

PHRM396 – Research Methods in Pharmacology – Drug Addiction

Research Methods in Pharmacology – Drug Addiction is a 1 credit lecture/lab course that will give students an overview of contemporary methods and experimental design used in Behavioral Pharmacology. Behavioral Pharmacology integrates many areas of biomedical research, such as Pharmacology, Neuroscience, Psychology, Physiology, and Animal Behavior. The course focuses on drugs with abuse liability as a tool to introduce core concepts in Behavioral Pharmacology. Topics covered in lecture will include: principles related to care and use of animals in research, assessing the validity of preclinical models, basic pharmacological principles, in vivo and in vitro models used in preclinical research. In the lab component of this course, students will gain hands-on experience working with laboratory mice in preclinical test(s) used to examine addictive properties of pharmacological compounds. Each class session will feature a lecture, followed by time in the lab running the behavioral experiment. Students will gather and analyze data and present a final report on the outcome of their research project. This course is ideally suited to students who are interested in pursuing careers in biomedical research, pharmaceutical industry, clinical counseling or social work, the government sector as well as those wishing to pursue translational research at an academic institution.

Prerequisites: Completion of UVM General and Mouse Animal Research modules in CITI. Completion of UVM Occupational Health and Safety form. These requirements should be met prior to our first class session. Instructors will provide instructions about how to complete these requirement upon course registration. Recommended; basic coursework in biology or neuroscience or biochemistry or coursework with a foundation in biological systems. Please contact course instructors with questions.