERAPY IX - INTEGUMENTARY

Pathophysiology and clinical presentation of common diseases of the integumentary system; chemistry, pharmacology and toxicology of common therapeutic agents used to treat integumentary diseases; therapeutic management of patients.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 3233 - Leadership and Ethics in Management

Leadership and ethical prinicples as applied to management in all pharmacy enviroments.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 3240 - PATIENT ASSESSMENT

Basic physical assessment is designed to provide the student essential foundation of knowledge about assessing the client at any given period of time along the health care continuum. Students will be instructed to recognize the normal and abnormal anatomical and physiological systems of the human body through various assessment techniques. One one-hour lecture and one 3-hour laboratory each week. PREREQ: P-2 standing.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture, No Credit Lab

Pharmacy Department

PHAR 3254 - PHARMACOTHERAPY IV - RENAL

Pathophysiology and clinical presentation of common diseases of the renal system; chemistry, pharmacology and toxicology of common therapeutic agents used to treat renal diseases; therapeutic management of patients.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 3255 - PHARMACOTHERAPY V - GI & HEPATIC

Pathophysiology, clinical presentation and therapeutic management of common diseases of the gastrointestinal tract and liver; chemistry, pharmacology and toxicology of common therapeutic agents to treat these disorders. PREREQ: P-2 standing.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 3256 - PHARMACOTHERAPY VI - RESPIRATORY

Pathophysiology and clinical presentation of common diseases of the respiratory system; chemistry, pharmacology and toxicology of common therapeutic agents used to treat respiratory diseases; therapeutic management of patients.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 3257 - PHARMACOTHERAPY VII - ENDOCRINE

Pathophysiology and clinical presentation of common diseases of the endocrine system; chemistry, pharmacology and toxicology of common therapeutic agents used to treat endocrine diseases; therapeutic management of patients. PREREQ: P-2 standing.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 3355 - Gastrointestinal, Hepatic, and Nutrition

Pathophysiology, clinical presentation and therapeutic management of gastrointestinal, liver,and nutrition disorders with a focus on the chemistry, pharmacology, and toxicology of common therapeutic agents used to support and treat these disorders.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 3361 - CASE STUDIES I

Emphasizes the scientific foundation of pharmacy practice. Application of principles of pathophysiology and therapeutics to drug therapy issues through student-centered, problem-based instructional processes. PREREQ: PHAR 2340 and PHAR 2202.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 3461 - Neurosensory and Psychiatry

Pathophysiology and clinical presentation of common diseases are discussed and neurological system, sensory organs, and common psychiatric diseases are discussed and the chemistry, pharmacology and toxicology of common therapeutic agents used to treat neurological and psychiatric diseases are covered as well as therapeutic management of patients.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 3462 - CASE STUDIES II

Emphasizes provision of pharmaceutical care to individual patients. Application of principles of pathophysiology and therapeutics to drug therapy issues through student-centered, problem-based instructional processes. PREREQ: P-3 standing.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 4161 - PHARMACOTHERAPY X - BONE AND JOINT

Pathophysiology and clinical presentation of common diseases of the musculoskeletal system; chemistry, pharmacology and toxicology of common therapeutic agents used to treat musculoskeletal diseases; therapeutic management of patients. PREREQ: P-2 standing.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 4163 - PHARMACOTHERAPY XIII - NUTRITION

Principles of nutrition; pathophysiology and clinical presentation of common nutritional diseases and nutritional support; chemistry, pharmacology and toxicology issues of nutritional diseases and support; therapeutic management of patients. PREREQ: P-3 standing.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 4165 - PHARMACOTHERAPY XV - SPECIAL POPULATIONS

Unique therapeutic problems and clinical management of pregnant, nursing, pediatric and geriatric patients.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 4166 - PHARMACOTHERAPY XVI - PHARMACOGENETICS

Pathophysiology and clinical presentation of common genetic diseases; pharmaceutics, chemistry, pharmacology and toxicology of common therapeutic agents used to treat genetic diseases; therapeutic management of patients.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 4201 - SPECIAL PROJECTS II

Second semester of independent research for advanced students in administrative, behavioral, clinical, or pharmaceutical sciences. ELECTIVE.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 4202 - ADVANCED PEDIATRICS

