

Texas Tech University Health Sciences Center

*School of Pharmacy*

*Doctor of Pharmacy Program*



*2024-2025*

## **SCHOOL OF PHARMACY CAMPUSES**

|  |   |  |   |
|--|---|--|---|
| <p><b>Abilene</b><br/>1718 Pine<br/>Abilene, TX 79601</p> <p>(325) 676-7948 Telephone<br/>(325) 676-1412 Facsimile</p> | <p><b>Amarillo</b><br/>1300 S. Coulter<br/>Amarillo, Texas 79106</p> <p>(806) 414-9300 Telephone<br/>(806) 356-4669 Facsimile</p> | <p><b>Dallas/Ft. Worth</b><br/>Southwest Building (official)<br/>5920 Forest Park<br/>Dallas, TX 75235<br/>(214) 654-9404 Telephone</p> <p>VA Medical Center Building 7<br/>(additional offices)<br/>4500 Lancaster Road<br/>Dallas, TX 75216<br/>(214) 372-5300 Telephone</p> | <p><b>Lubbock</b><br/>3601 4<sup>th</sup> Street, MS 8162<br/>Lubbock, Texas 79430</p> <p>(806) 743-4200 Telephone<br/>(806) 743-4209 Facsimile</p> |
|--|---|--|---|

**TE**

## **SCHOOL OF PHARMACY ADMINISTRATION**

Grace Kuo, Pharm.D., MPH, PhD, FCCP, PNAP, Dean

Rebecca Sleeper-Irons, Pharm.D., FCCP, FASCP, BCPS, Senior Associate Dean of Curriculum Affairs & Assessment & Accreditation

Charles F. Seifert, Pharm.D., FCCP, Associate Dean of Strategic Initiatives & Regional Dean for Lubbock Programs

Krystal Edwards, Pharm.D., Associate Dean of Career Development

Kenna Payne, Pharm.D., Associate Dean of Professional Development

Sara Brouse, Pharm.D., FCCP, FACC, BCPS, BCCP, Regional Dean, Abilene

Steven Pass, Pharm.D., MEd, FCCM, FCCP, FASHP, Regional Dean, Dallas

Krystal Haase, Pharm.D., FCCP, BCPS, BCCCP., Regional Dean, Amarillo

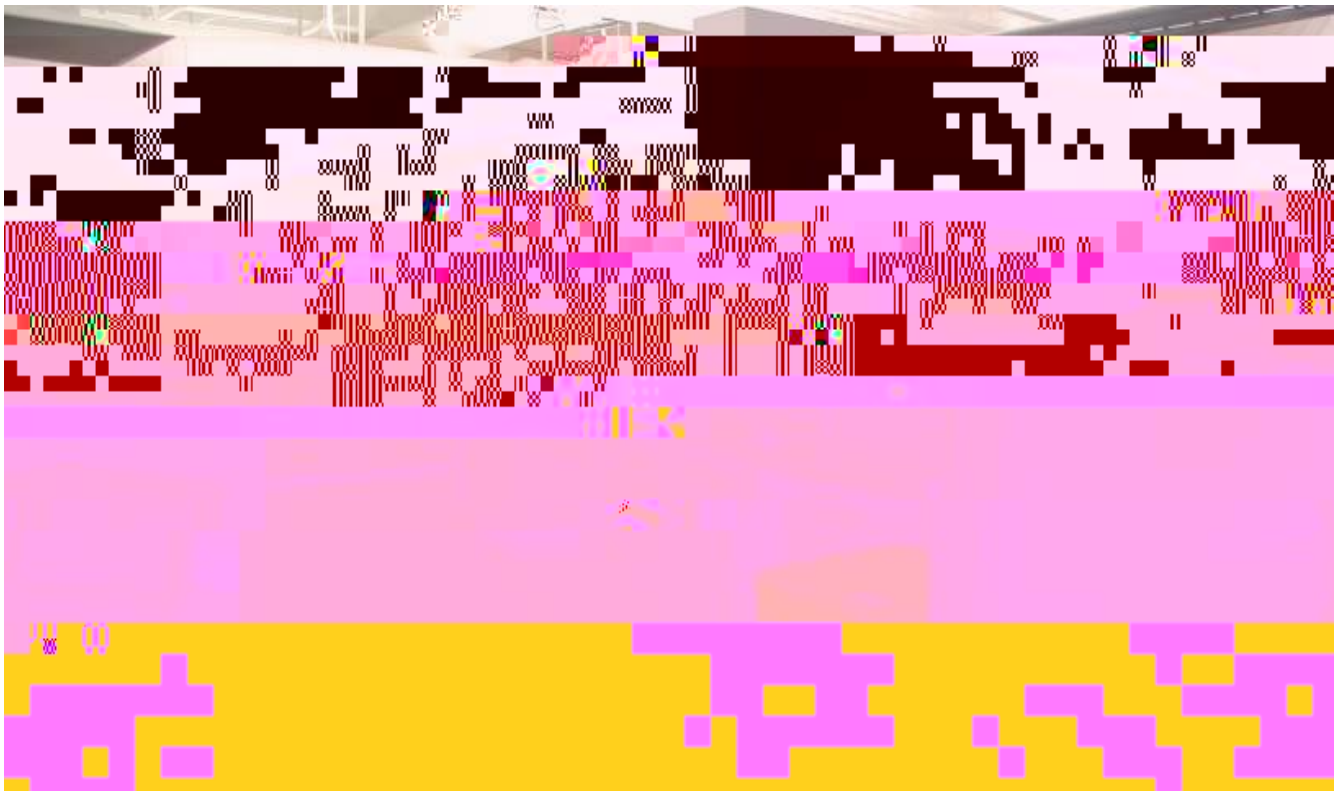
Eric MacLaughlin, Pharm.D., FCCP, BCPS, Chair, Pharmacy Practice

Thomas Abbruscato, Ph.D., Chair, Pharmaceutical Sciences

Sanjay Srivastava, Ph.D., Chair, Immunotherapeutics & Biotechnology

Ulrich Bickel, M.D., Ph.D., Associate Dean for Sciences

Molly Minze, Pharm.D., FCCP, BCACP, Associate Dean of Student Affairs & Admissions



