

DEPARTMENT OF PHARMACY PRACTICE

The Department of Pharmacy Practice, along with the Department of Pharmaceutical Sciences, **offers the entry-level Doctor of Pharmacy and the post-baccalaureate Doctor of Pharmacy. Persons interested in the post-baccalaureate Doctor of Pharmacy (Pharm.D.) should contact the Office of the Assistant Dean for Student Services in the College of Pharmacy and Health Sciences at Texas Southern University directly for details on the requirements for this degree.** The entry-level Doctor of Pharmacy (Pharm.D.) is a six-year program requiring two years of study at the pre-professional (pre-pharmacy) level and four years of study at the professional level. Courses offered through this unit include therapeutics and disease processes (PHAR), community and hospital/institutional pharmacy practice and other professional pharmacy practice experiences (PHAR), drug information and retrieval (PHAR), pharmacy administration and jurisprudence (PADM), and clinical research (PHAR).

Members of the Department of Pharmacy Practice are housed in Gray Hall with the Department Office located in Room 241. The Department supports the primary mission of the College.

Courses offered through this unit are described below. In addition, a summary of the requirements for the entry-level Pharm.D. is provided along with an indication of the sequence in which discipline-specific courses and their primary prerequisites and corequisites should be taken.

Students should refer to admission policies, comprehensive examination information, and other important information regarding the completion of the entry-level Doctor of Pharmacy under the College of Pharmacy and Health Sciences introductory section of this document.

LISTING OF FACULTY IN THE DEPARTMENT

Abobo, Cyril V.

Associate Professor

Pharmacy Practice

B.S., Texas Southern University

Pharm.D., Florida A & M University

Eaton, Angie

Assistant Professor

Pharmacy Practice

Pharm.D., Texas Southern University

Estes, Flora

Assistant Professor

Pharmacy Practice

Pharm.D., Texas Southern University

Chui-Poon, Ivy

Assistant Professor

Pharmacy Practice

Pharm.D., University of Houston

Jackson-Stewart, Doris

Associate Professor

Pharmacy Practice

B.S., Texas Southern University

Pharm.D., Mercer University

Maclayton, Darego

Assistant Professor

Pharmacy Practice

Pharm. D., Texas Southern University

Morris-Moultry, Aisha M.

Assistant Professor

Pharmacy Practice

M.S., Ohio State University

Pharm.D., Texas Southern University

Ndefo, Uche Anadu

Assistant Professor

Pharmacy Practice

Pharm.D., University of South Carolina

Okafor, Kingsley C.

Professor

Pharmacy Practice

B.S., Texas Southern University

Pharm.D., Florida A & M University

Osemene, Nora I.

Associate Professor

Pharmacy Practice

BA., University of Iowa

B.S., M.S., University of Houston

Pharm.D., Texas Southern University

PHARMACY PRACTICE COURSES

- PADM 530** **Ethics in Pharmacy Practice** **(3)**
- Students develop skills in moral reasoning necessary to protect the safety, health, and dignity of patients served. Professional responsibilities emphasized. Three hours of lecture per week. Prerequisite: Second professional year standing in the College of Pharmacy and Health Sciences.
- PADM 634** **Jurisprudence** **(3)**
- Study of federal, state, and local laws pertaining to the practice of pharmacy. Rules and regulations of administrative agencies discussed. Three hours of lecture per week. Prerequisite: Completion of all 500-level courses in the College of Pharmacy and Health Sciences.
- PADM 637** **Strategic Management in Health Care** **(3)**
- Designed to familiarize students with pharmaceutical economics and policy and the health care enterprise. Three hours of lecture per week. Prerequisite: Completion of all 500-level courses in the College of Pharmacy and Health Sciences.
- PADM 638** **Pharmacy Management** **(3)**
- Instruction in basic concepts used to operate and manage pharmacies and medication therapy management services. Three hours of lecture per week. Prerequisite: Completion of all 500-level courses in the College of Pharmacy and Health Sciences.
- PHAR 416** **Introductory Pharmacy Practice Experiences I** **(1)**
- Students will be exposed to and participate in supervised pharmacy practice activities allowing direct interaction with diverse patient populations in a variety of practice settings. Prerequisite: Good standing in the professional pharmacy program.
- PHAR 417** **Introductory Pharmacy Practice Experiences II** **(1)**
- Continued development of skill acquired in PHAR 416. Students will be exposed to and participate in supervised pharmacy practice activities allowing direct interaction with diverse patient populations in a variety of practice settings. Prerequisite: PHAR 416.
- PHAR 418** **Spanish for Pharmacy Professionals** **(1)**
- Introduction provided will enable students to effectively communicate in the Spanish language as it applies to the practice of pharmacy. Prerequisite: Must be enrolled in the professional pharmacy program and consent of the instructor.
- PHAR 427** **Introduction to Pharmacy and Health Care Systems** **(2)**
- Provides students with an understanding of foundations of pharmacy and pharmacy practice, health care agencies/systems, and disease control/prevention. Three hours of lecture per week. Prerequisite: First professional year standing in the College of Pharmacy and Health Sciences or consent of the instructor.