Become familiar with the pharmacotherapy of select pediatric disease states. Also, will develop an understanding of the issues faced daily in a multidisciplinary, team-centered approach to pediatric pharmacotherapy, which will improve the knowledge of interdisciplinary care. Includes perspective from physicians, pharmacists, nurses, respiratory therapists, dieticians, physical and occupational therapists, and social workers, and discharge planners. Develop and improve upon skills such as self-directed learning, clinical and interpersonal skills, and professional values and behaviors. PREREQ: P-3 standing. ELECTIVE.
Levels: Pharmacy-Doctoral
Schedule Types: Elective

Pharmacy Department

PHAR 4204 - DRUG REVIEW

A fast-paced review of drug information associated with each drug class. This course will seek to provide the student with specific clinical knowledge and pearls and more confidence as they enter their 4th year rotations. PREREQ: P-3 standing. ELECTIVE.
Levels: Pharmacy-Doctoral
Schedule Types: Elective

Pharmacy Department

PHAR 4205 - HISTORY OF PHARMACY

The history of pharmaceutical practice, science, and technology, and the evolving role of the pharmacist in Western Europe and the United States from classical antiquity until the present. Sequential development period will be presented by means of lectures, audiovisual materials, case studies, biographical sketches, and objects from the Texas Pharmacy Museum collection. PREREQ: P-3 standing. ELECTIVE.
Levels: Pharmacy-Doctoral
Schedule Types: Elective

Pharmacy Department

PHAR 4206 - VETERINARIAN PHARMACY

Study of the pharmacist's professional role regarding veterinarian products and medical devices common to veterinarian pharmacy practice; emphasis on diseases of animals and the effectiveness, safety, limitations and composition of therapeutic entities used in the treatment of animal diseases. PREREQ: P-3 standing. ELECTIVE.
Levels: Pharmacy-Doctoral
Schedule Types: Elective

Pharmacy Department

PHAR 4207 - DRUG ABUSE

Detailed study of the pharmacodynamic and societal aspects of drugs of abuse; the pharmacist's professional role in drugs of abuse education and counseling. ELECTIVE.
Levels: Pharmacy-Doctoral
Schedule Types: Elective

Pharmacy Department

PHAR 4208 - SPANISH FOR HEALTH PROFESSIONALS

Verbal and written communication skills in Spanish important for patient counseling. ELECTIVE.
Levels: Pharmacy-Doctoral
Schedule Types: Elective

Pharmacy Department

PHAR 4210 - Current Topics in Pharmacy Practice

Student led discussions of current professional issues in pharmacy practice. One hour of recitation once each week. ELECTIVE
Levels: Pharmacy-Doctoral
Schedule Types: Elective

Pharmacy Department

PHAR 4211 - ADVANCED INFECTIOUS DISEASES

In-depth, primary literature based perspective of infectious diseases including a focus on resistant pathogens and the importance of appropriate pharmacodynamics in the treatment of infections.
Levels: Pharmacy-Doctoral
Schedule Types: Elective

Pharmacy Department

PHAR 4212 - SPANISH FOR HEALTH PROFESSIONALS II

Students will expand the language knowledge for healthcare professions who will be interacting with non-English speaking patients whose only spoken language is Spanish. PREREQ: PHAR 4208.
Levels: Pharmacy-Doctoral
Schedule Types: Elective

Pharmacy Department

PHAR 4224 - Pharmaceutical Sciences Journal Club

Student directed presentations of scientific literature.
Levels: Pharmacy-Doctoral
Schedule Types: Elective

Pharmacy Department

PHAR 4226 - SPECIAL TOPICS

Advanced studies in administrative, behavioral, clinical, or pharmaceutical sciences. May be taken for a total of 4 credit hours; must take two courses. ELECTIVE.
Levels: Pharmacy-Doctoral
Schedule Types: Elective

Pharmacy Department

PHAR 4227 - SPECIAL PROJECTS

Independent research for advanced students in administrative, behavioral, clinical, or pharmaceutical sciences. ELECTIVE.

Levels: Pharmacy-Doctoral
Schedule Types: Elective

Pharmacy Department

PHAR 4233 - PRACTICE MANAGEMENT - FINANCIAL MANAGEMENT

Financial management concepts for pharmacy practice in all environments.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 4234 - PRACTICE MANAGEMENT - INSTITUTIONAL PHARMACY OPERATIONS

Management and operational aspects of institutional pharmacy practices. PREREQ: PHAR 2231 and PHAR 4233. SELECTIVE.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 4235 - PRACTICE MANAGEMENT - COMMUNITY PHARMACY OPERATIONS

Management and operational aspects of community pharmacy practices. PREREQ: PHAR 2231 and PHAR 4233. SELECTIVE.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 4241 - GRAND ROUNDS (FALL)

