SCHOOL OF PHARMACY PROFESSIONAL ELECTIVES
SPRING TERM 2184

DISCLAIMER: THIS LIST REPRESENTS THE COURSES WITHIN THE SCHOOL OF PHARMACY THAT ARE SCHEDULED IN THE SPRING 2018 SEMESTER. FOR APPROVED ELECTIVES OUTSIDE OF THE SCHOOL OF PHARMACY, PLEASE SEARCH FOR CLASS AVAILABILITY IN PEOPLESOFT - HTTPS://PSMOBILE.PITT.EDU/APP/CATALOG/CLASSSearch

PHARM 2001 Pharmaceutical Analysis
CLASS NUMBER: 17157
Time: Mon. 12:00 – 2:00 PM and Wed. 2:00 – 4:00 PM
Coordinator: Dr. Beumer
Enrollment Cap:

Current methods utilized in pharmaceutical research for the analysis and isolation of drugs and their metabolites. Theories of extraction, solvent partition and forms of chromatography (adsorption, partition, gas, liquid, counter current, ion exchange, gel-filtration and electrophoresis) are discussed.

PHARM 2003 Pharmacoepidemiology
CLASS NUMBER: 29550
Time: Wed. 4:00 – 6:00 PM
Coordinator: Dr. Hernandez
Enrollment Cap:

Introduction to the field of pharmacoepidemiology which uses epidemiologic methods to examine the benefits or risks of medications in the population.

PHARM 2510 Executive Boardroom
CLASS NUMBER: 23637
Time: Thu. 1/18 5:00-7:00PM; Fri. 3/2, 3/23, 4/6, 4/20 1:50-5:00PM
Coordinator: Dr. Vanscoy
Enrollment Cap: 8 students (P2 & P3)

This interactive course brings in top pharmaceutical and health care executives and builds on business and management concepts. Students are engaged in a structured understanding of the “business of pharmacy in health care” and related fields that impact the profession in an executive boardroom format. This course focuses on “entrepreneurship in medicines and health care” and analyzes the fundamental of entrepreneurism amongst successful executive finders, binders, and minders. (Coordinator may request a letter of intent).

PHARM 3140 Intro to Translational Research in Health Sciences
CLASS NUMBER: 29551
Time: Thu. 5:00 – 7:00 PM
Coordinator: Dr. Poloyac
Enrollment Cap: 7 students

Course will provide students with a comprehensive survey of the processes involved in translating research discoveries into practices that promote health and prevent disease. The specific topics to be covered include five goals: 1) Introduce students to the NIH roadmap and to discuss the conceptual framework for multidisciplinary and interdisciplinary research. 2) Provide perspectives on objectives outlined at the national level in healthy people 2010/2020 and at the global level by organizations such as the world health organization. 3) Provide an understanding of the models of translational research. 4) Introduce students to the methods of clinical and translational research. 5) Interpret and explain the drug and therapeutic development process. Also, topics include the implementation of new therapies as standards of care and the application of innovative preventive services. Various research methodologies, including those encompassed in the drug development process will be discussed. Course will offer lectures via electronic media and will use a collaborative learning approach to classroom activities.
PHARM 5805  Community Pharmacy Management  
**Credits:** 3  
**CLASS NUMBER:** 13952  
**Coordinator:** Dr. Drab  
**Time:** Mon. & Wed. 1:00 – 2:30 PM  
**Enrollment Cap:** None

The course will provide an overview of the personal financial planning process: creating a personal budget, developing personal financial goals, individual risk assessment and management techniques, investment and portfolio analysis, employee benefit and retirement planning, and protecting one’s assets with insurance. Throughout the course, students will be challenged to become active self-directed learners, recognizing their personal educational needs, selecting appropriate learning resources, and evaluating their progress. The course is complemented by a series of guest lectures conducted by corporate pharmacy executives.

