

Course Syllabus for General Biology I

BIOL 112.01 Spring 2012

MWF 8:00-8:50 am

Foster Science Building Room 458

Mission Statements:

ACU: The mission of Abilene Christian University is to educate students for Christian service and leadership throughout the world.

College of Arts and Sciences: The mission of the College of Arts and Sciences is to educate students for worldwide Christian service and leadership through programs of study and other learning experiences that blend a liberal arts education with professional and career education.

Biology Department: The Department of Biology educates students for Christian service and leadership by preparing them to become biological scientists, pre-college teachers, and health care professionals.

Instructor: Dr. Joshua Brokaw

Office: Foster Science Building Room 479D

Office Hours: 9:30-10:30 am (MWF), 8:30-9:30 am (TR), 2-3 pm (MW), or appointment*

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*E-mails are welcome at any time and can be used to schedule appointments outside of my scheduled office hours.

Course Description:

BIOL 112, General Biology I (3 credit hours). A consideration of the diversity of life, emphasizing organism classification, structure and function in plants and animals.

Textbook: Biology, 9th edition, by Solomon, Berg, and Martin (2011)

Prerequisites: ACT comp of 22 or above, SAT total of 1110 or above, or a grade of “C” or better in BIOL 101 or BIOL 120. Concurrent enrollment in BIOL 114 required.

Purpose: General Biology I is designed to serve as an introductory biology course for students interested in careers in biology or biology-related fields.

Anticipated Outcomes and Competency Measures: This course provides the opportunity to learn foundational facts and principles of biology necessary for continuation to advanced courses in specialized biological fields. Course competencies include demonstrated knowledge and understanding of 1) the basic structure of the **tree of life** representing hypotheses of common ancestry; 2) structural and functional differences distinguishing the major groups of organisms, including **viruses, bacteria, protists, plants, fungi, and animals**; 3) structure and life processes in plants, including major **tissue systems, life cycles, and growth and development**; and 4) structure and life processes in animals, including **tissues, organs and organ systems, reproduction and development, and behavior**. Competency in this biological knowledge will be assessed by your performance on quizzes, tests, and a comprehensive final exam as outlined below.

Grade Assessment:

Grades	Point System	Weight
Attendance	50	(10%)
10 Quizzes	50	(10%)
3 Tests	300	(60%)
Final Exam	100	(20%)
Total	500	(100%)

Grade Scale:

A:	450-500 points
B:	400-449 points
C:	350-399 points
D:	300-349 points
F:	less than 300 points

Attendance: Attendance is vital for success in this class. University policy states that students are allowed absences of no more than 9 MWF meetings. These include “approved absences” as well as other absences. The **only** acceptable excuses for missing class are 1) illness with doctor’s letter (note: the school medical clinic **does not** provide excuse notes under most circumstances), 2) death in immediate family (parents, siblings, grandparents), 3) official school trips (with **advance** approvals). **About 10% of your grade depends on attendance.**

Attendance Grading:

Days Missed	Points Awarded
0	50
1	50
2	45
3	40
4	35
5	30
6	25
7	20
8	15
9	10
10	Automatic withdrawal with F

All quizzes, tests, and exams should be taken when scheduled. If an acceptable excuse (as stated above) for missing a quiz or test is given, you may take it within a week upon your return. Students must notify the professor prior to the next class that they are requesting a “make-up.” According to university policy, if a student misses a final examination with permission, the teacher will record an “I” (incomplete) for the course grade. The final examination may be given at a later date (within the first six weeks of the following semester), with permission from the college dean.