## TABLE OF CONTENTS

|  |    |   |    |
|--|----|---|----|
| <b>Dean’s Message</b>                  | 6  | <b>Doctor of Pharmacy Admissions Policy</b> | 31 |
|  |    | - The Admission Process                     | 31 |
| <b>School of Pharmacy Philosophy</b>   | 6  | - Pre-requisites                            | 32 |
|  |    | - Required Application Documents            | 35 |
| <b>Mission Statement</b>               | 7  | - Technical Standards                       | 36 |
|  |    | - Foreign Student Information               | 37 |
| <b>Vision Statement</b>                | 7  | - Transfer Credits                          | 38 |
|  |    | - Regular Admission Review                  | 39 |
| <b>Culture Statement</b>               | 7  |   |    |
| <b>Outcomes</b>                        | 8  | <b>Pharm.D/MBA Program</b>                  | 39 |
|  |    | <b>Pharm.D/MPH Program</b>                  | 40 |
| <b>Accreditation</b>                   | 8  | <b>Pioneer Pathway</b>                      | 40 |
|  |    |   |    |
| <b>Purposes and Functions</b>          | 8  | <b>SOP Student Health Record Policy</b>     | 40 |
|  |    | - Enrollment Requirements                   | 42 |
| <b>General Information</b>             | 9  | - Flu Vaccine                               | 42 |
| - History                              | 9  | - Background checks/drug screen             | 43 |
| - The School of Pharmacy               | 10 |   |    |
| - Amarillo                             | 10 | <b>The Professional Program</b>             | 43 |
| - Abilene                              | 10 | - Grading                                   | 43 |
| - DFW                                  | 10 | - Student Success Initiative                | 44 |
| - Lubbock                              | 11 | - Progression                               | 44 |
|  |    | - Honor Council                             | 46 |
| <b>Affiliated Teaching Hospitals</b>   | 11 | - Campus Assignment Policy                  | 46 |
|  |    | - Withdrawal Policy                         | 46 |
| <b>The Program</b>                     | 14 |   |    |
| - Concentration in Special Populations | 14 |   |    |
| - Other degrees and pathways           | 14 |   |    |
| <b>Texas Pharmacy Museum</b>           | 15 |   |    |
| <b>Our History-Our Image</b>           | 15 |   |    |
| <b>Academic Calendar</b>               | 15 |   |    |
| <b>Pharmacy Licensure</b>              | 16 |   |    |
| <b>Texas Residency</b>                 | 16 |   |    |
| <b>TTUHSC Student Affairs</b>          | 16 |   |    |
| - Student Handbook                     | 16 |   |    |
| - International Student Support        | 17 |   |    |
| - Disability Services                  | 17 |   |    |
| - Office of Registrar                  | 17 |   |    |
| - Financial Aid                        | 17 |   |    |
| - Office of student life               | 18 |   |    |
| - Health insurance                     | 18 |   |    |
| - Veterans resource center             | 20 |   |    |
| - SOP Office of Student Affairs        | 20 |   |    |
| - Other campus info and resources      | 20 |   |    |
| - Student health services              | 22 |   |    |
| - Scholarships                         | 28 |   |    |
| - Estimated Tuition & Fees             | 29 |   |    |
| - Emergency Tuition Loan Program       | 31 |   |    |

## **Dean's Message**

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 patients through innovation and excellence in pharmacy education, practice, and research.

## **VISION STATEMENT**

To transform health care and the lives of the patients we serve.

## **CULTURE STATEMENT**

Our culture - the way we live BT/F13(y65 221.52 Tm0 G{ )JT3 w)3(e)-3( 1)-13(i)-2(v)10(e)-3( BT/F13(y65 221.52





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.

beginning Fall, 1996. Currently, 155 students are admitted once each year in the fall semester.

small group study rooms, administrative and faculty offices, and student lounges. Students are able to complete clinical practice experiences among the numerous hospitals, clinics, and community pharmacies throughout the Metroplex in an interprofessional environment.

### Lubbock

The Lubbock campus is part of the Texas Tech University Health Sciences Center main campus. It is the main campus for the Schools of Medicine, Nursing, Health Professions and Graduate School of Biomedical Sciences. Lubbock students have access to all facilities and programs that a comprehensive health sciences center and major academic campus of more than 40,000 students offer. Pharmacy students share classrooms, clinics, and hospitals with medical, nursing, and other allied health professions 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 Health 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 distr 51Nu(n)10(t)-i(r)7( 0(a)-3(s)4( w)3(e)-3

## **ABILENE**

### Hendrick Health

Hendrick Health was founded in 1924 as a not-for-profit healthcare institution in response to a community need for quality healthcare. Throughout the decades, Hendrick has grown with the community. In 2020, Hendrick Health expanded to a three hospital system—Hendrick Medical Center North and Hendrick Medical Center South in Abilene; and Hendrick Medical Center Brownwood in Brownwood. Hendrick Health North is a 522-bed medical center and Hendrick Health South is a 231-bed facility. Hendrick Health also encompasses a rehabilitation center, cancer center, hospice care facility, a level 2 Neonatal Intensive Care Unit, and multiple hospital-based specialty ambulatory care clinics which serve as training sites for PharmD students.



## **DALLAS/FORT WORTH**

### VA North Texas Health Care System

The VA North Texas Health Care System (VANTHCS) hospital is the primary teaching site of Texas Tech Health Sciences Center School of Pharmacy Dallas Campus. The School of Pharmacy's VA 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 healthcare 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,



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.

#### Carillon Senior Living Community

The Carillon partners with the School of Pharmacy to provide clinical education in Geriatric Pharmacotherapy. As a CCRC (Continuous Care Retirement Community) the Carillon offers a campus of independent living, assisted living, and a 140-bed long term care facility, which includes a dedicated memory care unit and short term Skilled Nursing care.

#### University Medical Center

University Medical Center University Medical Center is a 501-bed tertiary care county teaching hospital which provides >35 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

weekday in classes, laboratories, or clinical experiences.

