PSC - PHARMACEUTICAL SCIENCES

PSC 3110 Pharmaceutical Biochemistry Cr. 3
Survey of biochemistry for pharmacy students, metabolism, and drug effects in the maintenance of normal human biochemistry and homeostasis. Offered Fall.
Restriction(s): Enrollment is limited to Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

PSC 4115 Pharmaceutics I Cr. 3
Introduction to pure drug substance formulation into dosage forms and the principles and mechanisms for developing dosage forms for safe and effective use in patients. Offered Fall.
Restriction(s): Enrollment limited to students in the Doctor of Pharmacy program.

PSC 4125 Introduction to Pharmaceutical Sciences: Medicinal Chemistry / Pharmacology / Immunology Cr. 3
Introduction to medicinal chemistry, pharmacology and biotechnology with a focus on drug discovery and drug action. Offered Fall.
Restriction(s): Enrollment limited to students in the Doctor of Pharmacy program.

PSC 4215 Pharmaceutics II Cr. 2
Basic pharmacokinetics: principles of drug administration, distribution, metabolism and excretion (ADME) using different dosage forms, and basics of administration routes. Offered Winter.
Restriction(s): Enrollment limited to students in the Doctor of Pharmacy program.

PSC 4225 Autonomic Pharmacology Cr. 2
The principles of autonomic pharmacology integrated into an understanding of the functioning of the autonomic system; the major target organs and the physiological effects of agonists and antagonists elicited through autonomic receptor subtypes. Offered Winter.
Prerequisite: PSC 4125.
Restriction(s): Enrollment limited to students in the Doctor of Pharmacy program.

PSC 5115 Pharmacokinetics Cr. 2
Conceptual knowledge-base and practical calculation applications of pharmacokinetic principles. Offered Fall.
Restriction(s): Enrollment limited to students in the Doctor of Pharmacy program.

PSC 5600 Drugs of Abuse Cr. 2
Pharmacology and toxicology, both clinical and animal, associated with recreationally-used agents; treatment of acute and chronic problems associated with these agents; concept of chronic drug administration and abuse as disease state. Offered Yearly.
Restriction(s): Enrollment limited to students in the Pharmacy and Health Sciences.

PSC 5870 Seminar in Pharmacology Cr. 1
Reports and discussions on current literature and recent advances in the field. Assigned topics presented by students. Offered for undergraduate credit only. Offered Every Term.
Restriction(s): Enrollment limited to students in the Pharmacy and Health Sciences.
Repeatable for 2 Credits

PSC 5990 Directed Study in Medicinal Chemistry Cr. 2
Offered for undergraduate credit only. Offered Every Term.
Restriction(s): Enrollment limited to students in the Pharmacy and Health Sciences.

PSC 5991 Directed Study in Pharmaceutics Cr. 2
Offered for undergraduate credit only. Offered Every Term.
Restriction(s): Enrollment limited to students in the Pharmacy and Health Sciences.

PSC 5992 Directed Study in Pharmacology Cr. 2
Offered for undergraduate credit only. Offered Every Term.
Restriction(s): Enrollment limited to students in the Pharmacy and Health Sciences.

PSC 6285 Pharmacy Seminar Cr. 1
Presentations on topics of current interest on basic science problems relevant to the major discipline of pharmaceutical sciences. Offered Winter.
Restriction(s): Enrollment limited to students in the Doctor of Pharmacy program.
Equivalent: PSC 7840

PSC 6800 Introduction to Research Cr. 2
Fundamental concepts and resources for responsible conduct of biomedical research and advancing scientific professional development, and data analysis and statistics. Offered Yearly.
Restriction(s): Enrollment limited to students in the Pharmacy and Health Sciences.

PSC 6890 Toxicology and Adverse Drug Reactions Cr. 3
Study of toxicology and adverse drug reactions including metabolism, hypersensitivity, carcinogenicity, drug-drug interactions, and other factors hazardous to human health. Offered Yearly.
Restriction(s): Enrollment limited to students in the Pharmacy and Health Sciences.

PSC 6910 Pharmaceutical Waste: Environmental Impact and Management Cr. 2-3
Course designed for advanced professional and graduate students with sufficient chemistry and/or biological sciences background who are interested in the environmental impact, management, and regulation of waste pharmaceuticals as emerging issues. Offered Spring/Summer.
Restriction(s): Enrollment is limited to Professional level students.
Equivalent: CE 6910

PSC 7010 Advanced Drug Action and Safety I Cr. 3
Survey of advanced research topics in pharmacology. Offered Biannually (Fall).
Restriction(s): Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

PSC 7020 Advanced Drug Discovery I Cr. 3
Survey of advanced research topics in medicinal chemistry. Offered Biannually (Fall).
Restriction(s): Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

PSC 7040 Advanced Drug Formulation and Delivery I Cr. 3
Survey of advanced research topics in pharmaceutics. Offered Biannually (Winter).
Restriction(s): Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.
PSC 7160 Advanced Practice Basic Pharmaceutical Sciences Elective Cr. 3-6
Eight-week rotation in basic science-oriented research laboratory. Offered Irregularly.
Restriction(s): Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.
Repeatable for 6 Credits