- PHAR 429** **Emergency Preparedness for Pharmacy Professionals** **(2)**
- Students will be trained to provide pharmaceutical care and services in local and regional emergency situations. Prerequisite: Must be enrolled in the professional pharmacy program and consent of the instructor.
- PHAR 430** **Biostatistics in Pharmacy** **(2)**
- Provides students with an understanding of probability concepts, distributions of random variables, nonparametric methods, and other statistical methods used in biomedical, pharmaceutical, and health care research. Two hours of lecture per week. Prerequisite: First professional year standing in the College of Pharmacy and Health Sciences or consent of the instructor.
- PHAR 515** **Pharmacy Seminar** **(1)**
- Discussions on relevant research topics and literature in the clinical and pharmaceutical sciences. Student presentations and discussions required. One hour of lecture per week. Prerequisite: Completion of all 400-level courses in the College of Pharmacy and Health Sciences.
- PHAR 521** **Non-Prescription Products** **(2)**
- Study of non-prescription drug items and prosthetics which allows the student to evaluate over-the-counter products and make judgments concerning benefits to patients. Two hours of lecture per week. Prerequisites: Completion of all 400-level courses.
- PHAR 536** **Patient Assessment and Physical Diagnosis** **(3)**
- Applications of physical diagnostic examinations in various pathological states for provision of pharmaceutical care. Three hours of lecture per week. Prerequisite: Completion of all 400-level courses in the College of Pharmacy and Health Sciences.
- PHAR 601** **Special Problems** **(0-8)**
- Methods in pharmaceutical sciences and clinical research; application of hypothesis formulation, literature evaluation, experimental design, clinical skills, data acquisition/analysis, and formal presentations. Variable number of hours of lecture per week. Students may enroll in up to a total of 8 semester credit hours of Special Problems while in the professional pharmacy program. Prerequisite: Special permission by the Department
- PHAR 615** **Prescription Practice Laboratory** **(1)**
- Continuation of PHAR 635 with emphasis on appropriate dispensing practices and procedures. Three hours of laboratory per week. Prerequisite/Corequisite: Successful completion of or concurrent enrollment in PHAR 635 and Completion of all 500-level courses.
- PHAR 630** **Pharmacotherapeutics I** **(3)**
- Series of organized lectures stressing rational drug therapy in acute and chronic disease states. Three hours of lecture per week. Prerequisite: Completion of all 500-level courses in the College of Pharmacy and Health Sciences.

PHAR 631 Drug Information, Literature, and Research Methods (3)

Study of basic statistical analysis, study design, and literature assessment. Emphasis placed on comprehensive evaluation of published studies and development of research protocols. Three hours of lecture per week. Prerequisite: Completion of all 500-level courses in the College of Pharmacy and Health Sciences.

PHAR 632 Professional Communications/Counseling (3)

Interactive course designed to guide pharmacy students in the development of effective counseling and communication skills. Three hours of lecture per week. Prerequisite/Corequisite: Completion of all 500-level courses in the College of Pharmacy and Health Sciences.

PHAR 633 Pharmacotherapeutics II (3)

Organized lectures on rational drug therapy in acute and chronic disease states. Three hours of lecture per week. Prerequisite: Completion of all 500-level courses in the College of Pharmacy and Health Sciences.

PHAR 635 Prescription Practice (3)

Study of professional patient-focused services provided by pharmacists, including appropriate dispensing procedures. Three hours of lecture per week. Prerequisite: Completion of all 500-level courses in the College of Pharmacy and Health Sciences.

PHAR 711 Biotechnology in Pharmacy (3)

Basic principles and practical applications of molecular biological techniques in pharmaceutical development. Experimental, analytical, and production technologies discussed along with ethical implications. Three hours of lecture per week. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences or consent of the instructor.