## **TEXAS PHARMACY MUSEUM**

Inside the Amarillo 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.

## **OUR HISTORY – OUR IMAGE**

As as chronicle our own history and experiences with life in the School of Pharmacy, personal images may be captured during events organized and hosted by the University using film

## **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



## **International Student Support (806)743-4568**

<https://www.ttuhscc.edu/international/>

International students are an important and integral part of the TTUHSC. International Student Services helps international students with information about immigration issues, provides support for academic and cultural adjustment, and offers opportunities for involvement in the University community.

## **Student Disability Services (806)743-1926**

[Student Disability Services | Texas Tech University Health Sciences Center \(ttuhsc.edu\)](#)

The mission of Student Disability Services at Texas Tech University Health Sciences Center is to support the Values-Based Culture by providing services for students with disabilities and encouraging accessibility within the learning experience by educating the campus community on related issues.

TTUHSC complies with the Americans with Disabilities Act (ADA), Section 504 Rehabilitation Act of 1973, and state and local requirements regarding students with disabilities. Under these laws, no otherwise qualified individual with a disability shall be denied access to or participation in services, programs, and activities of TTUHSC solely on the basis of the disability.

To obtain accommodations, qualified students must complete an application and provide documentation to TTUHSC Student Disability Services. If there are further questions about the process, reach out to Student Disability Services.

## **Office of the Registrar**

<https://www.ttuhscc.edu/registrar/>

The Registrar's Office is responsible for providing services to students and alumni including enrollment verifications, degree verifications, name changes, and residency reclassifications. These services, and more, can be accessed through the HSC WebRaider Portal at [www.webraider.ttuhscc.edu](http://www.webraider.ttuhscc.edu). Students can also view their unofficial transcript and request an official HSC transcript through the WebRaider Portal.

Students must also maintain accurate permanent and local addresses with the Registrar's Office. Addresses are used for various purposes including student billing and official state and federal reporting. Maintaining an accurate address and telephone number is also important for use by University officials and/or student organizations. Students can update their address through the WebRaider Portal under "My Personal Information" or through their "Action Items" tab.

## **Office of Student Financial Aid (806) 743-3025 | [financial.aid@ttuhsc.edu](mailto:financial.aid@ttuhsc.edu)**

It is the objective of the TTUHSC Office of Student Financial aid to provide financial assistance to students who, without such assistance, would not be able to pursue advanced education. Financial

aid, student eligibility requirements, and disbursement dates and can be found on our website:  
<https://www.ttuhschool.edu/financial-aid/>.

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

**Office of Student Life (806) 743-2302 | [student.life@ttuhsc.edu](mailto:student.life@ttuhsc.edu)**

<https://www.ttuhschool.edu/student-life/default.aspx>

Student Life is here to help students make the most of their TTUHSC experience, bringing together the people, places and programs that support their growth, wellness and success both within and outside of the classroom. Through student programming and more than 100 student organizations, TTUHSC offers activities year-round to fulfill professional and personal interests. Students needing information about TTUHSC's student organizations, the institutional Student Government Association, the annual Ring Ceremony and graduation announcements can visit



Please allow 5-7 days for review. You will receive an email from AHP. If approved, the charge on your tuition and fee account will be removed or refunded back to your account.

Utilize the resources on the [Office of Student Life website](#) and the [AHP website](#), which provide detailed information about the enrollment and waiver processes for the student health insurance plan.

### **Veterans Resource Center (806)743-7549**

<https://www.ttuhs.edu/veterans-resource-center/>

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

If you have any questions regarding benefits or available services, please contact the TTUHSC Veterans Resource Center at 806-743-7549 or email [vrcenter@ttuhsc.edu](mailto:vrcenter@ttuhsc.edu).

### **Writing Center**

The TTUHSC Writing Center's mission is to engage successfully and consistently with writers (students, faculty, staff, researchers, residents, etc.) on all TTUHSC campuses with respect to conversations about their writing at any stage of the writing process, with the key aim of helping these writers become more engaged, confident, and self-reflective. [writing.center@ttuhsc.edu](mailto:writing.center@ttuhsc.edu) or (806) 743-3638

### **SOP SCHOOL OFFICE OF STUDENT AFFAIRS**

Students needing assistance with campus issues, application, academic issues, and personal counseling should seek help here: **(806) 414-9393**