As pharmacists, Texas Tech School of Pharmacy graduates will be called upon to present continuing education programs to healthcare professionals. The objective of the Grand Rounds Course is to ensure that the Texas Tech graduate has prepared and presented two ACPE-quality continuing education programs. The student will complete all the steps required for a formal ACPE-approved program up to the point of actually obtaining an ACPE provider number. Thus, although not formally approved by ACPE, the program should fulfill all ACPE provider requirements. COREQ: P4 standing; fall semester.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 4242 - GRAND ROUNDS (SPRING)

As pharmacistS, Texas Tech School of Pharmacy graduates will be called upon to present continuing education programs to healthcare professionals. The objective of the Grand Rounds Course is to ensure that the Texas Tech graduate has prepared and presented two ACPE-quality continuing education programs. The student will complete all the steps required for a formal ACPE-approved program up to the point of actually obtaining an

ACPE provider number. Thus, although not formally approved by ACPE, the program should fulfill all ACPE provider requirements. COREQ: P4 standing; spring semester.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 4261 - PHARMACOTHERAPY XI - NEUROSENSORY

Pathophysiology and clinical presentation of common diseases of the neurological system and sensory organs; chemistry, pharmacology and toxicology of common therapeutic agents used to treat neurological and sensory organ diseases; therapeutic management of patients. PREREQ: P-3 standing.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 4262 - PHARMACOTHERAPY XII - PSYCHIATRY

Pathophysiology and clinical presentation of common psychiatric diseases; chemistry, pharmacology and toxicology of common therapeutic agents used to treat psychiatric diseases; therapeutic management of patients. PREREQ: P-3 standing.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 4264 - PHARMACOTHERAPY XIV - ONCOLOGY

Pathophysiology, clinical presentation and therapeutic management of common cancers; chemistry, pharmacology and toxicology of therapeutic agents used to treat these disorders.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 4267 - PHARMACOTHERAPY XVII - CLINICAL TOXICOLOGY

Toxicology and clinical treatment of overdoses of common therapeutic agents.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 4270 - COMMUNITY PHARMACY PRACTICE CLERKSHIP

Pharmaceutical care in various community pharmacies. Four mornings each week for 6 weeks (128 contact hours) PREREQ: P-3 standing.
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4271 - Intermediate Community Pharmacy Clerkship

Reinforce and build upon the basic knowledge and experience gained in rotations. The focus will be on integrating patient care activities with pharmacy operations, conducted in a chain or independent community pharmacy. ELECTIVE
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4274 - INSTITUTIONAL PHARMACY PRACTICE CLERKSHIP

Practical experiences in unit dose drug distribution systems and preparation of sterile products. Four mornings each week for 6 weeks (128 contact hours). PREREQ: P-3 standing.
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4275 - AMBULATORY CLINICAL SKILLS CLERKSHIP

Development of basic clinical skills in the care of ambulatory patients. Rotations may be completed in any ambulatory care environment where pharmacists have complete access to other caregivers and complete patient information. Four mornings each week for 6 weeks (128 contact hours). PREREQ: P-3 standing.
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4276 - INPATIENT CLINICAL SKILLS CLERKSHIP

Pharmaceutical care in the inpatient setting. Development of basic clinical skills in the care of inpatients. Rotations may be completed in any inpatient care environment. Four mornings each week for 6 weeks (128 contact hours). PREREQ: P-3 standing.
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4463 - CASE STUDIES III

Emphasizes provision of pharmaceutical care to large patient populations. Application of principles of pathophysiology and therapeutics to drug therapy issues through student-centered, problem-based instructional processes. PREREQ: P-3 standing.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 4665 - CONSULTING PHARMACY CLERKSHIP

Student directed activities with special patient populatiuons.
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4666 - PEDIATRIC INTENSIVE CARE CLERKSHIP

An advanced clerkship with a focus in pediatric critical care for the student with a special interest in pediatric pharmacotherapy. Each student will be responsible for the drug and non-drug therapy of critically ill children (under supervision of preceptor). PREREQ: P-4 standing and PHAR 4677. ELECTIVE.
Levels: Pharmacy-Doctoral
Schedule Types: Elective

Pharmacy Department

PHAR 4667 - DISEASE STATE/FORMULARY MANAGEMENT CLERKSHIP

Course will incorporate policy development, formulary management, and disease state management utilizing TDCJ healthcare facilities. PREREQ: P-4 standing. ELECTIVE.
Levels: Pharmacy-Doctoral
Schedule Types: Elective

