

# PRINCIPLES OF DRUG ACTION I

## PYPS 5120 • SPRING TERM 2004

### 1. COURSE OBJECTIVES

The objective of PYPS5120 is to present, in an integrated manner, chemical and pharmacological principles of drug action.

### 2. COURSE INSTRUCTORS

- Dr. Charles Breese (Office: 408 Pharmacy, [breescr@auburn.edu](mailto:breescr@auburn.edu))
- Dr. Jack DeRuiter (Office: 304 Pharmacy, [deruija@auburn.edu](mailto:deruija@auburn.edu))
- Dr. M. E. Hamrick (Office: 403 Pharmacy, [hamrime@auburn.edu](mailto:hamrime@auburn.edu))
- Dr. Tom Riley, Course Coordinator, (Office: 306 Pharmacy, [rileytn@auburn.edu](mailto:rileytn@auburn.edu))
- Dr. Forest Smith, (Office: 308 Pharmacy, [smithft@auburn.edu](mailto:smithft@auburn.edu))

### 3. COURSE SCHEDULE - 11:00 to 11:50AM Tues. and Thurs. (134 Chemistry), Wed. and Fri. (2370 Haley).

### 4. CREDIT HOURS - 4

### 5. COURSE POLICIES

- a. Students are expected to attend all scheduled classes.
- b. Students are expected to carry out all assigned work and to take all examinations at the scheduled times. It is the responsibility of the student to advise the instructor in advance of any anticipated absence from an examination. No student will be allowed to take an exam prior to its scheduled date and time. Make-up exams will not normally be provided. In the event an exception is made, make-up exams will be scheduled at the discretion of the instructor.
- c. Students may request instructor's consideration of numerical errors or reevaluation of answers to questions. Requests must be submitted to the instructor(s) that prepared the exam within 24 hours of the return of an exam grade (the sooner, the better). No petitions will be received more than 5 days after return of an exam. Note that, at the discretion of the instructor, review of an exam may involve review of the complete exam and can result in either a lowering or raising of the exam grade.
- d. Students must adhere to the School of Pharmacy Honor Code in completing all requirements of the course.
- e. Questions concerning course content should be directed to the Instructor responsible for that content. Questions concerning course policy and/or procedures should be directed to the **Course Coordinator** (Dr. Riley).

### 6. WEB RESOURCES

A WebCT course page is available for **PYPS5120** as a source of information and materials relevant to the course. Students should check their e-mail and the WebCT site daily for messages and information pertaining to the course.

## 7. TEXTS

a. **Required:** Basic and Clinical Pharmacology, B. G. Katzung, McGraw Hill, 2004 edition.

b. **Reference:**

1. Wilson and Gisvold's Textbook of Organic Medicinal and Pharmaceutical Chemistry, Eds. J. N. Delgado and W. A. Remers, 10th Edition, Lippincott-Raven, 1998
2. Principles of Medicinal Chemistry, Eds. W. O. Foye, T. L. Lemke, and D. A. Williams, 4th Edition, Williams and Wilkins, 1995
3. Goodman and Gilman's The Pharmacological Basis of Therapeutics, Tenth Edition, McGraw-Hill, 2001.
4. Pharmacology, by H. P. Rang, M. M. Dale, J. M. Ritter and P. Gardner, Churchill Livingstone, 4th edition, 2001

## 8. ASSESSMENT (Scheduling of lectures and exams are subject to change)

- a. Exam I (20%) - Week 3/4
- b. Exam II (20%) - Week 6/7
- c. Exam III (30%) - Week 10/11
- d. Final Exam (30%) - Final exam week

## 9. GRADING SCALE

A = 89.6 to 100

B = 79.6 to 89.5

C = 69.6 to 79.5

D = 60 to 69.5

F = >60

## 10. COURSE OUTLINE

A. Physicochemical Principles of Drug Action [January 13<sup>th</sup> through January 30<sup>th</sup>]

### EXAM #1, Week 3 (Dr. DeRuiter)

B. Physicochemical Factors Influencing Drug Disposition [February 3<sup>rd</sup> through February 20<sup>th</sup>]

### EXAM #2, Week 6 (Dr. Riley)

C. Target Sites of Drug Action [February 24<sup>th</sup> through March 3<sup>th</sup>]

D. Cholinergic Agents [March 4<sup>th</sup> through March 17<sup>th</sup>]

### EXAM #3: Week 10 (Drs. Breese & Smith)

E. Adrenergic Agents [March 18<sup>th</sup> through April 14<sup>th</sup>]

F. Dopaminergic Agents [April 15<sup>th</sup> through April 30<sup>th</sup>]

### FINAL EXAM: Final Exam Week (Drs. Smith & Breese)