

DOCTOR OF PHARMACY

Available on the Jackson Campus

Union University's Doctor of Pharmacy program is accredited by the Accreditation Council for Pharmacy Education (ACPE, www.acpe-accredit.org), the national or(OO 0 0 TJETEMC /P <</Lang (en-US)/MCID 10863 >>BDC BT-0.017 Tc 10 0 0 10 54 531.6949



Financial Assistance

Financial aid information for graduate students is available on our website at www.uu.edu/financialaid/graduate/. Generally, graduate students may be eligible for Federal Direct student loans or private alternative student loans, depending on the program of study and the eligibility of the borrower. Union University is also approved by the Department for Veterans Affairs to offer educational benefits to veterans, reservists, and dependents of veterans who qualify for Veterans Benefits. Any person who qualifies for VA Benefits should check with the Office of Student Financial Planning as soon as possible after acceptance into a graduate program.

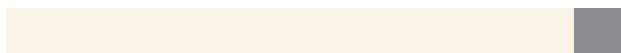
Interprofessional Practice and Education (IPE)

Interprofessional practice and education is incorporated in various courses throughout the curriculum. Pharmacy students are provided multiple opportunities to learn about, from and with other healthcare professionals to gain an understanding of the roles and responsibilities of all healthcare providers and how interprofessional teamwork can improve patient outcomes. IPE enables future pharmacists to become collaborative practice ready providers.

Center for Population Health and Rural Medicine (PHaRM)

The purpose of the Center for Population Health and Rural Medicine (PHaRM) is to advance Union University's ability to care for the underserved population of West Tennessee while broadening the interprofessional educational experiences of our students and other healthcare providers. Our mission includes affording students opportunities to provide more collaborative and patient-centered care in a structured, real-world setting. The Center achieves its mission through interprofessional learning experiences, community service learning experiences, clinical experiences, research, continuing education programs and simulation education.

af



program as approved by the College of Pharmacy: PHRM700; PHRM735; PHRM744; PHRM765; PHRM772; PHRM 759. Please see the Master of Business Administration section of the Graduate Catalog for MBA core coursework and prerequisite coursework. MBA core coursework can be done on either Union's Jackson or Germantown campuses or a combination of the two. Please contact the MBA Director (731-661-5341) in the McAfee School of Business for any questions you may have

Course Descriptions: Pharmacy (PHRM)

BPE: Board-preparatory elective

NBPE: Non board-preparatory elective

510. Advanced Human Gross Anatomy (2)

Prerequisites: BIO 221 & 222.

Reciprocal Credit: BIO 510

This course will incorporate the dissection of cadavers and viewing of anatomical models in understanding the nervous, endocrine, cardiovascular, respiratory, digestive, and urinary systems of the human body. Additional emphasis is placed on the needs of professional health care personnel.

519. Clinical Microbiology (2)

Reciprocal credit: BIO 519

A review of the organisms associated with infections in humans with application directed towards those most commonly encountered in the United States. This will focus on how the body responds to various types of infections, and relevant clinical treatment methods.

524. Immunology Concepts (1)

Reciprocal credit: BIO 524

A survey of the immune system. This will be integrated with how the body responds to various types of immunologic disorders and relevant clinical treatment methods.

700. Introduction to Pharmacy (2)

Introduction to the practice of pharmacy for first year students including an introduction to the profession and its evolving opportunities, what a pharmacist is, their role in the various settings of the health care system including drug distribution, drug utilization and the use of technology and supportive personnel.

701. Special Projects in Community Practice (2) (BPE)

This course provides advanced knowledge of clinical topics and emerging practice developments as they relate to community practice. Students will learn aspects of community practice beyond the traditional dispensing role of the pharmacist and gain skills to aid them in becoming community pharmacy practice innovators.

702. Ambulatory Care (2) (BPE)

An elective course designed to strengthen the student's understanding of diseases or illnesses common in an adult ambulatory care practice. The course utilizes group discussion of primary literature and the development of clinical practice guidelines. Student presentations and other active learning activities will extend knowledge beyond that provided in previous coursework.

703. Introduction to Population Pharmacokinetics (2) (BPE)

This course provides students an introduction to the theory and methods of population pharmacokinetic and pharmacodynamics analysis with nonlinear mixed-effects models. The course includes hand-on modeling experiences and discussion of advanced topics such as Bayesian estimation, covariate analysis, and the role of computer simulation. Students will evaluate population pharmacokinetic literature and FDA guidance documents on related issues.

704. Personal Financial Management (2) (NBPE)

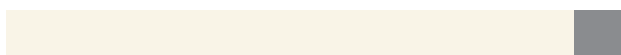
An overview of personal financial management. This course will include tools and resources that when implemented will help achieve financial goals.

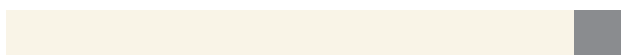
705. Pharmaceutical Calculations (2)

This course introduces the prescription, prescription notation and abbreviations, basic pharmaceutical calculations, statistics, and the mathematics of chemical kinetics and pharmacokinetics.

706. Advanced Cardiovascular Pharmacotherapy (2) (BPE)

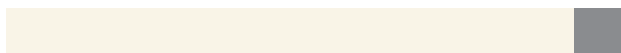
An elective providing the student with a more thorough study of cardiology and cardiovascular topics in application of the therapies and te3 ()4pies hniq.6 (opi.)]15.3 (1)16.6 (er)-421 (e)dTJETEMC





739. Clinical Laboratory Medicine (1)

Basic laboratory tests used to diagnose disease and monitor disease progression and drug therapy. Students will learn to screen and evaluate patients using relevant clinical data.