### **OTHER CAMPUS INFORMATION & RESOURCES**

Immunizations



Managed Health Care (806) 414-9344

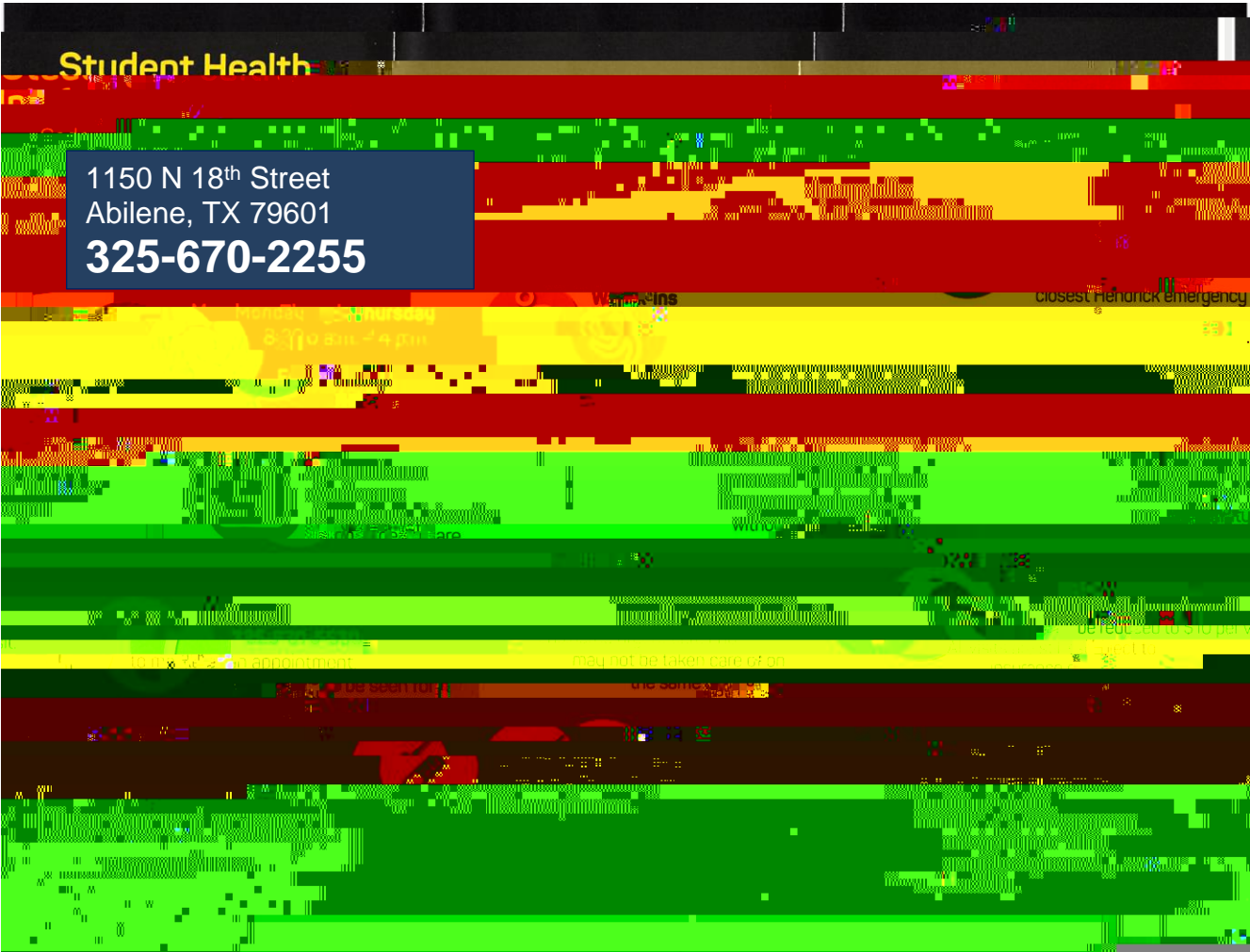
Abilene



Some of the services provided by the hospital include:   
 - Emergency Department   
 - Outpatient Services   
 - Inpatient Services   
 - Radiology Services   
 - Laboratory Services   
 - Pharmacy Services   
 - Physical Therapy Services   
 - Occupational Therapy Services   
 - Speech Therapy Services   
 - Case Management Services   
 - Social Work Services   
 - Nutrition Services   
 - Patient Education Services   
 - Supportive Care Services   
 - Palliative Care Services   
 - Hospice Services   
 - Organ Donation Services   
 - Transplant Services   
 - Genetic Testing Services   
 - Cancer Services   
 - Heart and Lung Services   
 - Kidney Services   
 - Liver Services   
 - Pancreas Services   
 - Endocrine Services   
 - Gastrointestinal Services   
 - Urology Services   
 - Gynecology Services   
 - Obstetrics Services   
 - Pediatrics Services   
 - Neonatal Services   
 - Ophthalmology Services   
 - Otolaryngology Services   
 - Dermatology Services   
 - Plastic Surgery Services   
 - Orthopedic Services   
 - Neurology Services   
 - Neurosurgery Services   
 - Cardiology Services   
 - Cardiac Surgery Services   
 - Vascular Services   
 - Infectious Disease Services   
 - Immunology Services   
 - Allergy Services   
 - Rheumatology Services   
 - Hematology Services   
 - Oncology Services   
 - Radiation Oncology Services   
 - Palliative Care Services   
 - End-of-Life Services   
 - Bereavement Services   
 - Spiritual Care Services   
 - Chaplaincy Services   
 - Patient Advocacy Services   
 - Case Management Services   
 - Social Work Services   
 - Nutrition Services   
 - Patient Education Services   
 - Supportive Care Services   
 - Palliative Care Services   
 - Hospice Services   
 - Organ Donation Services   
 - Transplant Services   
 - Genetic Testing Services   
 - Cancer Services   
 - Heart and Lung Services   
 - Kidney Services   
 - Liver Services   
 - Pancreas Services   
 - Endocrine Services   
 - Gastrointestinal Services   
 - Urology Services   
 - Gynecology Services   
 - Obstetrics Services   
 - Pediatrics Services   
 - Neonatal Services   
 - Ophthalmology Services   
 - Otolaryngology Services   
 - Dermatology Services   
 - Plastic Surgery Services   
 - Orthopedic Services   
 - Neurology Services   
 - Neurosurgery Services   
 - Cardiology Services   
 - Cardiac Surgery Services   
 - Vascular Services   
 - Infectious Disease Services   
 - Immunology Services   
 - Allergy Services   
 - Rheumatology Services   
 - Hematology Services   
 - Oncology Services   
 - Radiation Oncology Services   
 - Palliative Care Services   
 - End-of-Life Services   
 - Bereavement Services   
 - Spiritual Care Services   
 - Chaplaincy Services   
 - Patient Advocacy Services



**Student Health Services Abilene:**









## **TUITION AND FEE 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 \$400 nonrefundable placement guarantee fee.

### **Student Business Services**

---

Academic Year 2024-2025 Estimated Tuition

|  |             |             |
|--|-------------|-------------|
| Total Fees for First Year                      | \$4,240.00  | \$4,240.00  |
| Total of Tuition, Fees & Expenses for 39 hours | \$19,177.00 | \$35,557.00 |

|   |            |            |
|---|------------|------------|
| Estimated Total for Outside Expenses for First Year | \$2,545.00 | \$2,545.00 |
|---|------------|------------|

ADMISSION FEES

Tuition, fees and expenses are subject to change at any time 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 personal expenses, including travel and housing during their clinical experiences.

Other Fees

Refunds

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. Coursework older than 7 years will be subject to further review. 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\*\*  
English Comp I 3 SCH\*  
English Comp II 3 SCH\*  
English Literature 3 SCH\*  
Humanities/Social Sciences 15 SCH \* \*\*\*

**Legend:**

\*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, 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.