PSC 7600 Drugs of Abuse: Advanced Cr. 2
Pharmacology and toxicology, both clinical and animal, associated with recreationally-used agents; treatment of acute and chronic problems associated with these agents; concept of chronic drug administration and abuse as disease state. Offered Yearly.
Restriction(s): Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

PSC 7700 Advanced Drug Action and Safety II Cr. 2
Continuing survey of modern research topics in pharmacology. Offered Biannually (Winter).
Restriction(s): Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

PSC 7710 Advanced Drug Discovery II Cr. 2
Continuing survey of advanced research topics in medicinal chemistry. Offered Biannually (Winter).
Restriction(s): Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

PSC 7720 Advanced Drug Formulation and Delivery II Cr. 2
Second course in survey of advanced research topics in pharmaceutics. Offered Biannually (Winter).
Restriction(s): Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

PSC 7800 Research Techniques in Medicinal Chemistry Cr. 1-4
Laboratory work employing modern techniques available in medicinal chemistry; application of basic principles to graduate study and research. Offered Every Term.
Restriction(s): Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.
Repeatable for 12 Credits

PSC 7810 Research Techniques in Pharmaceutics Cr. 1-4
Laboratory work employing modern techniques available in pharmaceutics: application of basic principles to graduate study and research. Offered Every Term.
Restriction(s): Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.
Repeatable for 12 Credits

PSC 7820 Research Techniques in Pharmacology Cr. 1-4
Laboratory work employing some of the modern techniques available in pharmacology, including the application of basic principles to graduate study and research. Offered Every Term.
Restriction(s): Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.
Repeatable for 12 Credits

PSC 7840 Seminar in Basic Pharmaceutical Sciences Cr. 1-3
Basic science seminar for doctor of pharmacy students or graduate students. Offered Irregularly.
Restriction(s): Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

PSC 7850 Pharmaceutical Sciences Colloquium Cr. 1
This course is a required seminar course for all graduate students in the Department of Pharmaceutical Sciences. Offered Every Term.
Restriction(s): Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.
Repeatable for 10 Credits

PSC 7860 Introduction to Seminar Cr. 1
A required seminar course for all first year graduate students in the Department of Pharmaceutical Sciences. Students will be required to present a seminar on their research progress during their first year in the program. Offered Every Term.
Restriction(s): Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.
Repeatable for 4 Credits

PSC 7870 Second Year Seminar Cr. 1
A required seminar course for all second year PhD students in the Department of Pharmaceutical Sciences. Students will be required to present a seminar on a topic unrelated to their research. Offered Fall, Winter.
Prerequisites: ([PSC 7860 with a minimum grade of C])
Restriction(s): Enrollment is limited to Graduate level students.

PSC 7880 Third Year Seminar Cr. 1
A required seminar course for all third year PhD students in the Department of Pharmaceutical Sciences. Students will be required to present a seminar on their research. Offered Fall, Winter.
Prerequisites: ([PSC 7870 with a minimum grade of C])

PSC 7999 Master's Essay Direction Cr. 1-4
Offered Every Term.
Restriction(s): Enrollment limited to students with a class of Candidate Masters; enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

PSC 8650 Special Topics in Medicinal Chemistry Cr. 2
Recent developments in medicinal chemistry. Topics under investigation and of current interest offered in different semesters. Offered Every Term.
Restriction(s): Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.
Repeatable for 6 Credits

PSC 8660 Special Topics in Pharmaceutics Cr. 2
Recent developments in pharmaceutics. Topics under investigation and of current interest offered in different semesters. Offered Every Term.
Restriction(s): Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.
Repeatable for 6 Credits
PSC 8670 Special Topics in Pharmacology Cr. 2
Recent developments in pharmacology. Topics under investigation and of current interest offered in different semesters. Offered Every Term.
**Restriction(s):** Enrollment limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.
**Repeatable for 6 Credits**

PSC 8999 Master's Thesis Research and Direction Cr. 1-8
Offered Every Term.
**Restriction(s):** Enrollment limited to students with a class of Candidate Masters; enrollment limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.
**Repeatable for 8 Credits**

PSC 9990 Pre-Doctoral Candidacy Research Cr. 1-8
Research in preparation for doctoral dissertation. Offered Every Term.
**Restriction(s):** Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.
**Repeatable for 12 Credits**

PSC 9991 Doctoral Candidate Status I: Dissertation Research and Direction Cr. 7.5
Offered Every Term.
**Restriction(s):** Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

PSC 9992 Doctoral Candidate Status II: Dissertation Research and Direction Cr. 7.5
Offered Every Term.
**Restriction(s):** Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

PSC 9993 Doctoral Candidate Status III: Dissertation Research and Direction Cr. 7.5
Offered Every Term.
**Restriction(s):** Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

PSC 9994 Doctoral Candidate Status IV: Dissertation Research and Direction Cr. 7.5
Offered Every Term.
**Restriction(s):** Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

PSC 9995 Candidate Maintenance Status: Doctoral Dissertation Research and Direction Cr. 0
Offered Every Term.
**Restriction(s):** Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.
**Repeatable for 0 Credits**