Pharmacology 203: General Pharmacology
Syllabus

3 credits CRN 63134
MW: 9:30 a.m. to 10:45 a.m.
Hale ‘Imiloa 113

INSTRUCTOR: Allison Beale
OFFICE: Hale ‘Imiloa 113, office hours in ‘Imiloa 113
E-MAIL: abeale@hawaii.edu
OFFICE HOURS: Before class, 8:30 a.m. to 9:30 a.m.
TELEPHONE: Please use email
EFFECTIVE DATE: Fall 2011

WINDWARD COMMUNITY COLLEGE MISSION STATEMENT

Windward Community College is committed to excellence in the liberal arts and career development; we support and challenge individuals to develop skills, fulfill their potential, enrich their lives, and become contributing, culturally aware members of our community.

CATALOG DESCRIPTION

Covers a wide range of drugs with emphasis on sites and mechanism of action, toxicity, fate and uses of major therapeutic agents.

This course is intended for students in nursing and allied health fields.

Prerequisites: Grade of "C" or better in ZOOL 141 and ZOOL 142.

Recommended Preparation: College level chemistry.

STUDENT LEARNING OUTCOMES

• Describe the basic mechanisms of drug action.
• Demonstrate knowledge of the terminology and special concepts useful in the study of pharmacology.
• Describe how differences between individuals govern their response to drugs.
• Define how drugs are processed and biotransformed by the body.
• Identify frequent complications and side effects associated with the major drug classes.
• Describe significant interactions between drugs
• Use information from the pharmacokinetics of a specific drug to determine dosing schedules and best route of drug administration.
• State the therapeutic uses for each major drug group.

COURSE CONTENT

CONCEPTS AND TOPICS
1. Principles of pharmacology
2. Peripheral nervous system anatomy and pharmacology
3. Central nervous system anatomy and pharmacology
4. Cardiovascular, renal and hematologic pharmacology
5. Respiratory pharmacology
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6. Pharmacology of pain and inflammation management
7. Gastrointestinal pharmacology
8. Endocrine pharmacology
9. Chemotherapy
10. Vitamins, supplements and herbal formulations

COURSE TASKS

INSTRUCTIONAL METHODS:

1. Lecture – attendance is mandatory.
2. Classroom discussions – be prepared to answer questions based on lecture material.
3. Classroom activities – may include pronunciation drills of drug names.
4. Self-study – assigned reading must be completed before class.
5. Research (library/on-line) projects
6. Quizzes and Examinations – complete daily quiz at start of class as well as midterms and a final exam.

ASSESSMENT TASKS AND GRADING

EXAMINATIONS

Quizzes will be worth 10-20 points each. Total value is approximately 250 points.

The midterm exam will be worth approximately 200 - 300 points. The final exam will be worth approximately 500 points.

The total for all examinations will be approximately 1000 points.

The quizzes will be an assessment of the student’s ability to recall material from the previous reading assignment and lecture. The exams will require the student to demonstrate knowledge and understanding of information and concepts presented in lecture, reading assignments, classroom activities, worksheets and other handouts, as well as information presented from internet resources.

ATTENDANCE

Attendance to the lectures is expected and required. Once lecture starts, common courtesy dictates that you remain seated until the end of class. If it is impossible for you to remain seated for a medical reason, please communicate with me so we can respectfully accommodate your need without undo disturbance to others.

Students who are more than 15 minutes late for, or who leave early from class will be counted as absent. This includes leaving for any unexcused reason during lecture, even if you return. Any student absent two (2) or more unexcused times will be required to meet with the instructor to discuss a course of action to avoid a potential 10% reduction in final points. Absenteeism may result in a student being asked to withdraw from the course.
METHOD OF GRADING

GRADING SCALE

<table>
<thead>
<tr>
<th>Total points</th>
<th>Percentage</th>
<th>Grade</th>
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<tbody>
<tr>
<td>900-1000</td>
<td>90-100</td>
<td>A</td>
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<tr>
<td>800-899</td>
<td>80-89.9</td>
<td>B</td>
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<tr>
<td>700-799</td>
<td>70-79.9</td>
<td>C</td>
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<tr>
<td>600-699</td>
<td>60-69.9</td>
<td>D</td>
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<tr>
<td>599 or below</td>
<td>59 OR BELOW</td>
<td>F</td>
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Grades may be curved or calculated based on a percentage at the instructor’s discretion; however, the student may use the above grading scale as a guide to evaluate their performance throughout the class. If you miss an examination because of an illness or legitimate emergency, you must contact the instructor within 48 hours to arrange a time to take a make-up exam. The instructor may request that the student present evidence of the illness or emergency that caused the student to miss the exam. If the student misses an exam for any other reason, the student may be prohibited from taking a make-up exam, thus failing to receive any points for the missed exam. While make-up exams will cover the same content area as a missed exam, the exam format and specific questions may be different. No retests will be given for any reason. Quizzes may not be retaken, taken late or made up.

