

COLLEGE OF PHARMACY

Sheila Mitchell(2007). Dean for the College of Pharmacy. B.S. and Pharm.D., University of Tennessee Health Science Center.

George DeMaag(2008). Associate Dean for Academic Administration and Professor of Pharmacy. B.S., Western Michigan University; Pharm.D., University of Michigan.

Kim Madewell Jones(2007). Assistant Dean for Student Services and Associate Professor of Pharmacy. B.S., Middle Tennessee State University; Pharm.D., University of Tennessee College of Pharmacy.

Mark Stephens(2007). Assistant Dean, Experiential Education and Professor of Pharmacy. B.S. and Pharm.D., University of Tennessee College of Pharmacy.

Jodi Leke Taylo(2009). Chair, Pharmacy Practice and Associate Professor of Pharmacy. B.S., Middle Tennessee State University; Pharm.D., University of Tennessee.

Blake Watkins(2008). Chair, Pharmaceutical Sciences and Professor of Pharmacy. B.S., Union University; Ph.D., University of Georgia.

Sean King(2009). Director for the Center for Population Health and Rural Medicine and Associate Professor of Pharmacy. B.S., M.S., and Ph.D., University of Mississippi.

Kimberly Lindsey-Goodrick(2008). Director for Interprofessional Education and Associate Professor of Pharmacy. B.S. and Pharm.D., University of Tennessee.

Janie Steinback(2012). Coordinator of Continuing Education and Faculty Support, College of Pharmacy. B.B.A., University of Memphis.

Kristina Martin (2010). Director for Pharmacy Admissions. B.S.B, Murray State University.

Carol Courtner(2004). Coordinator of Continuing and Experiential Education, College of Pharmacy. B.S., Union University.

A list of faculty who teach in graduate programs is available on www.vtu.edu/academics/faculty/

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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) national organization that accredits Doctor of Pharmacy programs offered by Colleges and Schools of Pharmacy in the United States and selected non-U.S. sites.

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.

Dual-Degree Option

Union University's College of Pharmacy and the McAfee

708. Self-Care/Counseling (2) (BPE)

An elective course covering common medical conditions eligible for patient self-treatment. Emphasizes appropriate selection of the lifestyle modifications and over-the counter medications and devices that are most appropriate based on disease and patient factors. Also provides an opportunity for students to practice and demonstrate patient counseling techniques.

709. Drugs of Abuse (2)

A course examining current knowledge about drugs and substances of abuse or misuse. Emphasis will be given to societal issues and the role a pharmacist can play as a provider of drug facts and information.

710. Medical Terminology (1)

This course provides an introduction to the origin and definition of medical terms used in various healthcare settings. In addition, it provides an introduction into body structures, diseases, and treatments arranged in an organ system manner.

711. Health Care and Missions (2) (NBPE)

This elective course provides students an opportunity learn about another culture and participate in a short-term health care mission trip. Students will learn to coordinate drug distribution, make pharmacotherapy recommendations within a limited formulary, and provide patient education in a setting with many communication barriers. Students, guided by faculty, will learn to provide patient care in this unique environment.

712. Oncology (2) (BPE)

Elective course to provide students advanced exposure to oncology building on topics in PHRM 761. Students are introduced to different malignant disease states and their common chemotherapeutics regimens, the principles of cancer prevention and screening, pharmaceutical care to manage short and long-term side effects from cancer and treatments, and appropriate management and handling of cytotoxic medications.

713. Critical Care (2) (BPE)

Elective course designed to strengthen student's knowledge of common critical care topics with emphasis on applications of primary research in various disease states. The course will utilize group discussion of literature including reviews, guidelines, and primary research articles on selected topics in the area of critical care therapeutics. Students will give presentations to extend their knowledge beyond that provided in previous coursework.

716. Principles of Pharmaceutical Sciences (2)

An introduction to the chemical and physical properties of medicinal agents. It will provide a foundational understanding of key concepts in the pharmaceutical sciences in preparation for coursework in medicinal chemistry, pharmacology and pharmaceuticals.

717. Advanced Pain Management (2) (BPE)

Elective course building on PHRM 707, an in-depth overview of pain management, including pain classifications, assessment, pharmacological and non-pharmacological treatment options of a variety of nociceptive and neuropathic pain syndromes.

