

# SCHOOL OF PHARMACY PROFESSIONAL ELECTIVES

## FALL TERM 2211

**DISCLAIMER: THIS LIST REPRESENTS THE COURSES WITHIN THE SCHOOL OF PHARMACY THAT ARE SCHEDULED IN THE FALL 2020 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 3034 Topics in Translational Research**  
**CLASS NUMBER:** 28030

**Credits:** 1  
**Coordinators:** Dr. P. Empey  
**Enrollment Cap:** 10 students

This course is structured as a journal club focused on translational investigations and is being offered jointly with the universities of Minnesota, North Carolina, and Pittsburgh for 1st and 2nd year graduate students from all three programs who will participate in discussions by live video teleconferencing. Articles emphasizing methods which allow for translation from preclinical to clinical investigation will be discussed in several different therapeutic areas with emphasis on pharmacometrics, genomics, biomarker validation, and drug discovery. **Instructor's permission is required. Please submit a one paragraph e-mail to Dr. Empey, [PEMPEY@PITT.EDU](mailto:PEMPEY@PITT.EDU) to explain your interest in translational research and why you want to enroll in the class.**

**PHARM 3068 Computational Systems Pharmacology**  
**CLASS NUMBER:** 31730

**Credits:** 3  
**Coordinators:** Drs. J. Wang/S. Xie  
**Enrollment Cap:** 35 students

This course will teach the fundamentals of computational systems pharmacology (CSP) modeling and their applications to study drug actions and rational development of new drugs through network analysis, Theoretical concepts pertaining to computational systems pharmacology, such as drug target identification and computer aided drug design (CADD), will be taught. The course also includes hands-on training with the mainstream network analysis and CADD software, such as Symbiology of Matlab, Tetrad, drug discovery package of Schrodinger. This is a mandatory course to be taken for the PSP program.

**PHARM 5801 Pharmaceutical Care to Underserved Populations**  
**CLASS NUMBER:** 13798

**Credits:** 3  
**Coordinator:** Dr. Connor  
**Enrollment Cap:** 8 students

A sequence of courses that address issues related to providing pharmaceutical care to underserved populations. Topic areas that will be addressed include: Psychosocial Factors Impacting Health, Political and Economic Influences on Health Care Access, Community Advocacy and Resources, Patient Assessment, Clinical Problem Solving Skills, Pharmacotherapy Management, and Patient Education. Students will have opportunities for interdisciplinary care and educational sessions. **Enrollment preference will be given to global ARCO students.**

**PHARM 5806 Pediatric Pharmaceutical Care**  
**CLASS NUMBER:** 22540

**Credits:** 2  
**Coordinator:** Dr. Howrie  
**Enrollment Cap:** 15 students

Provides students with opportunities to acquire the knowledge and skills necessary to provide pharmaceutical care to pediatric patients of all ages.

**PHARM 5812 Healthcare Innovations 1**  
**CLASS NUMBER:** 13802

**Credits:** 1.5  
**Coordinator:** Dr. Pringle  
**Enrollment Cap:** 16 students

Students will be able to effectively participate in a healthcare innovation application team as either a leader or participant that results in the application of an evidence-based healthcare innovation, which leads to improved patient care. Students will be able to develop detailed and effective strategic frameworks from which they can outline and track their progress in implementing a healthcare innovation.

**PHARM 5815 Concepts of Managed Care Pharmacy****CLASS NUMBER:** 17769**Credits:** 2**Coordinators:** Drs. Lopata/Mancini**Enrollment Cap:** 20 students

The purpose of this course is to understand the fundamental concepts in managed care pharmacy and the relation to the healthcare system. This course supports the school's mission by enabling students to better navigate and understand the healthcare system from the perspective of different stakeholders to help optimize pharmaceutical care. **Instructor's permission is required. Please submit a one paragraph e-mail to Dr. Mancini, [MANCINIDJ2@UPMC.EDU](mailto:MANCINIDJ2@UPMC.EDU), and Dr. Lopata, [EML76@pitt.edu](mailto:EML76@pitt.edu), to explain your interest in managed care and why you want to enroll in the class.**

**PHARM 5817 Advanced Infectious Diseases****CLASS NUMBER:** 17765**Credits:** 1**Coordinator:** Dr. Falcione**Enrollment Cap:** 18 students

Students will expand upon and apply knowledge and skills developed in the required Infectious Diseases 1 and 2 course sequence and Advanced Pharmaceutical Care 1 to new and complex infectious disease case scenarios, be introduced to the principles of antimicrobial stewardship, learn basic skills relevant to performing antimicrobial stewardship activities in a health system, and explore current controversies in infectious diseases to optimize the health patients with complex infectious diseases. Instructor's permission is required. **Please submit a one paragraph e-mail to Dr. Falcione, [FALCIONEBA@UPMC.EDU](mailto:FALCIONEBA@UPMC.EDU), to explain your interest in advanced infectious diseases and why you want to enroll in the class.**

**PHARM 5818 Medical Parasitology****CLASS NUMBER:** 22861**Credits:** 1**Coordinator:** Dr. Paul Schiff**Enrollment Cap:** 24 students

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.

**PHARM 5820 Pharmacy Innovation 1****CLASS NUMBER:** 21174**Credits:** 1**Coordinators:** Drs. Ali/Patel**Enrollment Cap:** 30 students

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.

**PHARM 5831 Healthcare for the LGBTQIA Community****CLASS NUMBER:** 25775**Credits:** 2**Coordinator:** Dr. Grieve**Enrollment Cap:** 15 students

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 5835 Reinventing the Incumbent: Designing an Intrapreneurship Strategy Credits: 1**

**CLASS NUMBER:** 26889

**Coordinators:** Drs. Ali/Patel

**Enrollment Cap:** 30 students

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 business models, funding, consumer behavior in healthcare and landscape reviews of technology in healthcare 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.

**PHARM 5837 Intro to Psychopharmacology & Psychiatric Disorders Credits: 3**

**CLASS NUMBER:** 29965

**Coordinator:** Dr. Fabian

**Enrollment Cap:** 24 students

This course will serve as an introduction to psychopharmacology and the management of common psychiatric disorders including substance use disorders. This course is designed to familiarize students with the fundamentals of pharmacological as well as non-pharmacological treatment from a historical, sociological and practice perspective. This course aims to increase mental health literacy and enhance practitioner competency while elucidating the roles of healthcare providers within an interprofessional team framework. This is an introductory course. No prerequisites are required.

## **Independent/Directed Study Options:**

**PHARM 5824 Mentored Research 1**

**CLASS NUMBER:** TBD

**Time:** As arranged with faculty

**Credits:** 1 - 3

**Coordinator:** Varies

**Enrollment Cap:** None

The purpose of this course is to give PharmD students an experiential educational offering within a research laboratory. This course is available to all students including (but not limited to) those in the Research Area of Concentration. The general focus of the course is to provide students with mentored research experiences to answer hypothesis-driven questions within the pharmaceutical sciences. Ongoing studies include but are not limited to in vitro synthesis, mechanistic studies, in vivo animal models of disease, and large population studies in order to bridge the bench to bedside to improved public health through research.

**Coordinator's permission is required.**

**PHARM 5851 – 5858 Special Topics 1 – 8**

**CLASS NUMBERS:** TBD

**Time:** 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. **Student must apply using the Special Topics Web App. More information can be found in the PharmD Handbook under Special Topics -**

<http://pages.pharmacy.pitt.edu/pharmdhandbook/special-topics-courses/>.