764. Pharmaceutics I Lab – Compounding (1)

This lab course is designed for PY2 students to apply some of the basic principles and concepts they learned from physical pharmacy (Pharmaceutics 1) as a means of performing pharmaceutical compounding. This course will emphasize an understanding of the formulation and physiological factors involved in the delivery and absorption of drugs through a variety of routes of administration and dosage forms. The formulation, stability, and packaging of various dosage forms will be studied. Students will learn and experience preparing some traditional solid dosage forms like tablets, capsules, powders, lozenges, and suppositories. It will also emphasize the preparation of some liquid dosage forms including solutions and suspensions. Semi-solids such as creams, pastes, ointments and emulsions will also be emphasized and prepared in the lab. Additionally the student will also utilize and apply their pharmaceutical calculation skills, which they began acquiring or developing from the previous year. For example in a compounding pharmacy, the pharmacists must know and frequently perform the necessary mathematical calculations to determine the amount of active pharmaceutical ingredients (API) and excipients needed to prepare and produce a particular dosage form and product strength. Furthermore the pharmacist must also understand and know how to perform the calculations necessary for evaluating and determining drug encapsulation efficiency, product weight uniformity, and drug release rate from the prepared product. Accuracy (and or proficiency) of interpretation of a prescription and subsequent processing of the product label will be covered as well.

765. Pharmacoeconomics and Health Systems Management (2)

Concepts and theories of pharmacoeconomics and human resource management in all pharmacy practice settings: planning, implementation, and analysis processes as related to personnel along with fiscal management at the systems, pharmacy and patient level.

766. Patient Assessment and Interviewing (2)

Hands-on opportunity for students to apply concepts of physical assessment and interviewing in a clinical laboratory environment. Students will be able to assess response to drug therapy by combining physical assessment with patient interviewing and will also develop their skills in communicating with patients.

767. Applied Therapeutics with IPE I (2)**768. Applied Therapeutics with IPE II (2)**

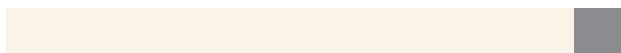
These P-2 and P-3 courses are two of five designed to focus on the development of professional skills required for contemporary pharmacy practice. Students are placed in the clinical environment to introduce the concepts of pharmaceutical care prior to advanced pharmacy practice experiences. Students will have opportunities to have direct patient contact and participate in interprofessional patient care; with these interactions and patient review, students will then present patient cases and therapeutic plans during small group recitations. Simulated patient cases will also be utilized where students can evaluate patients and provide therapeutic recommendations in the simulation lab.

770. Pharmacokinetic Principles and Application (4)

This course introduces pharmacokinetic principles and therapeutic drug monitoring. Students will gain an understanding of the absorption, distribution, metabolism and elimination of drugs, focusing on quantitative aspects of these processes. Pharmacodynamic and clinical implications will be explored, including how to formulate appropriate dosing regimens based on patient specific physiological and environmental factors (l xnTt)-15.i

774. Clinical Foundations (2)

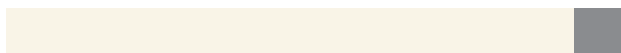
This course is designed provide an update and systematic review



Advanced Pharmacy Practice Experiences (APPE)

Each Advanced Pharmacy Practice Experience (APPE) is designed to offer the student increased experience in unique and progressive pharmacy practice settings. Students are exposed to the roles and responsibilities of the pharmacist in practice and the importance of the pharmacist in direct and indirect patient care. Students will be expected to hone practice skills, professional judgement, behaviors, attitudes and values, confidence, and a sense of personal and professional responsibility to practice both independently and collaboratively in an Interprofessional, team-based care environment. Courses are taught by full-time faculty members or by practicing pharmacists appointed by the University as Clinical Preceptors. APPEs take place at approved institutions and pharmacies. Most sites are located in West Tennessee; however the College has approved over 400 clinical precepto

MC 1254EMCaciiETEMC /P <</Lang (en-US)/MCID 11721 >>BDC BT-0.012 Tc 0.028 Tw (en-US)/MCID 11721 > oTennesseeA(ely in



730. Acute Care Pharmacy Practice (4 each)

Two APPEs from this section are required, including Acute Care Internal Medicine and any other course listed. Additional courses in this section may be completed as elective APPEs. These courses are designed to offer the student advanced experience in acute care pharmacy practice settings. Students are expected to apply knowledge and skills learned during the experience and previously in the curriculum in order to accurately and efficiently communicate with patients, caregivers, and health care professionals; collect and analyze patient information for the development of an evidence-based treatment plans in the acute care setting; appropriately documents interventions in the medical record; identify and resolve medication-related problems; respond to drug information questions; actively participate as an interprofessional healthcare team member; and conduct themselves in a professional manner.

730A. Internal Medicine

730B. Infectious Disease

730C. Cardiology

730D. Women's Health

730E. Neonatology/Pediatrics

730F. Oncology

730G. Critical Care

730H. Nutrition

730J. Psychiatry

730K. Geriatrics

730L. AIDS Care

730M. Emergency Medicine

730N. Surgery

730P. Transplant

730R. Institutional MTM

730S. Neurology

730T. Medication Safety

730U. Geriatric Team Practice

730V. Hospice/Palliative Care

730W. Long Term Care

730X. Pulmonary Medicine

730Y. Pediatric Oncology

730Z. Pediatric Transplant

740. Practice Management (4 each)

These Advanced Pharmacy Practice Experiences (APPEs) are elective courses designed to offer the student advanced experience in the management of pharmacy practice in various settings. Students are expected to apply knowledge and skills learned during the experience and previously in the curriculum in order to identify operational, clinical, or