PHARM 5808  Comprehensive Diabetes Management  
**Credits:** 3  
**CLASS NUMBER:** 13958  
**Coordinator:** Dr. Drab  
**Time:** Wed. 3:00 – 5:00 PM  
**Enrollment Cap:** None

This internet-based course provides students with a multidisciplinary foundation in the principles of diabetes management. Students will develop their knowledge and ability to assess, manage, educate, and monitor patients with diabetes. Pathophysiology, monitoring, complications, and treatment including pharmacotherapy, medical nutrition therapy, and exercise therapy will be explored.

PHARM 5809  Principles and Techniques for Teaching  
**Credits:** 1  
**CLASS NUMBER:** 26983  
**Coordinator:** Dr. Meyer  
**Time:** Mon. & Wed. 1:00 – 2:30 PM (meets 1/8 – 2/12)  
**Enrollment Cap:** 6 students

Students will explore the art and science of teaching and careers in higher education. After an introduction to the literature in higher education and the principles of instructional design, participants will have opportunities to design and deliver a unit of instruction on a current healthcare topic, facilitate learning in a laboratory setting, and apply principles of assessment to the evaluation of teaching by peers. Students must be able to attend practica sessions on selected dates at the Bidwell Training Center (1650 Metropolitan Street, Pittsburgh, PA 15233).

PHARM 5813  Acute Care Pharmacotherapy Simulation  
**Credits:** 3  
**CLASS NUMBER:** 17453  
**Coordinator:** Dr. Smithburger  
**Time:** Wed. 1:00 – 4:00 PM  
**Enrollment Cap:** 21 students

Course is designed to allow students to apply clinical knowledge, skills and attitudes gained in previous courses to care for patients with advanced cardiovascular diseases and those that are critically ill. Students will expand on the concepts gained throughout the pharmacotherapy of cardiovascular disease course. Course utilizes simulation based learning to enhance clinical decision-making processes. A major component of the course is self-study requiring an adult learning approach to education. The adult learning concept will require students to be responsible for and highly interactive in achieving the objectives of the course. The learning environment will foster clinical decision making and reinforce concepts learned throughout the school’s curriculum. Also, it will provide an excellent source for objective assessment of student knowledge and performance.  
**Enrollment preference will be given to pharmacotherapy scholars.**
Course will introduce and discuss important topics in global health, focusing specifically on care of the underserved in a global context. Topics discussed will include health policy and economics, determinants of health, essential medicines, community-oriented primary care, structural violence, malnutrition and tropical medicine. In addition to readings and weekly discussion groups, students will have the opportunity to gain valuable practice-based skills by working in underserved clinics in Pittsburgh. Although not a prerequisite, this course compliments pharmaceutical care to underserved populations offered in the fall term.

Course offers a concise presentation of the protozoan and helminthic parasites of medical importance, with an emphasis on parasitic morphology and life cycle, disease transmission, pathogenesis, prophylaxis, therapy and epidemiology.

Course provides basic insights into issues that affect the care of patients in the community through discussions of contemporary topics and further develops the student’s skills in research by continuing the analysis and reporting of projects from community pharmacy health service research 2. Specifically, students will enhance their critical thinking skills by examining the drivers for specific contemporary issues (e.g. pharmacist role in an accountable-care organization) and by learning to ask testable scientific questions.

The purpose of the course is to give PharmD students in the research area of concentration an experiential educational offering within a research laboratory. The general focus of the research by the faculty in the Center for Clinical Pharmaceutical Sciences is to determine and evaluate the factors and quantitative relationships that lead to variability in disease progression and drug response in patients. Research is focused on the translational and clinical aspects of scientific research. Ongoing studies include clinically relevant animal models of disease through large population studies in order to bridge the bench to bedside to improved public health through clinical and translational research. Disease state interests include but are not limited to the areas of infectious disease, nephrology, critical care, stroke, psychiatric disorders, liver disease, oncology, and cardiovascular disease. Coordinator’s permission is required.
PHARM 5825  Healthcare Innovations 2
CLASS NUMBER:  24784
Time:  Wed.  1:00 – 3:00 PM
Credits:  2
Coordinator:  Dr. Pringle
Enrollment Cap:  16 students

Course is to provide the students who have successfully completed Healthcare Innovations 1 the opportunity to apply what they have learned by observing successful and unsuccessful innovation applications within the VA Health System in Pittsburgh and using the innovation model master in part 1 of this two part course to provide evaluative insight as to why the innovations observed may have succeeded or failed to succeed. As part of this course, the students will also learn about the Veterans’ Engineering Resource Center (VERC) Program at the VA and how it guides the development and implementation of innovations that aim to improve healthcare quality and outcomes for participating veterans. Coordinator’s permission is required.