We have always maintained a holistic application review when considering candidates for admission. This review includes the following items:

- Overall GPA
- Pre-Pharmacy GPA
- Letters of Recommendation
- Essays



See prerequisites at <https://www.ttuhsu.edu/pharmacy/prospective/prerequisites.aspx>. Each candidate shall complete at least the minimal course prerequisites for admission to TTUHSC School of Pharmacy.

Advanced Placement (AP), International Baccalaureate (IB), and College Level Examination Program (CLEP) credit taken prior to enrollment at the candidate's school will be accepted if on the candidate's college/university transcript.

- o Dual credit taken prior to enrollment at the candidate's school will be accepted.
- o Courses may be taken at a community college or a university.

Each candidate must remain in good academic and disciplinary standing at their school.

The candidate must complete a successful interview.

### 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 PharmCAS application online, submitted your transcripts, given your references their forms to complete, completed the supplemental application, paid your application fee, and your grades have been received by the Pharmacy College Application Service (PharmCAS), your application will go through a 6-step review process.

#### **Step 1 – Admission Staff Review**

The admissions advisor 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. Your transcripts will be reviewed for each "F", "W", and "D" previously made in the all previous coursework. The status of your application will be posted online and verify that your application is complete.

#### **Step 2 – Admissions Committee Member 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 one of the SOP campus locations for an interview.

If you are not offered an opportunity for an interview, it does not mean that we believe you would not 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

*Preparing for the Interview...*

1. Dress professionally. When you look professional, you act it....but be sure your clothes are comfortable and you feel good about the way you look.
- 2.

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 \$400.00 is required with your acceptance.

If you do not make the first admissions list, please do not give up on being admitted to the SOP. 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 PharmCAS and send you a letter notifying you of your admissions. If you are an alternate, keep monitoring PharmCAS for updates to your status. You may also contact the Office of Student Affairs and Admissions if you have any questions about how your application was reviewed.

### 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 m ab, claul, clill not acncñitions, please

The pharmacy experience essay and the reference letters are used to evaluate the overall qualifications of the candidate. Please go to our website for course matrix information, and information about important dates.

### 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 standards, with or without reasonable accommodation, to achieve successful completion of the PharmD degree:

#### **Visual Acuity**

Possess sufficient vision, with or without reasonable accommodation, to:

- accurately read 6-point type,
- read and process written information in written and digital format,
- distinguish the markings, shapes, colors, and other characteristics on typical commercially prepared products, and
- observe the activities of technical support staff operating under his/her supervision in accordance with workplace policies and state law

#### **Hand, Finger, Eye Manipulations**

.



## 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 Affairs and Admissions by the required deadline. All prerequisite course work must be completed by May 31.



application deadline for admission is March 1<sup>st</sup> of each year. Electronic applications are found at <https://sophasexpress.liaisoncas.com/>. Applicants for the Pharm.D./MPH program program MUST have a prior baccalaureate or higher degree to be admitted into the program or the ability to complete these requirements before starting in the MPH portion of the curriculum. Additional information regarding requirements for enrollment, applications, fees, and program information can be found in the TTUHSC School of Pharmacy Pharm.D./MPH website.

## **THE PIONEER PATHWAY**

The Pioneer Pathway is an extension of our existing distributive campus model with a mission to enable access to quality pharmacy education for learners within our region and beyond. This pathway allows students the flexibility to complete the initial two years of their training in a remote, structured learning environment using a combination of online asynchronous and synchronous coursework with in-person immersions. The third year is transitional; in the Fall, the students experience a blend of similarly structured remote coursework and their didactic electives and complete a 6-week structure



## **PROCEDURE**

**POSITIVE** TB skin test in the past, a report indicating a negative chest x-ray taken within the previous twelve months is **required**. TTUHSC will also accept IGRA (T-SPOT or quantiferon) testing in place of a TB test If you have previously had1 0 0( )ITJE)

## CPR

It is the responsibility of the student to maintain CPR certification. 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 two-step 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 have a follow-up PPD skin test every 1-2 years.





## Honor Council

The purpose of the Texas Tech Health Sciences Center School of Pharmacy Honor Council is to serve as student and faculty representatives who foster and uphold the School of Pharmacy Code of Professional and Academic Conduct. The Honor Council also serves to promote integrity as well as develop a culture of honesty and student accountability within the school and their respective classes. The Honor Council will convene and provide rulings over student violations of the Code of Professional and Academic Conduct and to promote integrity and accountability. The Honor Council will provide recommended sanctions when a rules violation has been committed and submit summary reports directly to the Dean of the School of Pharmacy as well as report back to their classes.

[https://hscweb.ttuhschool.edu/pharmacy/documents/administration/policies/SOP\\_OP\\_77.P.27\\_School\\_of\\_Pharmacy\\_Honor\\_Council.pdf](https://hscweb.ttuhschool.edu/pharmacy/documents/administration/policies/SOP_OP_77.P.27_School_of_Pharmacy_Honor_Council.pdf)

## Campus Assignment Policy

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

---

## Withdrawal Policy (from courses)

**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.

**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.

**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.

**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.

**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.

**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 Clinical Correlations, Grand Rounds, and experiential rotations. A Doctor of P

## 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. Listed below 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 Affairs can be contacted by students demonstrating any indication of academic difficulty to 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.

# **Curricular Competencies and Assessment**

## **Terminal Outcomes and Ability Statements**

Commensurate with the American Council on Pharmacy Education's curricular standards, the school of Pharmacy states the areas of expected competency for a pharmacy learner upon graduation from the Doctor of Pharmacy program.

