Biol 4000/6000  General Pharmacology
Credit Hours: 3-0-3

Department of Biology

Instructor: Dr. Timothy J. Fort
Office: BC 1100
Phone: (229) 249-2643
Email: tjfort@valdosta.edu

Office Hours: Tuesday and Thursday 4.00pm – 5.00pm

Lecture: Tuesday and Thursday 2.00pm – 3.15pm
Room: BC 1025

Golan, DE, Tashjian, AH, Armstrong EJ, & Armstrong AW

Course Description: General principles of pharmacology including pharmacokinetics and pharmacodynamics
with emphasis on drugs affecting major systems of the body.

Prerequisites BIOL 4000: BIOL 1107, BIOL 1108, BIOL 3200, CHEM 1211/1211L, and CHEM1212/1212L, or
permission of instructor. Recommended: BIOL 3450 or BIOL 3460

Prerequisites BIOL 6000: Admission into the graduate program or permission of Instructor.

Course Objectives:
By the end of this course, students will be expected to:
(1) Demonstrate an understanding of the general principles of pharmacology.
(2) Relate the functioning of individual drugs to the overall functioning of the human body.
(3) Demonstrate competency in factual content / interpretation of the major areas of general pharmacology.
These objectives support in part the Department of Biology Undergraduate Educational Outcomes #3, the
Department of Biology Graduate Educational Outcomes #1 and the Valdosta State University General
Educational Outcomes #’s 4, 5, and 7.

Attendance: Attendance of lectures is expected of all students. Student attendance of classes will be
recorded.

Conduct: Students are expected to arrive on time and behave with respect in lectures. Students should not
talk during lectures, but if you do not understand or do not hear something please ask for clarification. Use of
cell phones during lectures is not permitted. Cell phones must be turned off during lectures. If your cell phone
activates during a lecture you will be asked to leave. If your cell phone activates during an exam you will be
asked to leave and receive 0% for that exam.

Cheating / Plagiarism: Please refer to the Student Code of Ethics in the Valdosta State University Student
Handbook. Any student caught cheating will be penalized, ranging from receiving a zero for that assignment or
test, to failure and expulsion from the course. Please refer to the Valdosta State University, Department of
Biology Plagiarism Policy. By taking this course, you agree that all required course work may be subject to
submission for textual similarity review to Turnitin, a tool within BlazeVIEW.

Students with Documented Disabilities: Students requesting classroom accommodations or modifications
due to a documented disability must contact the Access Office for Students with Disabilities located in the
Farber Hall. The phone numbers are 245-2498 (V/VP) and 219-1348 (TTY).

Privacy Act: Due to the Buckley Amendment, or Privacy Act, an individual’s personal information cannot be
released to anyone but that individual. As such, grades will not be discussed over the phone, by email, or
released to a friend or relative.
### BIOL 4000 Assessment:

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<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>Lecture: 3 Exams @100 points each</td>
<td>300</td>
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<tr>
<td>Cumulative Final</td>
<td>200</td>
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<tr>
<td>Drug Characteristics Assignment</td>
<td>100</td>
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<td><strong>TOTAL</strong></td>
<td><strong>600</strong></td>
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### BIOL 6000 Assessment:

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<tbody>
<tr>
<td>Lecture: 3 Exams @100 points each</td>
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<tr>
<td>Cumulative Final</td>
<td>200</td>
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<tr>
<td>2 Drug Characteristics Assignments @100 points each</td>
<td>200</td>
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<tr>
<td>Oral Presentation</td>
<td>50</td>
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<td><strong>TOTAL</strong></td>
<td><strong>750</strong></td>
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- Any assigned work submitted late will NOT be graded.
- Any assigned work submitted electronically will NOT be graded, unless prior permission for electronic submission is granted.
- Make up examinations will only be given if an acceptable documented reason (determined by the instructor) is provided.
- Exams: Question styles will vary depending on the topics being examined and may include (but are not limited to), multiple choice, fill in the blank, diagrams, short answer and essays.

### Tentative Sequence of Lecture Topics

#### Section I: Fundamental Principles of Pharmacology (Chapters 1-5)
Drug-receptor Interactions; Pharmacodynamics; Pharmacokinetics; Drug Metabolism / Toxicity

#### Section II: Principles of Neuropharmacology (Chapters 7-18)
Cholinergic and Adrenergic Pharmacology; Pharmacology of GABAergic, Glutamatergic, Dompanimergic & Serotonergic Neurotransmission; Analgesia; Local / General Anesthetics; Drugs of Abuse

#### Section III: Cardiovascular Pharmacology (Chapters 19-25)
Cholesterol and Lipoprotein Metabolism; Volume regulation / Vascular tone; Hemostasis and Thrombosis; Cardiac Rhythm / Contractility; Hypertension / Ischemic Heart disease / Heart Failure

#### Section IV: Principles of Endocrine Pharmacology (Chapters 26-31)
Hypothalamus / Pituitary Gland; Thyroid Gland; Adrenal Cortex; Reproduction; Pancreas & Glucose

#### Section VI: Principles of Inflammation / Immune Pharmacology (Chapters 41-48)

#### Section V: Principles of Chemotherapy (Chapters 32-40)

**Tentative Exam Dates:**
- Examination #1: 10 September
- Examination #2: 6 October
- Examination #3: 3 November

**Final Examination:** Wednesday 9th December 2.45pm-4.45pm