PHAR 725 Adverse Drug Reaction (3)

Designed to emphasize Adverse Drug Reaction (ADR) knowledge and competencies necessary in patient evaluation, literature evaluation, and implementation of effective ADR avoidance programs. Two hours of lecture per week. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

PHAR 741 Ambulatory Care Practice (4)

Provision of pharmaceutical care to ambulatory patients and the pharmacist's role as a primary care provider. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

PHAR 742 Applied Pharmacokinetics Practice (4)

Provision of pharmacokinetics consultation to hospitalized patients and other members of the health care team. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

PHAR 744	Clinical Toxicology Practice	(4)
	Participation in clinical toxicology programs, poison control centers, and related programs. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.	
PHAR 745	Community Pharmacy Practice	(4)
	Participation in the delivery of pharmaceutical care services in a community pharmacy under the supervision of a licensed pharmacist/preceptor. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.	
PHAR 746	Acute/Emergency Medicine	(4)
	Provision of pharmaceutical care to critically ill patients admitted to organized health care settings. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.	
PHAR 747	Information Systems Management	(4)
	Provision of drug information and consultation services to health services, to health care professionals, and to patients. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.	
PHAR 748	Geriatrics Practice	(4)
	Provision of pharmaceutical care to patients admitted to geriatric services. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health.	
PHAR 749	Home Health Care Practice	(4)
	Provision of pharmaceutical care to patients receiving home health care. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.	
PHAR 751	Hospital Pharmacy Practice	(4)
	Participation in the delivery of pharmaceutical care in an institutional setting. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences or consent of the instructor.	
PHAR 752	Immune Pharmacology Practice	(4)
	Provision of pharmaceutical care to patients admitted to the infectious diseases care service. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.	
PHAR 753	Family Medicine	(4)
	Provision of pharmaceutical care to patients admitted to the internal medicine, general medicine, and practice setting services. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.	

PHAR 754	Oncology Practice	(4)
	Provision of pharmaceutical care to hospitalized and/or ambulatory oncology patients. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.	
PHAR 755	Parenteral Nutrition	(4)
	Provision of pharmaceutical care to patients receiving parenteral nutrition with some emphasis on enteral supplemental therapy. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.	
PHAR 756	Pediatrics/Neonatology Practice	(4)
	Provision of pharmaceutical care to patients admitted to pediatric and neonatal services or ambulatory care practice settings. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.	
PHAR 757	Pharmacy Administration	(4)
	Participation in the administrative aspects of institutional pharmacy practice and pharmacoconomics. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.	
PHAR 758	Psychiatry Practice	(4)
	Provision of pharmaceutical care to patients admitted to psychiatry services or ambulatory care practice settings. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.	
PHAR 759	Surgery Practice	(4)
	Provision of pharmaceutical care to patients admitted to surgical intensive care units. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.	
PHAR 760	Cardiology	(4)
	Structured pharmacy experience in an institutional setting dealing with surgery patients having cardiovascular diseases and disorders in acute and ambulatory care practice settings. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.	
PHAR 761	Consulting Pharmacy Practice	(4)
	Clinical pharmaceutical health care experience with a consultant pharmacist or in practice settings that provide consultant services. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.	
PHAR 762	Managed Care Pharmacy Practice	(4)
	Enhancement of student involvement in the managed care setting., including hospitals, community, and the pharmaceutical industry. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.	

PHAR 763

Nuclear Pharmacy Practice

(4)

Clinical pharmaceutical health care experience with patients undergoing nuclear pharmacy treatment. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

PHAR 764

Pharmacoeconomics Practice

(4)

Principles for evaluating and conducting pharmacoeconomic studies, including cost effectiveness, cost utilization, cost minimization, and cost benefit ratios. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

Students participating in the experiential training program in pharmacy will be required to engage in a variable rotation schedule of professional practice experience activities in a variety of health care settings: community, retail, hospital, and other pharmaceutical specialties. Students are required to participate in introductory pharmacy practice experiences (IPPE) and complete a specified number of hours as designated by the program. Students participating in advanced pharmacy practice experiences (APPE) are required to complete a minimum of 40 hours per week. The duration of each advanced pharmacy practice experience course is six (6) weeks.

