

# PHC - PHARMACOLOGY

---

## PHC 5030 Individual Research in Pharmacology Cr. 2-5

Direct participation in laboratory research into the ways drugs affect cell processes, under the supervision of a departmental faculty advisor. Introduction to experimental protocol and current related scientific literature. Offered for graduate credit only. Offered Every Term.

**Restriction(s):** Enrollment is limited to Graduate level students.

## PHC 6500 Drugs and the Addictive Process Cr. 3

Introduction to general principles of drug action; specific pharmacologic, toxicologic, and pathologic effects of abused drugs; bio-psycho-social bases for addiction. Offered for graduate credit only. Offered Yearly.

**Restriction(s):** Enrollment is limited to Graduate level students.

## PHC 7010 Pharmacology Lecture Cr. 4

Introductory presentation of drug actions on living tissue. Offered Winter.

**Restriction(s):** Enrollment is limited to Graduate level students.

## PHC 7220 Molecular Biology of Cancer Development Cr. 3

Genetics and molecular basis of normal cell transformation into malignant cancer cells. Molecular mechanisms that are fundamental to the regulation of cell growth, development, and differentiation will be discussed. The students are expected to present and participate in discussions of one or more key recent papers that are relevant to the lectures. Students with a strong background in biology/molecular biology are encouraged to apply. Offered Biannually (Fall).

**Prerequisite:** IBS 7015, with a minimum grade of C ; CB 7210, with a minimum grade of C

**Restriction(s):** Enrollment is limited to Graduate level students.

**Equivalent:** CB 7220

## PHC 7240 Principles of Cancer Chemotherapy Cr. 2

Continuation of the principles of cancer therapy taught in C B 7210. Concepts relating to tumor biology and the biochemistry and pharmacology of both classic and targeted agents are covered. Offered Yearly.

**Prerequisite:** IBS 7015, with a minimum grade of C ; CB 7210, with a minimum grade of C

**Restriction(s):** Enrollment is limited to Graduate level students.

**Equivalent:** CB 7240

## PHC 7410 Principles of Toxicology Cr. 3

Basic concepts and principles of toxicology, including toxicity of major classes of chemicals (pesticides, solvents, metals) and organ systems (renal, immune, digestive, neuro and respiratory) affected. Offered Fall.

**Prerequisite:** CHM 2220, with a minimum grade of C- ; CHM 2230, with a minimum grade of C- ; BIO 1510, with a minimum grade of C-

**Restriction(s):** Enrollment is limited to Graduate level students.

**Equivalent:** BIO 7011

## PHC 7505 Cellular Electrophysiology of CNS Neurons Cr. 3

Molecular mechanisms underlying electrical activity of CNS neurons. Lectures and student presentations: one hour lecture followed by two hours of student-led discussion. Offered Biannually (Fall).

**Restriction(s):** Enrollment is limited to Graduate, Medical or Professional level students.

## PHC 7650 Advanced Topics in Pharmacology Cr. 1-6

Modules of instruction in sharply-defined areas of current research in pharmacology and related disciplines. Each module will cover fundamental concepts, essential knowledge base, research protocols and techniques, and future issues. Offered Every Term.

**Prerequisite:** PHC 7010, with a minimum grade of C

**Restriction(s):** Enrollment is limited to Graduate level students.

**Repeatable for 6 Credits**

## PHC 7700 Recent Developments in Pharmacology Cr. 1-4

Selected topics and readings in pharmacology. Offered Every Term.

**Restriction(s):** Enrollment is limited to Graduate level students.

**Repeatable for 12 Credits**

## PHC 7710 Individual Studies in Pharmacology Cr. 1-8

Offered Every Term.

**Restriction(s):** Enrollment is limited to students with a major in Pharmacology; enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Philosophy or Master of Science degrees.

**Repeatable for 8 Credits**

## PHC 7890 Seminar Cr. 1

Assigned readings and student presentation; faculty and outside speakers. Offered Every Term.

**Restriction(s):** Enrollment is limited to students with a major in Pharmacology; enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Philosophy or Master of Science degrees.

**Repeatable for 12 Credits**

## PHC 7996 Research Cr. 1-20

Special research topics in specified areas arranged with individual faculty members. Offered Every Term.

**Restriction(s):** Enrollment is limited to Graduate level students.

**Repeatable for 30 Credits**

## PHC 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 is limited to Graduate level students.

**Repeatable for 8 Credits**

## PHC 9990 Pre-Doctoral Candidacy Research Cr. 1-8

Research in preparation for doctoral dissertation. Offered Every Term.

**Restriction(s):** Enrollment is limited to Graduate level students.

**Repeatable for 12 Credits**

## PHC 9991 Doctoral Candidate Status I: Dissertation Research and Direction Cr. 7.5

Offered Every Term.

**Restriction(s):** Enrollment is limited to Graduate level students.

## PHC 9992 Doctoral Candidate Status II: Dissertation Research and Direction Cr. 7.5

Offered Every Term.

**Prerequisite:** PHC 9991, with a minimum grade of S

**Restriction(s):** Enrollment is limited to Graduate level students.

## PHC 9993 Doctoral Candidate Status III: Dissertation Research and Direction Cr. 7.5

Offered Every Term.

**Prerequisite:** PHC 9992, with a minimum grade of S

**Restriction(s):** Enrollment is limited to Graduate level students.

**PHC 9994 Doctoral Candidate Status IV: Dissertation Research and Direction Cr. 7.5**

Offered Every Term.

**Prerequisite:** PHC 9993, with a minimum grade of S

**Restriction(s):** Enrollment is limited to Graduate level students.

**PHC 9995 Candidate Maintenance Status: Doctoral Dissertation Research and Direction Cr. 0**

Offered Every Term.

**Restriction(s):** Enrollment is limited to Graduate level students.

**Repeatable for 0 Credits**