Pharmacy Department

PHAR 4668 - PEDIATRIC CAMP & AMBULATORY CARE CLERKSHIP

Pharmaceutical care opportunities in a pediatric summer camp environment. Each student will be responsible for the care of 6-8 children under the supervision of a licensed health-care professional. PREREQ: P-4 standing. ELECTIVE.
Levels: Pharmacy-Doctoral
Schedule Types: Elective

Pharmacy Department

PHAR 4669 - GEROPSYCHIATRY CLERKSHIP

A formative clerkship to develop the clinical skills related to geriatric patients with psychiatric disorders. ELECTIVE.
Levels: Pharmacy-Doctoral
Schedule Types: Elective

Pharmacy Department

PHAR 4670 - SPECIAL TOPICS CLERKSHIP II

Advanced pharmaceutical care experiences with pediatric patients. ELECTIVE
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4671 - RESEARCH CLERKSHIP I

Research experience in pharmaceutical sciences, social and administrative sciences, or pharmacy practice. ELECTIVE.
Levels: Pharmacy-Doctoral
Schedule Types: Elective

Pharmacy Department

PHAR 4672 - RESEARCH CLERKSHIP II

Research experience in pharmaceutical sciences, social and administrative sciences, or pharmacy practice (second 6-week experience). ELECTIVE. PREREQ: PHAR 4671
Levels: Pharmacy-Doctoral
Schedule Types: Elective

Pharmacy Department

PHAR 4673 - ADVANCED COMMUNITY PHARMACY CLERKSHIP

Advanced pharmaceutical care experiences with community pharmacy patients.
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4674 - ADVANCED HOSPITAL PHARMACY CLERKSHIP

Pharmaceutical care experiences with institutionalized patients. ELECTIVE.
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4675 - ADULT MEDICINE CLERKSHIP

Pharmaceutical care experiences with adult inpatient medicine patients.
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4676 - ADULT PRIMARY CARE CLERKSHIP

Pharmaceutical care experiences with ambulatory medicine adult patients.
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4677 - PEDIATRIC PRIMARY CARE CLERKSHIP

Pharmaceutical care experiences with ambulatory and inpatient pediatric patients.
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4678 - GERIATRIC PRIMARY CARE CLERKSHIP

Pharmaceutical care experiences with ambulatory and inpatient geriatric patients.
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4679 - PAIN MANAGEMENT CLERKSHIP

Pharmaceutical care experiences with an ambulatory patient population in need of chronic pain management. ELECTIVE.
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4680 - PALLIATIVE CARE CLERKSHIP

Pharmaceutical care experiences with palliative patients. ELECTIVE
Levels: Pharmacy-Doctoral
Schedule Types: Elective

Pharmacy Department

PHAR 4681 - RURAL PHARMACY PRACTICE CLERKSHIP

Pharmaceutical care experiences with ambulatory and/or institutionalized patients in a rural community.
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4682 - AMBULATORY CARE CLERKSHIP

Pharmaceutical care experiences with ambulatory patients. ELECTIVE

Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4683 - CARDIOLOGY CLERKSHIP

Pharmaceutical care experiences with patients with cardiovascular diseases. PREREQUISITE: P-4 standing. ELECTIVE
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4684 - ADVANCED DRUG INFORMATION CLERKSHIP

Pharmaceutical care experiences in a drug information service. ELECTIVE
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4685 - PULMONARY CLERKSHIP

Pharmaceutical care experiences with patients having respiratory diseases. ELECTIVE
Levels: Pharmacy-Doctoral
Schedule Types: Elective

Pharmacy Department

PHAR 4686 - HOME CARE CLERKSHIP

Pharmaceutical care experiences with home care patients. ELECTIVE
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4688 - INFECTIOUS DISEASES CLERKSHIP

Pharmaceutical care experiences with patients having infectious diseases. ELECTIVE
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4689 - NUTRITIONAL CARE CLERKSHIP

Pharmaceutical care experiences with nutritional care patients. ELECTIVE
Levels: Pharmacy-Doctoral

Schedule Types: Clerkship

Pharmacy Department

PHAR 4690 - ONCOLOGY CLERKSHIP

Pharmaceutical care experiences with patients having oncological diseases. PREREQ: P-4 standing. ELECTIVE
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4691 - PHARMACOKINETICS CLERKSHIP

Pharmaceutical care experiences in pharmacokinetic dosing program. ELECTIVE
Levels: Pharmacy-Doctoral
Schedule Types: Elective