Make up exams will be given at the Library Resource Center by arrangement.

ACADEMIC DISHONESTY

Students involved in academic dishonesty will receive an "F" grade for the course. Academic dishonesty includes cheating on exams and plagiarism. See pages 20-21 of the 2010-2011 course catalog for a description of the University’s policies concerning academic dishonesty.

LEARNING RESOURCES


Lecture notes (copies of PowerPoint presentation slides) and flash cards will be provided.


STUDENT RESPONSIBILITIES

The student is expected to attend lectures, participate in all course activities, and complete all quizzes, examinations and course assignments on time (no late work accepted). Please be considerate to other students by turning off, or silencing, any cell phones or beepers during class. Likewise, show consideration by not getting up during class for any reason.

Any changes in the course schedule, such as lecture order, examination dates, deadlines, etc., will be announced ahead of time in class or on the course website (in Laulima). It is the
student's responsibility to be informed of these changes. It is also the student's responsibility to
be informed about deadlines critical to making registration changes (e.g., last day for making an
official withdrawal).

HOW TO SUCCEED IN THIS CLASS

Although you will be given lecture outlines, you will not succeed in this class without attending
lecture and taking detailed notes. Science courses at WCC generally require a minimum of two
to three hours of independent study time for each hour in class. It is your responsibility to
allocate the appropriate amount of time needed for study and be realistic about all personal and
professional commitments that may cut into your study time.

As part of your studies, you will need to understand a veritable mountain of medical and
anatomical terms, most of which will probably be foreign to you (e.g., cholinergic receptors,
agonists and antagonists, hyperlipidemia, and post-synaptic potential). One way to learn these
vocabulary words is to make flash cards to quiz your self.

Answering the questions located at the end of each lecture chapter can be a helpful way to
learn new vocabulary and concepts. Be warned: Merely knowing the definitions of vocabulary
words or the names of drugs will be of little use if you do not know the pharmacology. In
addition to vocabulary, you will be expected to have a firm understanding of the physiological
mechanisms regulating drug pharmacokinetics and pharmacodynamics.

Instead of an "office hour," you will have the opportunity to attend review sessions, in the hour
immediately before class, during which drills will be conducted to help memorize the generic
and trade names of drugs covered in the previous lecture(s) as well as drug class, boxed
warnings, indications and adverse reactions. The answers to the study questions at the end of
each lecture and the study questions that are provided for the midterm and final will also be
reviewed during these sessions. If you have questions, this will be the time during which we
can tackle issues that are unclear in depth. There will be spontaneous drills to help with your
ability to associate information from various lectures. There will also be board notes to help
clarify physiological or pharmacological principles in the upcoming lecture. It is strongly
recommended that you allocate sufficient time to attend these sessions.

DISABILITIES ACCOMMODATION

If you have a physical, sensory, health, cognitive, or mental health disability that could limit your
ability to fully participate in this class, you are encouraged to contact the Disability Specialist
Counselor to discuss reasonable accommodations that will help you succeed in this class. Ann
Lemke can be reached at 235-7448, lemke@hawaii.edu, or you may stop by Hale ‘Akoakoa 213
for more information.
**GENERAL LECTURE SCHEDULE (SUBJECT TO CHANGE)**

Drug lists are included with each lecture, starting in the 4th week.

<table>
<thead>
<tr>
<th>Section</th>
<th>Week</th>
<th>Lecture</th>
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<tbody>
<tr>
<td>Introduction and Background Basics</td>
<td>1.</td>
<td>Introduction, Therapeutics</td>
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<tr>
<td></td>
<td>2.</td>
<td>Kinetics, Dynamics</td>
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<tr>
<td>Nervous System</td>
<td>3.</td>
<td>CNS Basics, Neurotransmitters</td>
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<td></td>
<td>4.</td>
<td>Peripheral Nervous System</td>
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<td>5.</td>
<td>Autocoids</td>
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<td>6.</td>
<td>Pain and Inflammation</td>
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<td></td>
<td>7.</td>
<td>Sedatives Hypnotics, Antidepressants, Antipsychotics, Anesthetics</td>
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<td></td>
<td>8.</td>
<td>Neurodegenerative Diseases</td>
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<td>Endocrine</td>
<td>9.</td>
<td>Endocrine</td>
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<tr>
<td>Cardiovascular</td>
<td>10.</td>
<td>CV1: Hypertension, CV2: Angina, CV3: Lipids</td>
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<tr>
<td>Antimicrobials</td>
<td>11.</td>
<td>Micro1: Bacterial basics, UTIs, BPH, Micro 2: Protein Synthesis Inhibitors</td>
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<td></td>
<td>13.</td>
<td>Micro 5: Antiparasitics, Antifungals, Respiratory Tract Drugs</td>
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<tr>
<td>Other</td>
<td>14.</td>
<td>Antivirals, Gastrointestinal Drugs</td>
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<td></td>
<td>15.</td>
<td>Cancer, Herbs, Supplements and Vitamins</td>
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