[http://www.ttuhschool.edu/pharmacy/documents/academics/Terminal\\_Outcomes\\_and\\_Ability\\_Statements.pdf](http://www.ttuhschool.edu/pharmacy/documents/academics/Terminal_Outcomes_and_Ability_Statements.pdf)

Your progress in developing mastery will be assessed continually as a part of each individual course through course exams, practicums, or other assessment methods as determined by the instructional design of the course, and also annually as part of an over-arching school-wide assessment program. The purpose of this combined assessment approach is 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

## **Pre-APPE Assessment**

The academic program is designed to provide Pharm.D. candidates with opportunities to develop the knowledge, skills, and behaviors required of a competent and ethical practicing pharmacist. The program's fourth academic year, comprised of Advance Pharmacy Practice Experiences (APPEs), is designed to provide candidates with opportunities to 1) practice acquired skills, 2) use learned pharmacy knowledge, and 3) exhibit professional behaviors. To ensure that candidates have the knowledge and skills essential to candidate success and patient safety during these experiences, an



assessment program of the Pre-APPE curriculum, consisting of professional years 1, 2, and 3 is conducted. This includes assessment of basic drug knowledge via the **Drug Knowledge Assessment (DKA)**, and clinical skills assessed via an **Objective Structured Clinical Examination (OSCE)**. Both assessments are typically administered early in the Spring semester to students in the P3 year. Each P3 candidate must provide proof of drug knowledge competency through achievement of 75% or greater score upon the DKA. P3 candidates failing to meet or exceed the DKA's criterion will be required to successfully complete remediation exercises and to pass the DKA prior to enrollment within the program's Advanced Pharmacy Practice Experiences (P4 clerkships). Similarly, student's must meet the competency benchmarks set for the OSCE. Students who do not meet the passing standard will be required to successfully complete the remediation exercises.

The DKA 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

Medications included in the DKA are derived from the top 200 prescribed out-patient medications and those commonly used in Health Systems. A list of those medications being evaluated will be made available to the candidates each year prior to the DKA date.

The skills evaluated in the OSCE include calculations, drug information search and evaluation skills, patient counseling, and other basic practice functions.

### Graduation



## 2024-2025 CURRICULUM PLANNER\*

### P0 Preparation for Fall Semester

**Orientation**                      During the 1 week prior to Fall Semester Start

### P1 Fall Semester

| <u>Credit Hours</u> | <u>Course Name and Number</u>   |
|---------------------|---|
| 0                   | PHAR 1101 Practice Readiness Experiential Program I (PREP I)<br>(Longitudinal Course – Enrollment in Spring only) |
| 2                   | PHAR 1220 Foundations in Pharmacy Practice  |
| 3                   | PHAR 1330 Biological Foundations in Pharmacy and Patient<br>Assessment I  |
| 1                   | PHAR 1130 Biological Foundations I lab  |
| 3                   | PHAR 1332 Pharmacy Immunology and Microbiology  |
| 1                   | PHAR 1132 Clinical Immunizations lab  |
| 4                   | PHAR 1440 Molecular Foundations of Therapeutics   |
| 4                   | PHAR 1460 Pharmacy Science and Calculations   |
| 2                   | PHAR 1250 Clinical Correlations 1§  |
| 0                   | PHAR 1070 Essentials for Pharmacy Practice **   |
| <hr/>               |   |
| 20                  |   |

### P1 Spring Semester

| <u>Credit Hours</u> | <u>Course Name and Number</u>   |
|---------------------|---|
| 1                   | PHAR 1101 Practice Readiness Experiential Program I (PREP I)              |
| 2                   | PHAR 1233 Principles of Disease   |
| 2                   | PHAR 1240 Applied Medicinal Chemistry                                     |
| 3                   | PHAR 1331 Biological Foundations in Pharmacy and Patient<br>Assessment II |
| 1                   | PHAR 1133 Biological Foundations II lab                                   |
| 4                   | PHAR 1441 Principles of Drug Structure and Action                         |
| 4                   | PHAR 1461 Pharmacy Formulations and Compounding with Lab§                 |
| 2                   | PHAR 1251 Clinical Correlations 2§  |
| 0                   | PHAR 1071 Essentials for Pharmacy Practice **                             |
| <hr/>               |   |
| 19                  |   |

### P2 Fall Semester

| <u>Credit Hours</u> | <u>Course Name and Number</u>                         |
|---------------------|---|
| 4                   | PHAR 2401 Inte nBT/F4 12 Tf1 0 0 1 201.67 6.TMQq0qics |

## P2 Spring Semester

| <u>Credit Hours</u> | <u>Course Name and Number</u>  |
|---------------------|--|
| 4                   | PHAR 2460 Basic and Applied Pharmacokinetics   |
| 4                   | PHAR 2403 Integrated Practice and Therapeutics III (Endocrine, Reproduction, Bone and Joint, Integumentary)      |
| 4                   | PHAR 2404 Integrated Therapeutics and Practice IV (Infectious Diseases)  |
| 4                   | PHAR 2419 Practice Management II: Leadership, Law and Ethics§  |
| 2                   | PHAR 2261 Parenterals and Specialty Pharmaceuticals with lab   |
| 2                   | PHAR 2251 Clinical Correlations 4§   |
| 1                   | PHAR 2101 Practice Readiness Experiential Program II (PREP II) (Longitudinal Course – Enrollment in Spring only) |
| 0                   | PHAR 2071 Essentials for Pharmacy Practice **  |

21

§Students enrolled in the PharmD/MBA dual degree program take PHAR 2219 in place of PHAR 2419, along with PHAR 5372 Advanced Leadership and Ethics. See Pharm.D/MBA mini catalogue for specific details of the MBA course plan.

## P3 Fall Semester

| <u>Credit Hours</u> | <u>Course Name and Number</u>  |
|---------------------|--|
| 2                   | PHAR 3219 Practice Management: Institutional and Community Pharmacy Operations |
| 2                   | PHAR 3250 Clinical Correlations 5§   |
| 4                   | PHAR 3405 Integrated Therapeutics and Practice V (Neuro and Psych)             |
| 4                   | PHAR 3406 Integrated Therapeutics and Practice VI (GI and Hep)                 |
| 0                   | PHAR 3070 Essentials for Pharmacy Practice **                                  |

12 + \_ Varies based on number of elective hours and rotation hours taken. See below:

6 Six hours of electives required. These are primarily offered during the fall and spring semesters and most are designated as requiring P3 standing. Options for satisfying elective credits outside the traditional schedule or outside the 3<sup>rd</sup> professional year are available and are designated as off-schedule electives. Elective offerings will vary based on faculty availability. Each elective course contains two credit hours. See list of course descriptions for elective courses available in this academic cycle.