PHARM 5826  Advanced Pediatric Pharmaceutical Care
CLASS NUMBER:  24812
Time:  Mon.  2:30 – 4:30 PM
Credits:  2
Coordinator:  Dr. Howrie
Enrollment Cap:  12 students

The purpose of this course is to extend knowledge and skills in intensive and/or advanced pediatric specialties, building on previously developed fundamental knowledge of pediatric physiology, pathophysiology, pharmacology and therapeutics, so as to advance pharmaceutical care for infants and children with selected disorders. The course will focus on integration of science and practice to achieve outcomes that enhance patient care and quality of life.

PHARM 5830  Discovering Scientific Inquiry (DSI)
CLASS NUMBER:  24240
Time:  Mon.  2:00 – 4:00 PM
Credits:  2
Coordinator:  Dr. Ensor
Enrollment Cap:  16 students

The primary purpose of the course is to adequately prepare learners to execute an outcomes research-based project during the P4 curriculum. As a required component of the pharmacotherapy scholars program, this course will enable P3 students in the spring semester to design a study, submit the required Institutional Review Board documents, and strengthen their data analysis skills. Enrollment preference will be given to pharmacotherapy scholars.

PHARM 5831  Healthcare for the LGBTQIA Community
CLASS NUMBER:  28542
Time:  TBA
Credits:  2
Coordinator:  Dr. Grieve
Enrollment Cap:

This course will prepare the student to assess and guide comprehensive medical treatment for LGBTQIA individuals. Students will learn about cultural competency and inclusive language, screening and diagnosis, gender affirmation, primary and preventative care, and advocacy.

PHARM 5851 – 5858  Special Topics 1 – 8
CLASS NUMBERS:  TBD
Time:  TBD, as arranged with faculty
Credits:  1 - 3
Coordinator:  Varies
Enrollment Cap:  Varies

Student has the opportunity to explore a pharmaceutical research or pharmaceutical care topic on an individual or small group basis with the oversight of a faculty member. Generally, the successful completion of a project is required.
**NEW OFFERINGS FOR SPRING 2018**

PHARM 5832  Literature & Film to Understand Patient-Practitioner Experiences  Credits: 1
CLASS NUMBER: 29549  Coordinator: Dr. Meyer
Time:  Tue. 6:00 – 9:00 PM (meets 1/9, 1/23, 2/6, 2/20, 2/27, 3/20)  Enrollment Cap: 2 students

This course is open to students from across the health sciences and will be directed by an interprofessional faculty team. This course emphasizes the importance of understanding the universal human aspects of health and disease to further develop empathetic and holistic skills among health professional students. The importance of interprofessional collaboration as a mechanism to improve patient outcomes will be explored. Students and faculty will read and/or view selected works that focus on the human condition that may impact the physical and/or psychological health of the patient, families, communities, and care providers - and their interaction with the health care system. Guided discussion that helps students to reflect on the humanistic aspects of health care will be conducted. Coordinator's permission is required.

PHARM 5836  The Side Project: Building Value with Your Spare Time  Credits: 1
CLASS NUMBERS: 31022  Coordinators: Drs. Ali, Patel
Time:  Thu. 4:00 – 5:00 PM

The goal of this course series is to introduce didactic and experiential elements of entrepreneurship for pharmacy students. This course offers students the foundations required to successfully understand, create, and execute entrepreneurial ideas in pharmacy. This includes learning from success in other fields, understanding the components that comprise pharmacy, and identifying current opportunities in pharmacy. Concepts of start-up methodology, management/leadership, and company culture will be reviewed in this course. Career focuses for students would benefit in learning about starting a new company to disrupt incumbents, starting and managing new projects within an existing corporation, and new Management within the field of innovation.