727. Institute on Alcoholism and Drug Dependencies (2)
(BPE)

This course serves as an introductory or refresher session and a networking opportunity to provide information, motivation and guidance for student pharmacists who currently participate in or wish to become involved in the planning, implementation, or strengthening of state-level and campus-level programs, to help and assist pharmacists or student pharmacists whose competence to perform their responsibilities has become impaired due to alcoholism or other drug dependencies by assisting them in finding treatment, ongoing recovery and reentry into the practice of pharmacy or their pharmacy education; and to better prepare attendees to provide appropriate assistance and support to clients affected by alcoholism and other drug dependencies. Students may only be enrolled in this course after acceptance into the Institute on Alcoholism and Drug Dependencies by the American Pharmacists Association and are only eligible to receive elective credit upon completion of the institute requirements and course requirements. Institute completion requirements include one week of on-site training in Salt Lake City at the University of Utah.

728. Chemical Basis of Drug Action I (3)

An introduction to the chemical and physical properties of medicinal agents through discussion of the relationships of structural properties of drugs to their pharmacological properties, absorption, distribution, metabolism, chemical activity, and mechanism of action.

729. Immunization Training and Certification (1)

The APhA certification course highlights the role of vaccines in

of action, pharmacological basis of drug selection, disease treatment, pharmacodynamics of drug action, absorption,

755. Principles of Drug Action (3)

This course is designed to provide students with a strong foundation in the function of biomolecules in disease and drug action. Students will gain an understanding of the structural and physical properties of proteins, nucleic acids, lipids, and carbohydrates, as well as pharmaceutical agents that bind to and influence these macromolecules in an effort to understand the functional role each plays in the management of disease states.

756. Pharmacy Management (2) (BPE)

This elective course covers a broad range of community pharmacy management topics, including scheduling, inventory, employment law, claims adjudication, and personnel issues. Special attention is also given to effective communication and conflict negotiation skills. In-class discussions, outside reading, special projects, and expert guest lecturers give students a well-rounded exposure to the roles and responsibilities of the community pharmacy manager.

757. Special Problems in Pharmacy (2) (NBPE)

The purpose of this elective course is to introduce students to the methods by which pharmacists investigate and propose solutions to pharmacy related problems. With the assistance and approval of the instructor, students will identify a pharmacy related problem(s). Student will have the opportunity to gather information including completing a literature search and present their findings in an oral or written format.

759. Population Health (2) (BPE)

This elective course is designed to introduce pharmacy students to the concepts and issues of population health as they relate to the practice of pharmacy. Students learn how population health concepts and issues are important in daily pharmacy practice, with an emphasis on applying the fundamental issues of population health, health promotion, disease prevention, and epidemiology within pharmacy practice through a case study approach. Population health topics as they relate to the pharmacy discipline are emphasized and include but are not limited to: providing population-based care, providing patient centered care, promoting the availability of effective health and disease prevention services and health policy, research design, biostatistics, economics/pharmacoeconomics, epidemiology, pharmacoepidemiology, and professional communication.

760. Pharmacotherapy V (3)

This course focuses on drug therapy management of diseases and conditions associated with specific organ systems and will enable students to apply knowledge of pathology, pathophysiology, diagnosis, clinical presentation, classification, goals of therapy, non-pharmacotherapy, pharmacotherapy, considerations for special populations, and patient counseling to optimize patient outcomes. This course covers critical care/nutrition topics.

761. Pharmacotherapy VI (3)

This course focuses on drug therapy management of diseases and conditions associated with specific organ systems and will enable students to apply knowledge of pathology, pathophysiology, diagnosis, clinical presentation, classification, goals of therapy, non-pharmacotherapy, pharmacotherapy, considerations for special populations, and patient counseling to optimize patient outcomes. This course addresses medical conditions related to oncology, men's and women's health, toxicology, and rheumatic diseases.

762. Infectious Disease (2) (BPE)

This elective course is designed to strengthen the student's knowledge of infectious disease topics with emphasis on application of primary research and current guidelines in various disease states. The course will utilize group discussion of primary literature including reviews, guidelines and primary research articles on selected topics in the area of infectious disease therapeutics. Students will also give presentations on other related topics that will extend their knowledge beyond that provided in previous coursework.

763. Top 100 Drugs and Patient Counseling (2)

The purpose of this course is to provide first semester doctor of pharmacy students with an overview of some of the most commonly prescribed drugs in the US during the past year and basic skills required to effectively communicate drug information to patients.

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. Further

777. Pediatric Pharmacotherapy (2) (BPE)

This course will provide pharmacy students with a didactic learning experience that will develop a solid foundation in pediatric pharmacy. During this elective, students will develop and refine their clinical skills that will enhance future rotations, especially in the field of pediatrics. The student will become familiar with common pediatric disease states and therapies.