**CURRICULUM SUMMARY FOR
ENTRY-LEVEL DOCTOR OF PHARMACY DEGREE**

TOTAL CREDITS REQUIRED: 215

CORE CURRICULUM* (STANDARD)	MAJOR (PHARMACY)	OTHER REQUIREMENTS
44 credits	137 credits	34 credits
ENG 131 (3)**	BIOL 347 (4)	BIOL 111 (1)
ENG 132 (3)	PHAR 416 (1), PHAR 417 (1)	BIOL 112 (1)
SC 233; 135 or 136 (3)	PADM 530 (3), PADM 634 (3)	BIOL 131 (3)
MATH 133 (3)	PADM 637 (3), PADM 638 (3)	BIOL 132 (3)
CHEM 111, 131 (4)	PAS 415 (1), PAS 435 (3)	BIOL 344 (4)
CHEM 112, 132 (4)	PAS 436 (3), PAS 517 (1)	CHEM 211, 231 (4)
ENG 200 Level (3)	PAS 535 (2), PAS 537 (3)	CHEM 212, 232 (4)
Visual & Performing Arts (3) ***	PAS 539 (3), PAS 547 (4)	MATH 136 (3)
HIST 231 (3)	PHCH 411 (1), PHCH 431 (3)	PHYS 213 (1)
HIST 232 (3)	PHCH 412 (1), PHCH 432 (3)	PHYS 237 (3)
POLS 231 (3)	PHCH 531 (3), PHCH 532 (3)	PHAR 111 (1)+
POLS 232 (3)	PHAR 410 (1)	PHAR 112 (1)+
Social & Behavioral Sciences (3)****	PHAR 413 (1), PHAR 414 (1)	PHAR 211 (1)+
CS 116 (3)	PHAR 420 (2), PHAR 430 (2)	PHAR 212 (1)+
	PHAR 433 (3), PHAR 434 (3)	PHAR 429 (2)++
	PHAR 427 (2)	PHAR 418 (1)++
	PHAR 513 (1), PHAR 514 (1)	
	PHAR 515 (1)	
	PHAR 533 (3), PHAR 534 (3)	
	PHAR 536 (3)	
	PHAR 614 (1), PHAR 616 (1)	
	PHAR 615 (1)	
	PHAR 630 (3), PHAR 631 (3)	
	PHAR 632 (3), PHAR 633 (3)	
	PHAR 634 (3), PHAR 635 (3)	
	PHAR 636 (3)	
	PHAR 521 (2)	
	Experiential Training (32)	

* Students should be advised by a major advisor prior to registering for any credit, particularly any core curriculum credit as listed.

** (N) represents the number of course credits.

*** Select from the following courses: THC 130, THC 230, MUSI 131, MUSI 239, ART 131, and ART 132.

**** Select from the following courses: PSY 131, ECON 231, ECON 232, SOC 157, SOC 158, SOC 221 and SOC 238.

+ Transfer students should contact pharmacy admissions office to request approved substitute course(s).

++ Elective courses. All students must complete at least four (4) semester credit hours of electives.