A total of 4 rotations are required, but rotations may be taken in the fall or spring semester and there is the option to take a rotation during the Summer term by request; electives running during the morning sessions in the fall and spring semesters are taken when not enrolled in a clerkship rotation.

|   |  |
|---|--|
| 2 | PHAR 4270 Community Pharmacy Practice Rotation     |
| 2 | PHAR 4274 Institutional Pharmacy Practice Rotation |
| 2 | PHAR 4275 Ambulatory Clinical Skills Rotation      |
| 2 | PHAR 4276 Inpatient Clinical Skills Rotation       |

## P3 Spring Semester

| <u>Credit Hours</u> | <u>Course Name and Number</u>                                      |
|---------------------|--|
| 2                   | PHAR 3218 Practice Management: Financial Management                |
| 2                   | PHAR 3251 Clinical Correlations 6§                                 |
| 4                   | PHAR 3407 Integrated Therapeutics and Practice VII (Heme/Onc/Pain) |





# COURSE DESCRIPTIONS FOR THE DOCTOR OF PHARMACY PROGRAM

## PHAR 1001 - ANNUAL ASSESSMENT (FTRAD)

The School continually assesses student progression toward degree attainment and provides evaluation of quality of our curriculum. This 4-year, longitudinal process includes *global assessments* designed to assess student knowledge, skills, and behaviors necessary for successful performance of the School's 10 terminal outcomes. The process consists of assessment data from ACPE designated competencies compiled from course-embedded assessments (referred to as "by-domain assessment") and other standardized testing. The School uses the internally administered Drug Knowledge Assessment, and an internally administered skills assessment, referred to as an OSCE to evaluate knowledge and skills in the Pre-APPE curriculum. By the 4<sup>th</sup> professional year, completion degree requirements, such as the Co-curricular activities, and the Essentials for Pharmacy Practice series, is also assessed as part of this global assessment program.

**Levels:** Pharmacy-Doctoral

## FIRST YEAR COURSES

### PHAR 1070 – ESSENTIALS FOR PHARMACY PRACTICE 1 (FIVC)

The Essentials for Pharmacy practice series fulfills degree requirements pursuant to American Council on Pharmacy Education (ACPE) standards that are not specific to a single course or professional year. Each Essentials for Pharmacy Practice syllabus outlines the specific requirements by semester. This is the Fall semester course and includes Inter-professional Education (IPE) activities and Professional Identity Formation (PIF) activities associated with the P.I year. *Delivery method for Pioneer Pathway 2421 29.55 section is HYBRD.*

### PHAR 1071 – ESSENTIALS FOR PHARMACY PRACTICE 2 (FIVC)

The Essentials for Pharmacy practice series fulfills degree requirements pursuant to American Council on Pharmacy Education (ACPE) standards that are not specific to a single course or professional year. Each Essentials for Pharmacy Practice syllabus outlines the specific requirements by semester. This is the Spring semester course and

**Levels:** Pharmacy-Doctoral



Levels: Pharmacy-Doctoral, First year Fall

**PHAR 1440 – MOLECULAR FOUNDATIONS OF THERAPEUTICS (4:4:0 FIVC)**

Molecular aspects of biological processes, including the chemistry of biomolecules, enzymology, metabolic pathways, bioenergetics, biochemical control mechanisms, molecular biology and genetics. Discussion of metabolic diseases, fundamentals of nutrition and molecular diagnostics. Syllabus available.

Levels: Pharmacy-Doctoral, First year Fall §*Delivery method for Pioneer Pathway section is HYBRD.*

**Co-requisite: PHAR 1250**

**PHAR 1460 - PHARMACY SCIENCE AND CALCULATIONS (4:4:0, FIVC)**

This course introduces physicochemical principles of pharmaceutical dosage formulations, properties of drug substances and drug products, routes of administration, process of drug development, and all aspects of pharmaceutical calculations. Syllabus available.

Levels: Pharmacy-Doctoral, First year Fall §*Delivery method for Pioneer Pathway section is HYBRD.*

**Co-requisite: PHAR 1250**

**PHAR 1233 – PRINCIPLES OF DISEASE (2:4:0 FIVC)**

This course provides core concepts and mechanisms of the basic processes underlying diseases. Lectures will cover definitions of terminology, cells and tissues involved, morphological alterations, explanation of relevant biochemical pathways and disease pathogenesis and clinical presentation. Emphasis will be given on lifespan, sex and gender and culture differences, where applicable. Syllabus available.

Levels: Pharmacy-Doctoral, First year Spring §*Delivery method for Pioneer Pathway section is HYBRD.*

**Co-requisite: PHAR 1251**

**PHAR 1240 APPLIED MEDICINAL CHEMISTRY (2:4:0 FIVC)**

This introductory course is designed to facilitate understanding of fundamental concepts relating the application of medicinal chemistry to the practice of pharmacy. Basic principles of medicinal chemistry applied to the drug design and discovery process and introduction to the medicinal chemistry of drugs approved to treat major diseases. Syllabus available. §*Delivery method for Pioneer Pathway section is HYBRD.*

Levels: Pharmacy-Doctoral, First year Spring

**Co-requisite: PHAR 1251, 1441**

**PHAR 1251 CLINICAL CORRELATIONS 2 (2:0:2 FTRAD) §**

Practical application of foundational concepts in science and the practice of pharmacy within an integrated, applied, small-group learning environment. Emphasizes the relationships between human biological foundations, human disease, principles of drug structure, action, and formulation, and the practice of pharmacy. Syllabus available.

Levels: Pharmacy-Doctoral, First year Spring

**Co-requisite: PHAR 1233, 1240, 1431, 1441, 1460**

§ *Together, the following courses are equivalent to PHAR 1251 for Pioneer Pathway learners:*

**PHAR 1156 PHARMACY APPLICATIONS 2 (ONLIN)**

*This course focuses on the same concepts and learning outcomes as the Clinical Correlations 2 course, with delivery modified for online interaction.*

**PHAR 1157 PHARMACY CORRELATIONS 2 (FTRAD)**

*This course focuses on the same concepts and learning outcomes as the Clinical Correlations 2 course, with the schedule modified for in person learning during immersion sessions.*







modalities, herbals, and medical devices used in ambulatory pharmacy practice to treat minor medical

management of men and women across the lifespan in both acute and chronic care in a variety of health-system contexts. Syllabus available.