Quiz and Test Schedule:

Week	Day	Date	Event
1	Wed	18-Jan	First Day
2	Mon	23-Jan	Quiz 1
3	Mon	30-Jan	Quiz 2
4	Mon	6-Feb	Quiz 3
5	Mon	13-Feb	Quiz 4
	Wed	15-Feb	Test 1
6	Mon	20-Feb	Quiz 5
7	Mon	27-Feb	Quiz 6
8	Mon	5-Mar	Quiz 7
	Mon	12-Mar	Spring Break
9	Mon	19-Mar	Quiz 8
10	Mon	26-Mar	Quiz 9
	Wed	28-Mar	Test 2
11	Mon	2-Apr	Quiz 10
12	Mon	9-Apr	Quiz 11
13	Mon	16-Apr	Quiz 12
14	Mon	23-Apr	Quiz 13
15	Mon	30-Apr	Quiz 14
	Wed	2-May	Test 3
Finals	Mon	7-May	Final Exam , 10:30 a.m.-12:30 p.m.

Quizzes: Quizzes contain 10 multiple choice questions. As noted in the schedule, a total of 14 quizzes will be given during the first 10 minutes of most Monday classes **over material covered following the previous quiz or test.** The 4 lowest quiz scores will be dropped. All quizzes require use of a long scantron form. **You will need to bring scantron answer sheets (long forms only) and a #2 pencil with you for quizzes.** FYI: I will return graded scantrons, and the back sides of scantrons can be used for separate quizzes or tests.

Tests and Final Exam: Tests and the final exam contain 40 multiple-choice and 10 fill-in-the-blank questions. **Multiple-choice questions** may cover **any topic from lectures**, but up to 5% of questions may refer solely to material from reading assignments. Examples of previously used questions are available through the class files system, but new (similar) questions will be written for each exam. **Fill-in-blank questions** will focus on labeling of illustrations provided for each chapter by the instructor through the class files system. **Regular tests** will be given on dates noted in the schedule and will **cover all material since the previous test**. The **final exam is comprehensive** but covers only questions taken from the **Course Objectives Handouts** provided for each chapter by the instructor. Tests last 50 minutes and the final exam lasts 105 minutes. All tests and exams require use of a scantron form. **You will need to bring scantron answer sheets (long forms) and a #2 pencil with you for tests and exams.** FYI: I will return graded scantrons, and the back sides of scantrons can be used for separate quizzes or tests.

Class Schedule: * Any changes to planned topics will be communicated orally and/or in writing to students.

Scheduled Topics	Reading
First Day	
Science and Systematics	Ch. 23
Viruses	Ch. 24
Prokaryotes	Ch. 25
Protists	Ch. 26
Fungi	Ch. 29
An Introduction to Animal Diversity	Ch. 30
The Animal Kingdom: The Protostomes	Ch. 31
The Animal Kingdom: The Deuterostomes	Part Ch. 32
Seedless Plants	Ch. 27
Seed Plants	Ch. 28
Plant Structure, Growth, and Differentiation	Ch. 33
Leaf Structure and Function	Ch. 34
Stems and Roots	Ch. 35, 36
Reproduction in Flowering Plants	Ch. 37
Plant Growth and Development	Ch. 38
Animal Structure and Function	Ch. 39
Protection, Support, and Movement	Ch. 40
Neural Signaling	Ch. 41
Neural Regulation	Ch. 42
Sensory Systems	Ch. 43
Internal Transport	Ch. 44
The Immune System: Internal Defense	Ch. 45
Gas Exchange	Ch. 46
Processing Food and Nutrition	Ch. 47
Osmoregulation and Disposal of Metabolic Wastes	Ch. 48
Endocrine Regulation	Ch. 49
Reproduction	Ch. 50
Animal Development	Ch. 51
Animal Behavior	Ch. 52

Learning Disabilities: If you have a documented disability and wish to discuss academic accommodations, you must contact the *ACU Student Disability Services Office* (part of *Alpha Academic Service*) at (325) 674-2667 to make an appointment with the Director of Disability Services. In order to receive accommodations, you must be registered with them for each class in which you need accommodations. They will make necessary arrangements in cooperation with instructors.

Behavior/Dress Code: Any behavior or dress that distracts other students from learning will receive one warning. If there is a second infringement, you will be asked to leave class.

Academic Integrity: Cheating on quizzes, tests, or exams will automatically result in a grade of F. It will be reported to the department chair and the dean according to the procedures established by the university.