Pharmacy Department

PHAR 4692 - PSYCHIATRY CLERKSHIP

Pharmaceutical care experiences with patients having psychiatric diseases. ELECTIVE
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4693 - SURGERY CLERKSHIP

Pharmaceutical care experiences with surgical patients. ELECTIVE
Levels: Pharmacy-Doctoral
Schedule Types: Elective

Pharmacy Department

PHAR 4694 - NEONATOLOGY CLERKSHIP

Pharmaceutical care experiences with neonates. ELECTIVE
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4695 - CRITICAL CARE CLERKSHIP

Pharmaceutical care experiences with critically ill adult patients in the intensive care unit. PREREQ: P-4 standing. ELECTIVE
Levels: Pharmacy-Doctoral

Schedule Types: Clerkship

Pharmacy Department

PHAR 4696 - NUCLEAR PHARMACY CLERKSHIP

Practical experiences in the preparation of radiopharmaceutical products and their use in medical practice. ELECTIVE
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4697 - POISON CENTER CLERKSHIP

Pharmaceutical care experiences with patients or caregivers in the poison control center. ELECTIVE
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4698 - ADMINISTRATIVE PHARMACY PRACTICE CLERKSHIP

Practical experiences in financial, operations, personnel and marketing management of a pharmacy practice environment. ELECTIVE
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 4699 - SPECIAL TOPICS

Student directed activities with special patient populations. ELECTIVE
Levels: Pharmacy-Doctoral
Schedule Types: Clerkship

Pharmacy Department

PHAR 5199 - MBA/HOM Capstone

Students will have developed a set of exercisable behavioral skills that enable an individual to function effectively in a top level/responsible management position. This list of skills includes effective interpersonal communication, active listening, giving and receiving feedback, presentations, interviewing, team building and trust building, conflict management, resolution of ethical issues, situational team leadership and group facilitation.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 5307 - Healthcare Network, System and Organizational Operations

The course presents selected concepts and methods from management practices that are useful in healthcare settings. Topics concerning policy, organizational structure, finance, budgeting, managerial epidemiology, human resources, negotiation, and others are presented.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 5308 - Healthcare Quality: Design and Implementation

The course presents selected concepts and methods from a best demonstrated management practices that are targeted to healthcare settings. Topics concerning consumer centric approaches to improving patient safety, quality, and others are presented.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

PHAR 5309 - Introduction to Compliance & Performance Management in Healthcare Operations

This course presents concepts concerning management and compliance in healthcare settings. Topics concerning personnel management, improving service to patients as consumers of healthcare, financial management, and others are presented.
Levels: Pharmacy-Doctoral
Schedule Types: Lecture

Pharmacy Department

FACULTY

Abbruscato, Thomas J., Associate Dean, Graduate School of Biomedical Sciences and Associate Professor of Pharmaceutical Sciences; B.S. Molecular & Cellular Biology, University of Arizona, 1992; Ph.D. Pharmacology & Toxicology, University of Arizona, 1997.

Ahsan, Fakhrul, Associate Professor of Pharmaceutical Sciences; B.S. Pharmacy, University of Dhaka, Bangladesh, 1990; M.S. Pharmacy, University of Dhaka, Bangladesh, 1992; Ph.D. Pharmaceutics, University of Madrid, Spain, 1999.

Allen, April, Assistant Professor of Pharmacy Practice; Pharm.D., University of Tennessee, 2002.

Alvarez, Carlos, Assistant Professor of Pharmacy Practice; Pharm.D., Texas Tech University Health Sciences Center, 2004.

Anderson, Jr., H. Glenn, Associate Dean of Academic Affairs and Associate Professor of Pharmacy Practice ; B.S. Pharmacy, The Ohio State University, College of Pharmacy, 1991.; Pharm.D., The Ohio

State University, College of Pharmacy, 1994.

Bickel, Ulrich, Professor of Pharmaceutical Sciences; Doctor of Medicine, University of Ulm, Germany, 1985.

Blaszczyk, Amie, Assistant Professor of Pharmacy Practice; Pharm.D., Duquesne University, 2003.

Brinn, Lisa S., Instructor of Biomedical Sciences; B.S. Biology, Universidade Santa Ursula, Rio de Janeiro, RJ, Brazil, 1993; M.S. Science Universidade de Sao Paulo, Ribeirao Preto, SP, Brazil, 1996; Ph.D. Science; Universidade de Sao Paulo, Ribeirao Preto, SP, Brazil, 1999.

Brouse, Sara Douglas, Associate Professor of Pharmacy Practice and Vice Chair of Residencies; Pharm.D. University of Missouri-Kansas City School of Pharmacy,1997.