778. Drug-Induced Diseases (2) (BPE)

This is an elective course designed to help students understand the prevention, detection, and management of drug induced diseases in an organ system specific manner. The goal of this course is to prepare students to recognize some of the most common and serious drug induced conditions and have awareness of the possible causes. The course will provide the basis for the evaluation and monitoring of these adverse effects. This course will also explore the FDA approval process, principles of medication safety, and their impacts on healthcare. Evaluation of student's performance will be achieved through presentations, quizzes, exams, and class participation.

779. External Domestic Study Programs (1-4)

All courses and application to the program must be defined prior to travel.

779PF. External Domestic Study Programs (Pass/Fail) As Needed

All courses and their applications must be defined and approved prior to registering.

780. Study Abroad Programs (1-4)

All courses and application to the program must be defined prior to travel.

780PF. Study Abroad Programs (Pass/Fail) As Needed

All courses and their applications must be defined and approved prior to travel.

781. Advanced Self-Care (2) (BPE)

This is an elective course designed to help prepare the student for practice in all areas of pharmacy with a focus on retail or ambulatory care settings. The goal of this course is to produce pharmacists who are able to assist patients with safe and

Each course will be completed during a calendar month; rotations usually begin on the first and end on the last weekday of the month. The typical work week consists of 40 hours Monday-Friday; however evening and weekend hours are permitted. Students are expected to work a minimum of 160 contact hours during the rotation; exact schedules will be set by the Clinical Preceptor.

Doctor of Pharmacy students are required to complete ten APPE courses. APPE courses cannot begin until the student has completed all required didactic courses and introductory pharmacy practice experiences.

Students must complete six required APPE courses, which include the following:

- APPE 700. Advanced Institutional Practice
- APPE 710A. Advanced Chain Community Practice
- APPE 710B. Advanced Independent Community Practice
- APPE 720. Ambulatory Care (any section)
- APPE 730A. Internal Medicine
- APPE 730. (any section)

Students must complete four elective APPE courses, which include the following:

- APPE 710. (Any section, limited to one course in addition to the required courses stated above)
- APPE 730. (Any section, not limited in number of courses)
- APPE 740, 750, or 770. (Any section, limited to two courses)

700. Advanced Institutional Practice (4)

A required course designed to offer the student advanced experience in an institutional pharmacy practice setting. Students will be expected to apply knowledge and skills learned during the experience and previously in the curriculum in order to accurately and efficiently fill prescription orders; comply with state and federal laws as well as regulations from accrediting agencies; collect patient specific information for the development of an evidence-based treatment plan; respond to drug information questions; communicate effectively, orally and in writing, with patients, caregivers, and other health professionals; and conduct themselves in a professional manner.

710. Advanced Community Practice (4 each)

Two APPEs in this section are required courses, 710A and 710B. One additional course can be taken as an elective course. Each course is designed to offer the student advanced experience in various community 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 fill prescription orders; collect patient specific information for medication therapy management (MTM); appropriately document MTM and related activities; respond to drug information questions; communicate effectively, orally and in writing, with patients, caregivers, and other health professionals; manage a pharmacy practice; and conduct themselves in a professional manner. Course are repeatable for credit.

710A. Advanced Chain Community Practice

- 710B. Advanced Independent Community Practice
- 710D. Community Practice for Medically Undeserved
- 710E. Community Institutional Outpatient Pharmacy
- 710F. Community Practice Medication Therapy Management

720. Ambulatory Care (4)

This Advanced Pharmacy Practice Experience (APPE) is a required course. The course is designed to offer the student advanced experience in an ambulatory care pharmacy practice setting. Students are expected to apply knowledge and skills learned during the experience and previously in the curriculum in order to communicate effectively with patients and health care providers; conduct physical assessments as required; develop evidence-based treatment plans; respond to drug information questions; manage a patient-centered practice; and conduct themselves in a professional manner.

- 720A. Ambulatory Primary Care
- 720B. Ambulatory Anticoagulation Management
- 720C. Ambulatory Pediatric Care

730. Acute Care Pharmacy Practice (4)

Two Advanced Pharmacy Practice Experience (APPE) from this section are required. Additional courses in this section may be taken as elective courses. 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; respond to drug information questions; 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
- 730U. Geriatric Team Practice
- 730V. Hospice/Palliative Care
- 730W. Long Term Care

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 manage inventory; contracts; reimbursement; data; risk; and human resources, including scheduling, salaries, and performance evaluations.

740A. Institutional Practice Management

740B. Community Practice Management

740D. Management Clinical Practice

740E. Pharmacy Association Management

750. Specialty Pharmacy Practice (4 each)

These Advanced Pharmacy Practice Experiences (APPEs) are elective courses designed to offer the student advanced experience in various specialty 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 various practice settings; respond t.aD 11425 w547 Tm n >>BDCC(.aDh6n)-nt Cs.8547 urm2.7 (6