PSCI 425. College of Pharmacy Colloquium Lecture Series. 1 hour.  
Weekly, one-hour, basic-research seminars given by invited lecturers. 
Course Information: Previously listed as PSCI 425. May be repeated for 
a maximum of 2 hours. Students will not be able to concurrently enroll in 
PSCI 425 and PMPR 355 during the Spring semester.

PSCI 501. Drug Discovery, Design, and Development. 3 hours.  
Provides an overview of the process to discover, design, develop, and 
market drugs set in the background of chemistry and biology. Course 
Information: Credit is not given for PSCI 501 if the student has credit in 
BPS 507 or MDCH 507 or PMPG 507.

PSCI 502. Training in Research Presentation. 1 hour.  
Provides practice and practical guidance for giving a high quality research 
seminar. Course Information: Satisfactory/Unsatisfactory grading only. 
Previously listed as MDCH 593.

PSCI 503. Biostatistics for Pharmaceutical Scientists. 2 hours.  
Provides an introduction to basic statistical methods for pharmaceutical 
scientists. Course Information: Extensive computer use required. Credit is 
not given for PSCI 503 if the student has credit in BSTT 400.

PSCI 510. Principles of Pharmaceutics and Drug Delivery. 3 hours.  
Provides fundamental principles of pharmaceutics and drug delivery. 
Course Information: Credit is not given for PSCI 510 if the student has 
credit in BPS 501.

PSCI 519. Principles of Polymeric Science and Engineering. 3 hours.  
Intermediate polymer science, thermodynamics of polymer solutions, 
phase separations, MW determination, crystallization, elasticity, kinetics 
and processing. Course Information: Previously listed as PSCI 519. 
Prerequisite(s): MATH 220; or consent of the instructor.

PSCI 520. Research Techniques in Pharmacognosy. 3 hours.  
Provides an introduction to the techniques used in pharmacognosy 
research. Course Information: Previously listed as PMPG 510.

PSCI 521. Structure Elucidation of Natural Products. 3 hours.  
Provides an in-depth study of structure elucidation and dereplication 
of a natural product using modern computational methods and real-
life examples. Course Information: Previously listed as PMPG 516. 
Prerequisite(s): MDCH 562; or consent of the instructor.

PSCI 523. Special Projects in Pharmacognosy. 1-3 hours.  
Overview of current research topics of interest in Pharmacognosy. 
Course Information: Previously listed as PMPG 565. Prerequisite(s): 
Completion of the first year of the program.

PSCI 530. Principles of Medicinal Chemistry. 5 hours.  
Introduces concepts of graduate organic and physical organic chemistry 
as they relate to medicinal chemistry. Emphasis will be made on those 
topics of chemistry that are relevant to drug discovery and design. Course 
Information: Previously listed as MDCH 561. Prerequisite(s): Credit 
or concurrent registration in PHAR 422; or consent of the instructor. 
Recommended background: One year of organic chemistry with 
laboratory.

PSCI 531. Spectroscopy in Pharmaceutical Sciences. 3 hours.  
The fundamental principles used to determine structure and conformation 
in molecules, emphasizing spectroscopic methods useful in solving 
structural problems and in analyzing dynamic biological processes. 
Course Information: Previously listed as MDCH 562. Prerequisite(s): 
Consent of the instructor or one year of physical chemistry.

PSCI 591. Internship in Pharmaceutical Sciences. 1-12 hours.  
Students spend time working in an entity unaffiliated with the department, 
such as an industrial or specialized laboratory, to obtain professional 
experience in a field of pharmaceutical sciences. Course Information: 
May be repeated. Prerequisite(s): Consent of the instructor.

PSCI 592. Research Rotation in Pharmaceutical Sciences. 1-2 hours.  
Research rotation course in which first year students from the 
Pharmaceutical Sciences program will undertake projects in laboratories 
affiliated with this program. Course Information: May be repeated to a 
maximum of 4 hours. Students may register for more than one section 
per term. Meets eight weeks of the semester. To be taken fall and spring 
semesters of the first year of graduate study. Prerequisite(s): Consent of 
the instructor.

PSCI 594. Special Topics in Pharmaceutical Sciences. 1-4 hours.  
Covers at least one of the five concentrations of research 
in pharmaceutical sciences: pharmaceutics & drug delivery, 
pharmacognosy, chemistry in drug discovery, molecular mechanisms 
and therapeutics, and forensics. Course Information: May be repeated 
to a maximum of 4 hours if topics vary. Previously listed as MDCH 594. 
Prerequisite(s): One year of physical chemistry and one semester of 
biochemistry or consent of the instructor.

PSCI 598. Master’s Thesis Research. 0-16 hours.  
Independent research project under the guidance of an advisor. Course 
Information: Satisfactory/Unsatisfactory grading only. May be repeated. 
Prerequisite(s): Consent of the instructor.

PSCI 599. Ph.D. Thesis Research in Pharmaceutical Sciences. 0-16 
hours.  
Independent dissertation research under the guidance of an advisor and 
committee. Course Information: Satisfactory/Unsatisfactory grading only. 
May be repeated. Prerequisite(s): Consent of the instructor.