

COURSE INFORMATION
PHARMACOLOGY I (30:718:405)
Fall 2015 3 Credit Hours

Course Coordinators: Dr. Andrew Gow gow@rci.rutgers.edu
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Office hours by arrangement.

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Course Faculty: Dr. Carol Gardner cgardner@pharmacy.rutgers.edu
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Dr. Grace Guo guo@ehsi.rutgers.edu
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Dr. Debra Laskin laskin@ehsi.rutgers.edu
Office: Levine Rm 002

Lectures: Tuesdays and Fridays – 12:00 PM – 1:20 PM in Hill 114

Recitations: Wednesdays 11:35 AM – 12:35 PM in PH 111
Recitations will **not** be held every week.
A schedule for recitations will be announced after classes start.

Textbooks: The recommended textbook is *Principles of Pharmacology 3rd Edition* (Ed: David Golan, Publisher: Lippincott Williams & Watkins). Optional reading on Access Pharmacy in *The Pharmacological Basis of Therapeutics* (Ed: Goodman & Gilman, Publisher McGraw Hill) is also recommended.

Course Objectives: Specific learning objectives will be provided for each lecture; however, all lectures/course assignments and exams are designed to emphasize the below general professional competencies.

- I. Pharmaceutical Care
 - a. Provide patient-centered care: design, implement, monitor, evaluate, and adjust pharmaceutical care plans that are patient-specific and evidence-based.
 - i. Identify and define the terminology, signs, and symptoms associated with diseases and medical conditions.
 - ii. Identify and evaluate patient factors, genetic factors, biosocial factors, and concurrent drug therapy that influence the maintenance of wellness and the prevention or treatment of a disease or medical condition.
 - iii. Identify specific mechanisms of actions, uses, and indications for drug products.
 - iv. Evaluate drug therapy for the presence of pharmacotherapeutic duplications and interactions with other drugs, food, diagnostic tests, and monitoring procedures.
 - v. Identify contraindications, warnings, and precautions associated with a drug product's active and inactive ingredients.

- vi. Identify the physicochemical properties of drug substances that affect their solubility, pharmacodynamic and pharmacokinetic properties, pharmacologic actions, and stability.
 - vii. Identify pharmacotherapeutic outcomes and endpoints.
 - viii. Assess and evaluate patient signs and symptoms and results of monitoring tests to determine achievement of desired outcomes and to assess for adverse reactions and recommend appropriate pharmacotherapeutic alternatives.
- II. Professionalism: exhibit professional attitudes and behaviors.
- a. Become a self-directed and life-long learner.
 - b. Act as an advocate to advance the profession of pharmacy.
 - c. Demonstrate awareness of key issues and debates in healthcare.
 - d. Act with honesty and integrity in professional relationships.
 - e. Maintain professional competence.

Course Management: This course requires some activities on the internet using Sakai. All students registered for Pharmacology I will automatically be able to access the course when logged into Sakai. The address is: <https://sakai.rutgers.edu>. Handouts for the course will be posted on the Sakai website. It is the student's responsibility to print a copy of the lecture handout prior to coming to class. Course Faculty are typically on Sakai the evening before an examination to answer student questions.

Attendance: Students are expected to attend all classes; if you expect to miss one or two classes, please use the University absence reporting website <https://sims.rutgers.edu/ssra/> to indicate the date and reason for your absence. An email is automatically sent to us.

i>Clicker Information: You are required to purchase an i>clicker remote for in-class participation. Use of i>clicker remotes is at the discretion of each Course Faculty Member.

Examinations and Grading:

Three examinations will be given in this course. Each examination will contribute approximately one-third to the final grade. The total number of points from the three exams will be used in final grade calculations. The examinations are not cumulative. However, an optional Final Exam, that is cumulative, will be offered at the end of the course. For students who chose to take the optional Final Exam, each examination will contribute approximately one-quarter to the final grade.

Students are expected to take all exams on the days scheduled. Approval for a make-up exam will be given only if there is adequate documentation that absence from an exam was absolutely unavoidable. If permission to take a make-up exam is granted, the format of the exam will be at the discretion of the Course Directors.