Canales, Ann, Assistant Professor of Pharmacy Practice; Pharm.D., Southwestern Oklahoma, State University, 2001.

Capper, Julie, Assistant Professor Pharmacy Practice, Pharm.D., Creighton University School of Pharmacy and Health Professions, 2008.

Chastain, Lisa, Assistant Professor of Pharmacy Practice; Pharm.D., University of Houston, College of Pharmacy, 2005.

Choi, Suna: Research Assistant Professor, B.S. Food Science and Nutrition, Seoul National University, 1997: M.S. Food Science and Nutrition, University of Wisconsin-Stout, 1999, Ph.D. Science, University of Utah, 2004.

Coomer, Tiffany, Clinical Instructor Pharmacy Practice; Pharm.D., Texas Tech University Health Sciences Center, School of Pharmacy, 2009.

Cox, Craig, Associate Professor of Pharmacy Practice and Vice Chair of Experiential Programs; Pharm.D., Washington State University, 1999.

Craddock, Deeatra, Assistant Professor of Pharmacy Practice; Pharm.D., Auburn University, 2001.

Dalal, Kavita, Assistant Professor of Pharmacy Practice; Pharm.D., University of Houston, College of Pharmacy, 2002.

Edwards, Krystal, Assistant Professor of Pharmacy Practice; B.S. Pharmacy, Medical University of South Carolina, 1998; Pharm.D., Medical University of South Carolina, 2000.

Epps, Joel M., Academic Instructor; B.A. West Texas State University, 1979; M.B.A., Texas Women's University, 1982.

Eveleth, Jessica, Assistant Professor of Pharmacy Practice; Pharm.D., University of Iowa, College of Pharmacy, 2008.

Fike, David, Research Associate Professor, Touro University International, 2005.

Fox, Carol, Assistant Professor of Pharmacy Practice; Pharm.D., University of Connecticut, College of Pharmacy, 2006.

Greene, Shane, Associate Professor of Pharmacy Practice; Pharm.D., The University of Texas at Austin College of Pharmacy and The University of Texas Health Science Center -San Antonio, 1999.

Gunaje, Jayarama B., Associate Professor of Pharmaceutical Sciences; B.S., Biology, Mysore University, 1980; M.S., Biosciences, Mangalore University, 1982; Ph.D., Biochemistry, Indidan Institute of Science, Bangalore, 1989.

Haase, Krystal, Associate Professor of Pharmacy Practice; Pharm.D., The University of Texas at Austin College of Pharmacy, and The University of Texas Health Science Center -San Antonio, 1997.

Haase, Mark, Associate Professor of Pharmacy Practice and Head of Pediatrics Division; B.S. Pharmacy, University of Minnesota, 1996; Pharm.D., University of Minnesota, 1997.

Habeger, Butch (Harold E.), Associate Professor of Pharmacy Practice, Practice Management Division Director Pharmacy Operations; B.S. Pharmacy, South Dakota State University, 1970; M.B.A. Management, University of Puget Sound, 1981.

Hall, Ronald, Assistant Professor of Pharmacy Practice; B.S. Pharmacy, Saint Louis College of Pharmacy, 1999; Pharm.D., Saint Louis College of Pharmacy, 2000; MSCS, University of Texas Southwestern, 2009.

Horton, Niambi, Assistant Professor of Pharmacy Practice; Pharm.D., Auburn University, Tennessee, 2005.

Irons, Brian, Assistant Professor of Pharmacy Practice and Head of Primary Care Division; B.S., Pharmacy, University of Wisconsin, 1997; Pharm.D., University of Wisconsin, 1998.

Jaramillo, Jeanie, Assistant Professor of Pharmacy Practice and Interim Director of the Poison Control Center; Pharm.D., Texas Tech University Health Sciences Center, School of Pharmacy, 2001.

Johnson, Michelle, Assistant Professor of Pharmacy Practice; Pharm.D., Texas Tech University Health Sciences Center, School of Pharmacy, 2007.

Karamyan, Vardan T., Assistant Professor of Pharmaceutical Sciences; Pharm.D., Honors Diploma, School of Pharmacy, Yerevan State Medical University, Armenia, 2000; Ph.D., Biology, Institute of Biochemistry, National Academy of Sciences of Armenia and Department of Pharmaceutical Chemistry, School of Pharmacy, Yerevan State Medical University, 2004.