**Levels:** Pharmacy-Doctoral, Second year

**Co-requisite:** PHAR 2251

### **PHAR 2419 - PHARMACY OPERATIONS (2:4:1 FIVC)**

This course provides students the foundations of ethical leadership within the healthcare environment in their roles as employee, manager, and effective leader. Students will learn state and federal laws regulating pharmacy, healthcare and the administration of human resources. Application of laws, ethical dilemmas, and other management problems in the pharmacy environment will be illustrated in the classroom utilizing case studies, court cases, and role-playing. Syllabus available.

**Levels:** Pharmacy-Doctoral, Second year

**Co-requisite:** PHAR 2251

### **PHAR 2460- BASIC AND APPLIED PHARMACOKINETICS (4:4:0 FIVC)**

This course introduces the basic principles of pharmacokinetics, including compartmental and physiological analysis of the time courses of drug absorption, distribution, metabolism and elimination with emphasis on the pharmacokinetic based design of dosage regimens. Using pharmacokinetic modeling and calculations, the application portion of the course demonstrates how pharmacokinetic and pharmacodynamics principles are used to individualize drug dosing regimens to drug specific, disease specific, or patient specific needs for male or female patients across the lifespan. Syllabus available.

operations.





the outpatient health care setting. This clerkship is designed to enhance the student's understanding of the unique characteristics of patients, communication skills, physical assessment skills, and pharmacotherapy management of chronic or acute disease states in the ambulatory care setting to improve the student's necessary abilities to provide direct patient pharmaceutical care and disease management.

breaking cardiovascular topics, important for pharmacists, along with the chemistry, pharmacology, and toxicology of novel therapeutic agents used to treat cardiovascular diseases is provided. 6 week course. Syllabus available.

**PREREQ: PHAR 2401**

**Levels:** Pharmacy-Doctoral. Third year

**PHAR 4214 - ADVANCED PATIENT MANAGEMENT IN AMBULATORY CARE (2:5.3:0 FIVC)**

**ELECTIVE COURSE.**



graduates will be called upon to present continuing education to health care professionals. The student will develop an ACPE-quality continuing education program which fulfills the primary requirements of an ACPE provider. 15 week course in the Fourth professional year, Fall semester. Syllabus available.

**Levels:** Pharmacy-Doctoral, Fourth year

**PHAR 4110 - INTEGRATED CAPSTONE (1:0:1, FIVC)**

RURAL COMMU

**PHAR 4671 - RESEARCH ROTATION I (6:0:40 FTRAD)**

**ELECTIVE P4 APPE** - offered based upon preceptor availability Research experience in pharmaceutical sciences, social and administrative sciences, or pharmacy practice. 6 week course. Syllabus available.

**Levels:** Pharmacy-Doctoral, Fourth year

**PHAR 4672 - RESEARCH ROTATION II (6:0:40 FTRAD)**

**ELECTIVE P4 APPE** - offered based upon preceptor availability. Research experience in pharmaceutical sciences, social and administrative sciences, or pharmacy practice. 6 week course. Syllabus available.

**PRERE(a):** 1 0 12 0 612 792 reW\* nBT/F4 12 Tf1 0 0 1 1.G.nBTJETMCID u73 01c2 T (Le)-3(ve)-3(l)-2(s)4(:)



**ELECTIVE P4 APPE** - offered based upon preceptor availability. Pharmaceutical care experiences with neonates. 6 week course. Syllabus available.

**Levels:** Pharmacy-Doctoral, Fourth year

**PHAR 4695 - CRITICAL CARE ROTATION (6:0:40 FTRAD)**

**ELECTIVE P4 APPE** - offered based upon preceptor availability. Pharmaceutical care experiences with critically ill adult patients in the intensive care unit. 6 week course. Syllabus available.

**Levels:** Pharmacy-Doctoral, Fourth year

**PHAR 4696 - NUCLEAR PHARMACY ROTATION (6:0:40 FTRAD)**

**ELECTIVE P4 APPE** - offered based upon preceptor availability. Practical experiences in the preparation of radiopharmaceutical products and their use in medical practice. 6 week course. Syllabus available.

**Levels:** Pharmacy-Doctoral, Fourth year

**PHAR 4697 - POISON CENTER ROTATION (6:0:40 FTRAD)**

**ELECTIVE P4 APPE** - offered based upon preceptor availability. Pharmaceutical care experiences with patients or caregivers in the poison control center. 6 week course. Syllabus available.

**Levels:** Pharmacy-Doctoral, Fourth year

**PHAR 4698 - ADMINISTRATIVE PHARMACY PRACTICE ROTATION (6:0:40 FTRAD)**

**ELECTIVE P4 APPE** - offered based upon preceptor availability. Practical experiences in financial, operations, personnel, and marketing management of a pharmacy practice environment. 6 week course. Syllabus available.

**Levels:** Pharmacy-Doctoral, Fourth year

**PHAR 4699 - SPECIAL TOPICS ROTATION (6:0:40 FTRAD)**

**ELECTIVE P4 APPE** - offered based upon preceptor availability. Student directed activities with special patient populations. 6 week course. Syllabus available.

**Levels:** Pharmacy-Doctoral, Fourth year



# **Faculty**

Faculty rosters for each of the School of Pharmacy Departments are linked here:

Pharmacy Practice:

<https://www.ttuhs.edu/pharmacy/departments/practice/default.aspx> This home page features the Department Chair and Chair's message. Please interact with the "Faculty Roster" and "Staff Roster" links for alphabetized lists of faculty and staff along with job titles, training history, and other profile data.

Pharmaceutical Sciences:

<http://www.ttuhs.edu/pharmacy/pharmaceutical-sciences/> This home page features the Department Chair and Chair's message. Please interact with the "Pharmac/M r Â \_ ra\_ M P