Examination Policies:

- Students are expected to arrive on time for examinations. Admittance to the examination after the beginning of the exam is at the discretion of the instructor
- Students must leave coats, book bags, and other belongings at the front or back of the examination room. The only items allowed on the desk are those that are essential to completion of the exam. Other than the examination itself, papers of any kind are not allowed on the desk.

- Students must be prepared to present picture identification (e.g. driver's license, Rutgers student ID) if requested by the exam proctors.
- A student may be moved to a different seat at any time during the exam at the discretion of the proctors.
- Students who want to keep track of the time during an exam should wear a watch. Exam proctors will also provide periodic updates on the time remaining. Cellular phones and personal digital assistants (PDAs) are not acceptable timepieces and will not be allowed on the desk. Cellular phones must be turned off in bags and not on the student.
- Students wearing baseball caps or similar hats with lids must turn the hat around so that the lid does not cover the eyes.

Policy on Academic Integrity: Students are required to be familiar with the university's Policy on Academic Integrity (see <http://academicintegrity.rutgers.edu/integrity.shtml>). Violation of academic integrity is a separable offense under the University Code of Student Conduct. Violations of academic integrity occurring during exams will be either level three or four violations. The recommended sanction for level three violations is suspension from the university for one or more terms with a notation of "academic disciplinary suspension" placed on the student's transcript for the period of suspension and a failing grade in the course. The recommended sanction for level four violations is expulsion from the university and a permanent notation on the student's transcript. Any student who is aware of academic misconduct by another student is obligated to notify a faculty member; failure to do so is also a violation of the Policy on Academic Integrity. Any violations of academic integrity relating to this course will be handled by the student disciplinary process as outlined in the University Code of Student Conduct.

Course and Instructor Evaluation: Evaluations will be conducted online at the end of the semester to evaluate the design and content of the course and to evaluate each instructor. Your comments and suggestions are greatly appreciated and will be used to modify (and improve) the course in the future.

PHARMACOLOGY I (30:718:405)
LECTURE SCHEDULE
 Fall 2015 Hill 114
 Tuesdays and Fridays – 12:00 PM – 1:20 PM

DATE	TOPIC	LECTURER
Autonomic Pharmacology		
September 1	Excitable Cells and Electrochemical Transmission	Gow
September 4	Anatomy & Function of Autonomic Nervous System	Gow
September 8	Monday classes, no class	
September 11	Cholinergics I	Gow
September 15	Cholinergics II	Gow
September 18	Neuromuscular Pharmacology	Gow
September 22	Adrenergics I	Gow
September 25	Adrenergics II	Gow
September 29	Vasculature and Vascular Control	Gow
October 2	Renin-Angiotensin System	Aleksunes
Cardio-Renal Pharmacology		
October 6	Lipoprotein Metabolism	Guo
October 9	Electrolyte and Fluid Balance	Gordon
October 12 (Monday!)	EXAM 1 (RWJMS/ Main Lecture Hall 6 pm): first 8 lectures	
October 16	Diuretics	Gordon
October 20	Angina Drugs	Gerecke
October 23	Antihypertensives	Gerecke
October 27	Antiarrhythmics	Gerecke
October 30	Heart Failure Drugs	Gerecke
November 3	Hemostasis and Thrombosis	Gordon
Immunopharmacology		
November 6	Hematopoiesis/Anemia	Gerecke
November 10	EXAM 2 (RWJMS/ Main and East Lecture Hall 5 pm): 8 lectures	
November 13	Immune System Pharmacology I	Laskin
November 17	Immune System Pharmacology II	Laskin
November 20	Immune System Pharmacology III	Laskin
November 24	Eicosanoids & NSAIDS	Gardner
November 25	Friday classes, class cancelled	
November 27	Thanksgiving Break	
December 1	Histamine	Gardner
December 4	Bronchodilation & Hyper-responsiveness	Gardner
December 8	EXAM 3 (RWJMS/ Main and East Lecture Hall 5 pm): Last 8 lectures	
TBD	FINAL EXAM	