Katz, Paul, Associate Professor of Pharmacy Practice and Curator of the Texas Pharmacy Museum in TTUHSC School of Pharmacy; B.A. Art History, Swarthmore College, 1966; M.A. Anthropology, University of Kansas, 1969; M.Phil. Anthropology, University of Kansas, 1972; Ph.D. Anthropology, University of Kansas, 1976.

King, Shawna, Assistant Professor of Pharmacy Practice; Pharm.D., Texas Tech University Health Sciences Center, School of Pharmacy, 2005.

Klein, Mary, Assistant Professor of Pharmacy Practice; Pharm.D., Texas Tech University Health Sciences Center, School of Pharmacy, 2005.

Kwon, Young Min, Assistant Professor of Pharmaceutical Sciences; B.S., Chemistry, Oregon State University, 1997; Ph.D., Pharmaceutics & Pharmaceutical Chemistry, University of Utah, 2003.

LaGuardia, Sherry, Assistant Professor of Pharmacy Practice; Pharm.D., Texas Southern University, 2008.

La-Beck, Irene, Assistant Professor of Pharmacy Practice; Pharm.D., University of North Carolina, 2008.

Lee, Young Ran, Assistant Professor Pharmacy Practice; Pharm.D., Western University of Health Sciences, School of Pharmacy, 2007

Leff, Richard, Regional Dean for Dallas/Fort Worth Programs and Professor of Pharmacy Practice; B.S. Education, Northern Illinois University, 1970; B.S Pharmacy, Creighton University, 1973; Pharm.D., University of Minnesota, 1975.

Lenz, Ranee, Associate Professor of Pharmacy Practice and Chief, Managed Health Care Pharmacy Services; Pharm.D., School of Pharmacy and Allied Health Professionals, Creighton University, 1994.

Liu, Xinli, Assistant Professor of Pharmaceutical Sciences; B.S., Medicinal Chemistry, Department of Chemistry, Lanzhou University, P.R. China, 1995; Ph.D., Chemistry, Dept of Chemistry, University of Kentucky, 2001.

Lockman, Paul R., Assistant Professor of Pharmaceutical Sciences; B.S.N., Nursing, West Texas A&M University, 1994; Ph.D., Pharmaceutical Sciences, Texas Tech University Health Sciences Center, 2003.

Luedtke, Sherry A., Associate Dean of Professional Affairs and Associate Professor of Pharmacy Practice; B.S. Pharmaceutical Sciences, University of Wisconsin-Madison, 1992; Pharm.D., University of Wisconsin-Madison, 1994.

Luera, Patricia, Assistant Professor Pharmacy Practice; Pharm.D., University of Illinois College of Pharmacy, 1994.

Lyte, Mark, Professor of Pharmacy Practice; B.S., Medical Technology, Fairleigh Dickinson University, 1976; M.S., Microbiology, Weizmann Institute of Science, Israel, 1979; Microbiology, Weizmann Institute of Science, Israel, 1983.

Minze, Molly, Assistant Professor of Pharmacy Practice; Pharm.D., University of Houston, College of Pharmacy, 2005.

MacLaughlin, Anitra, Assistant Professor of Pharmacy Practice; Pharm.D., Medical University of South Carolina, 1998.

MacLaughlin, Eric, Associate Professor of Pharmacy Practice and Head of Adult Medicine Division; B.S. Pharmacy, Albany College of Pharmacy, 1996; Pharm.D., Medical University of South Carolina, 1998.

Mark, Karen S., Assistant Professor of Pharmaceutical Sciences; B.S., Computer Science, Winona State University, Winona, Michigan, 1986; B.S., Medical Technology, University of Nebraska Medical Center, College of Medicine, 1988; Ph.D., Pharmaceutical Science, University of Nebraska Medical Center, College of Pharmacy, Omaha, Nebraska; 1999.

Mathys, Monica, Assistant Professor of Pharmacy Practice; Pharm.D. University of Arkansas, 1998.

Meek, Claudia, Research Assistant Professor of Phramcy Practice, Ph.D., University of Texas at Dallas, 2005.

Mehvar, Reza, Professor of Pharmaceutical Sciences; Pharm.D., University of Tehran, Iran, 1979; Ph.D. Pharmacokinetics, Faculty of Pharmacy, University of Alberta, Edmonton, Canada, 1988.

Miller, Harold H., Associate Professor of Pharmaceutical Sciences; B.A.. Chemistry, Texas Tech University, Lubbock, Texas 1971; M.T. (ASCP) Medical Technology, Hendrick Medical Center, Abilene, Texas, 1972; Ph.D. Pharmacology, UT Southwestern Medical Center, Dallas, Texas 1978.