**Entry-Level Doctor Of Pharmacy Degree
Six Year Degree Plan - Total Credits: 215**

<i>First Year</i>	<i>First Semester</i>		<i>Second Semester</i>	
	BIOL 111 Biological Science I Laboratory	1	BIOL 112 Biological Science II Laboratory	1
	BIOL 131 Biological Science I, Lecture	3	BIOL 132 Biological Science II, Lecture	3
	CHEM 111 General Chemistry I Laboratory	1	CHEM 112 General Chemistry II Laboratory	1
	CHEM 131 General Chemistry I, Lecture	3	CHEM 132 General Chemistry II, Lecture	3
	CS 116 Computer Science	3	ENG 132 Freshman English II	3
	ENG 131 Freshman English I	3	HIST 232 Social and Political History of U.S. II	3
	HIST 231 Social and Political History of U.S. I	3	MATH 136 Precalculus	3
	MATH 133 College Algebra	3	PHAR 112 Pharmacy Orientation	1
	PHAR 111 Pharmacy Orientation	1		
	21 hrs		18 hrs	
<i>Second Year</i>	<i>Third Semester</i>		<i>Fourth Semester</i>	
	BIOL 344 Vertebrate Anatomy and Histology	4	CHEM 212 Organic Chemistry II Laboratory	1
	CHEM 211 Organic Chemistry I Laboratory	1	CHEM 232 Organic Chemistry II, Lecture	3
	CHEM 231 Organic Chemistry I, Lecture	3	PHAR 212 Medical Terminology	1
	ENG 200 Level English Literature	3	Social and Behavioral Sciences PSY 131, ECON 231, SOC 157, 158, 221, 238	3
	PHYS 213 College Physics I Lab	1	SC 233 Speech Communications	3
	PHYS 237 College Physics I	3	POLS 232 American Political Systems II	3
	PHAR 211 Pharmacy Applications	1	Visual and Performing Arts THC 130, 231; MUSI 131, 239; ART 131, 132	3
	POLS 231 American Political Systems I	3		
	19 hrs		17 hrs	
<i>Third Year</i>	<i>Fifth Semester</i>		<i>Sixth Semester</i>	
	PHCH 431 Pharmaceutical Chemistry I	3	BIOL 347 Microbiology	4
	PHCH 411 Pharmaceutical Chemistry I Laboratory	1	PHCH 432 Pharmaceutical Chemistry II	3
	PAS 435 Pathophysiology I	3	PHCH 412 Pharmaceutical Chemistry II Laboratory	1
	PAS 415 Pathophysiology I Laboratory	1	PAS 436 Pathophysiology II	3
	PHAR 420 Computer Applications in Pharmacy	2	Elective	1-3
	PHAR 433 Pharmaceutics I	3	PHAR 434 Pharmaceutics II	3
	PHAR 413 Pharmaceutics I Laboratory	1	PHAR 414 Pharmaceutics II Laboratory	1
	PHAR 427 Introduction to Pharmacy and Health Care Systems	2	PHAR 430 Biostatistics in Pharmacy	2
	PHAR 416 Introductory Pharmacy Practice Experiences I	1	PHAR 417 Introductory Pharmacy Practice Experiences II	1
	17 hrs		19-21 hrs	
<i>Fourth Year</i>	<i>Seventh Semester</i>		<i>Eighth Semester</i>	
	PHCH 531 Pharmaceutical Chemistry III	3	PHCH 532 Pharmaceutical Chemistry IV	3
	PHAR 533 Pharmaceutics III	3	PAS 547 Pharmacology Toxicology II	4
	PHAR 513 Pharmaceutics III Laboratory	1	PHAR 534 Pharmaceutics IV	3
	PAS 537 Pharmacology Toxicology I	3	PHAR 514 Pharmaceutics IV Laboratory	1
	PAS 517 Pharmacology Toxicology I Laboratory	1	PHAR 536 Patient Assessment and Physical Diagnosis	3
	PAS 535 Pathophysiology III	2	PAS 539 Chemotherapeutics)	3
	PHAR 515 Pharmacy Seminar	1	PADM 530 Ethics in Pharmacy Practice	3
	PHAR 521 Non-Prescription Products)	2		
	Elective	1-3		
	17-19 hrs		20 hrs	

**Entry-Level Doctor Of Pharmacy Degree
Six Year Degree Plan - Total Credits: 215**

Fifth Year	<i>Ninth Semester</i>		<i>Tenth Semester</i>	
	PHAR 634 Pharmaceutics V	3	PHAR 636 Pharmaceutics VI	3
	PHAR 614 Pharmaceutics V Laboratory	1	PHAR 616 Pharmaceutics VI Laboratory	1
	PHAR 630 Pharmacotherapeutics I	3	PHAR 635 Prescription Practice	3
	PHAR 631 Drug Information, Literature Evaluation, and Research Methods	3	PHAR 615 Prescription Practice Laboratory	1
	PHAR 632 Professional Communications/Counseling	3	PHAR 633 Pharmacotherapeutics II	3
	PADM 638 Pharmacy Management	3	PADM 634 Jurisprudence	3
	Elective	1-3	PADM 637 Strategic Management in Health Care	3
		17-19 hrs		17 hrs
	<i>Summer</i>			
Advanced Pharmacy Practice Experience as approved	8 hrs			

Sixth Year	<i>Eleventh Semester</i>		<i>Twelfth Semester</i>	
	Advanced Pharmacy Practice Experience as approved	12 hrs	Advanced Pharmacy Practice Experience as approved	12 hrs

Name: _____ T#: _____ Phone: _____

Address: _____

Advisor: _____ Date: _____

APPROVED:
Chair, Department of Pharmacy Practice: _____ Date: _____

Dean, College of Pharmacy and Health Sciences: _____ Date: _____