

Didactic Electives Offerings for McWhorter School of Pharmacy Students Spring 2021

The McWhorter School of Pharmacy Doctor of Pharmacy curriculum requires **two (2) didactic elective courses** to be completed during the second year spring semester and/or both semesters of the third professional year. All electives are 2-credit hours. Didactic electives are to be selected from the courses listed below, provided prerequisites are fulfilled. Course descriptions also are presented below. Courses taken prior to enrollment in the McWhorter School of Pharmacy cannot be counted toward elective requirements in the Doctor of Pharmacy curriculum.

Students enrolled in the McWhorter School of Pharmacy/Samford University joint-programs (MBA, MPH, Informatics, Health Law and Policy, Graduate Business Minor) can count selected joint-degree program courses to meet their pharmacy didactic elective course requirements. However, these students can still enroll in pharmacy didactic elective courses if they desire. The school is collaborating with other Samford University College of Health Sciences (CHS) faculty to create additional interprofessional didactic electives. Once approved, these will be added to this list.

Students can complete more than two (2) didactic elective courses if they choose. Extra tuition will NOT be charged to complete more than two (2) didactic elective courses (but cannot exceed 21 credit hours in the semester).

PHRX ^a	Course Name	P2 Spring	P3 Spring
485 ^b	Topics in Pharmacogenomics	X	X
456	Managed Care	X	X
463	Complementary and Alternative Medicine	X	X
465	Drug Discovery and Development	X	X
466	Mental Illness and Treatment in the Movies	X	X
473	Advanced Compounding	X	X
474	Scientific Writing: The Art of Generating Precise, Concise Technical Documents	X	X
480	Health-Systems Pharmacy Practice	X	X
483	Spanish for Pharmacy Communications	X	X
486	Careers in Pharmacy Academia	X	X
460	Research	X	X
454	Journal Club		X
462	Current Topics in Toxicology		X

a = Each elective has a minimum number of students that need to be enrolled for the elective to be scheduled.

b = This course is completely delivered and completed online.

PHRX 454 – Journal Club

This elective is designed for students to further enhance their skill at evaluating and critiquing randomized, controlled clinical trials. Selected trials (i.e., landmark and current) will be thoroughly assessed to identify strengths and limitations plus determine appropriate application into practice. **Prerequisite:** PHRX 403.

PHRX 456 – Managed Care Pharmacy

This elective explores the fundamental knowledge and skills needed in the delivery of pharmaceutical care in a managed health care environment, primarily serving ambulatory patients. Emphasis on drug benefit management from a fiscal and clinical perspective.

PHRX 460-01 – Research

This elective applies literature and laboratory techniques or other methods of scientific investigation to pharmaceutical problems. Students choose to study and investigate a synthetic route in the design of a drug or develop a quantitative assay procedure for a known chemical entity. **Prerequisite:** Professional GPA of at least 2.5.

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PHRX 460-02, -03, -04, -05 – Research

This elective is designed to provide the student with directed research experience on specific topics in pharmaceutical sciences. These topics are generally focused on characterization and evaluation of new or existing therapeutic agents, bioanalytical methodology for drug measurement, novel platforms and routes of administration. Students will gain hands-on experiences with *in vitro* bioanalytical sample preparation and analysis techniques. **Prerequisite:** Professional GPA of at least 2.5.

PHRX 462 – Current Topics in Toxicology

Primary instructors: Ann Slattery and Bill King from The Regional Poison Control Center at Children's Hospital in Birmingham. This elective covers common biologic, chemical and drug poisonings. Learn signs and symptoms, mechanisms of action, and toxicokinetics of various toxicants. Highlights "state of the science" treatment modalities. Includes site visit to local poison control center.

PHRX 463 – Complementary and Alternative Medicine

This elective provides pharmacy students with more specific education regarding herbal/natural products and other practices of complementary and alternative medicine.

PHRX 465 – Drug Discovery and Development

This elective is designed to provide pharmacy students with more in-depth training and understanding of the process of drug discovery and development and about related careers in the pharmaceutical industry.

PHRX 466 – Mental Illness and Treatment in the Movies

This elective is designed to evaluate the description and treatment of mental illness as portrayed in the movies. The class will be divided into groups and each group will present one movie. The groups will focus on specific movie scenes that address the disease in terms of symptomatology, effects on the characters' lives, attitudes of friends/family, portrayal of health care workers, treatment, etc.

PHRX 473 – Advanced Topics in Extemporaneous Compounding

This elective explores advanced topics related to non-sterile and sterile extemporaneous compounding through a case-based approach. Topics include compounding techniques, regulations, and requirements; as well as pharmacy business models. Compounding laboratory sessions will simulate real-world scenarios in preparing and dispensing compounded products.

PHRX 474 – Scientific Writing: The Art of Generating Precise, Concise Technical Documents –

This elective course aims to teach the fundamentals of effective scientific writing and coach students through the process of producing a technical document. Instruction will focus primarily on the steps of writing and publishing scientific manuscripts but other documents such as FDA drug safety and enforcement reports will also be addressed. The course will be presented in two segments: Part 1 will instruct the students to write concisely and clearly, whereas Part 2 will focus on the preparation of an actual scientific manuscript. Students are expected to attend a weekly lecture and to complete short writing and editing exercises, including production of a scientific abstract. Students will eventually develop a manuscript of their choice and will meet periodically with the instructor for individual editing sessions.

PHRX 480 –Health-Systems Pharmacy Practice

This elective is designed to offer students the opportunity to learn the more specific health-system pharmacy practices. Through lectures, individual assignments, and discussion, students will be introduced to the variety of practices a pharmacist can have in a health-system utilizing practicing pharmacists.

PHRX 483 –Spanish for Pharmacy Communications

This elective course provides acquisition of medical terminology and practice of language skills in Spanish for a range of health sciences, including nursing, nutrition and dietetics, pharmacy, and social work.

PHRX 485 –Topics in Pharmacogenomics

This elective focus on pharmacogenomics, an integral component of personalized medicine that is revolutionizing therapeutic strategies and healthcare systems. This discipline recognizes that every individual has unique clinical, genomic, epigenetic, and environmental information that has implications for personalized drug therapy. This online elective course in pharmacogenomics will introduce students to the fundamentals of pharmacogenomics and will provide an opportunity to discuss contemporary topics related to personalized medicine with other health care professionals.

PHRX 486 –Introduction to Careers in Pharmacy Academia

This elective orients students to terminology, teaching, assessment, and interviewing strategies related to faculty positions at schools/colleges of pharmacy. Professional communication and professional development will be highlighted throughout the course. Offered to P2 and P3 pharmacy students.