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Moridani, Majid Y., Assistant Professor of Pharmaceutical Sciences; Pharm.D., Tehran Medical University, Iran, 1993; Ph.D., Medicinal/Pharmaceutical Chemistry, Kings College London, University of London, London, U.K., 1997.

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Nelson, Sherida G., Clinical Instructor of Pharmacy Practice; B.S. Pharmacy, University of Iowa, College of Pharmacy, 1973.

Newsom, Judy K., Assistant Professor of Pharmaceutical Sciences; B.S. Pharmacy, University of Mississippi, 1987; M.S. Pharmacy Administration, University of Mississippi, 1991; Ph.D. Pharmacy Administration, University of Mississippi, 1995.

Ochoa, Pamella, Assistant Professor of Pharmacy Practice; Pharm.D., Texas Tech University Health Sciences Center, School of Pharmacy, 2003.

Parker, Thomas, Assistant Professor of Pharmacy Practice, Pharm.D., Texas Tech University Health Sciences Center, 2005.

Pass, Steven, Associate Professor Pharmacy Practice; Pharm.D., University of Kentucky, College of Pharmacy, 1996.

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Robles, Janie, Assistant Professor of Pharmacy Practice; Pharm.D., Texas Tech University Health Sciences Center, School of Pharmacy, 2003.

Seifert, Charles F., Regional Dean for Lubbock Programs and Professor of Pharmacy Practice; B.S. Pharmacy, North Dakota State University, 1982; Pharm.D., The University of Texas at San Antonio, 1984.

Shah, Sachin, Associate Professor of Pharmacy Practice, Pharm.D., Texas Tech University Health Sciences Center, 2001.

Simmons, David, Clinical Instructor of Pharmacy Practice; B.S., Pharmacy, Southwestern Oklahoma State University, 1982.

Sleeper, Rebecca, Associate Professor of Pharmacy Practice and Head of Geriatrics Division; Pharm.D., University of Rhode Island, 1998.

Smith, Quentin R., Senior Associate Dean for Sciences, and University Distinguished Professor of Pharmaceutical Sciences; B.S. Chemistry, Oberlin College, 1976; Ph.D. Pharmacology, University of Utah College of Medicine, 1980.

Stapleton, Jessica, Assistant Professor of Pharmacy Practice; Pharm.D., University of Tennessee, College of Pharmacy, 2008.

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Sterling, Teresa, Assistant Professor of Pharmacy Practice; Pharm.D., Shenandoah University, 2000.

Stoll, James, Associate Dean for Faculty Enhancement and Professor of Biomedical Sciences; B.S. Chemistry, New Mexico State University, 1980; Ph.D. Biochemistry, The Johns Hopkins University, 1986.

Tawwater, Christopher, Assistant Professor of Pharmacy Practice; Pharm.D., Texas Tech University Health Sciences Center, School of Pharmacy, 2007

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Treadway, Angela, Associate Professor of Pharmacy Practice; Pharm.D., The University of Texas at Austin College of Pharmacy, 1999.

Van Dusen, Virgil, Regional Dean of Abilene, Professor of Pharmacy Practice: *Juris Doctor,* University of Tulsa, 1982.

Vega, Jose, Assistant Professor of Pharmacy Practice; Pharm.D., Texas Tech University Health Sciences Center, School of Pharmacy, 2003.

Wang, Ming-Hai, Amarillo Community Endowed Chair in Cancer Research and Professor of Biomedical Sciences; M.D., Zhejiang University, China, 1982; M.S., Infectious Diseases, Zhejiang University, China, 1986; Ph.D., Infectious Diseases, Zhejiang University, China; and Medical University of Luebeck, Germany, 1989.

Weidanz, Jon A., Associate Professor of Biomedical Sciences; B.S. Biology, West Virginia University, 1985; M.P.H. Epidemiology, University of Alabama at Birmingham, 1987; Ph.D. Molecular Biology, University of Alabama at Birmingham, 1992.

Weis, Margaret T., Associate Professor of Biomedical Sciences; B.S. Loyola University, 1970; Ph.D. Molecular and Cellular Biology, Department of Pharmacology, Medical University of South Carolina, 1983.

Wise, Stephen, Assistant Professor of Pharmacy Practice; Pharm.D., Drake University, 2009.

Zhang, Ruiwen, Chair and Professor, Pharmaceutical Sciences; M.D., Shanghai Medical University, 1983, Ph.D. Toxicology and Occupational Epidemiology, Shanghai Medical University, 1988.