GRAYSON COLLEGE

Course Syllabus

Course Information BIOL 1307 Biology II

Professor Contact Information

Instructor/Professor: Michael B. Keck, PhD

Course Pre-requisites, Co-requisites, and/or Other Restrictions

Although students must register for a separate course number for lab and lecture, the two "courses" are in fact the same course and are separated only for scheduling and reporting reasons. Your final grade is derived from the combination of your lecture and laboratory grades (70/30 respectively). Together the lecture and laboratory satisfy the state learning objectives (CS1, CT2, CT3, EQS2, and TW1) and therefore must be taken concurrently.

Co-requisite: BIOL 1107 required; Prerequisite: College readiness in reading required.

Course Description

BIOL 1307. Biology II. (3-0-3). The diversity and classification of life will be studied, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. Concurrent enrollment in a laboratory section (BIOL 1107) is required. Prerequisite: College readiness in reading required. (R)

State Core Objectives Met in Lecture (BIOL 1307) and/or Lab (BIOL 1107) Course:

- 1. Communication Skills, CS1 Students will develop, interpret, and express ideas through written communication.
- 2. Critical Thinking Skills, CT2 Gather and assess information relevant to a question.
- 3. Critical Thinking Skills, CT3 Analyze, Evaluate, and Synthesize Information.
- 4. Empirical and Quantitative Skills, EQS2 Students will describe, explain, and predict natural phenomena using the scientific method.
- 5. Teamwork, TW1 Students will work cooperatively with their pears and leaders to more effectively solve problems by utilizing insights from multiple perspectives.

Student Learning Outcomes Met in Lecture (BIOL 1307) and/or Lab (BIOL 1107) Course:

1. Describe and demonstrate knowledge of modern evolutionary synthesis, natural selection, population genetics, micro and macroevolution, and speciation.

2. Describe phylogenetic relationships and classification schemes, and distinguish between them.

3. Identify the major phyla of life with an emphasis on plants and animals, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.

4. Describe basic animal physiology and homeostasis as maintained by organ systems.

5. Compare different sexual and asexual life cycles noting their adaptive advantages.

6. Illustrate the relationship between major geologic change, extinctions, and evolutionary trends.

7. Apply scientific reasoning to investigate questions, and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.

8. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.

9. Communicate effectively the results of scientific investigations.

Required Textbooks (ISBN # included) and Materials

Lecture Text: *Biology* 2nd edition, by <u>OpenStax College</u>. This is a FREE OER (open education resource) provided by Rice University, download the text at www.openstaxcollege.org OR you can purchase a hardcopy of the textbook for approximately \$50.00 ISBN: 978-1-947172-51-7

To access: 1) go to <u>http://cnx.org/content/col11448/latest/</u> 2) you will see options for the downloading of the text. Select what suits your needs, if you do not know your needs, then download the PDF file.

<u>Laboratory Text</u> *Exploring Biology in the Lab*, 3rd edition, Morton Publishing Company. ISBN: 9781617317552. This can be purchased through bookstore, (retails at \$106.95 new) or an outside vendor.

Required Assignments & Academic Calendar

In case of inclement weather, emergency closings, or other unforeseen disruptions to scheduled classes, student must log onto their Canvas accounts for directions on where or how to continue their coursework.

All tests, except for the Final Test, will be administered in the regular classroom during normal meeting times. The Final Test will be administered in the regular classroom during Final's Week, according to the schedule listed on the Grayson College Website.

Lecture Schedule

	Topics, Readings, Assignments, Deadlines
	Chapter 20: Phylogenies and the History of Life
	Chapter 21: Viruses
	Chapter 22: Prokaryotes: Bacteria and Archaea
	Chapter 23: Protists
	Chapter 24: Fungi
	Test #1
	Chapter 25: Seedless Plants
	Chapter 26: Seed Plants
	Chapter 27: Introduction to Animal Diversity
	Chapter 28 (part): Invertebrates
	Test #2
	Chapter 28 (part): Invertebrates
	Test #3
	Chapter 29: Vertebrates
	Chapter 46: Ecosystems
	Chapter: 47: Conservation Biology and Biodiversity
	Test #4
	Final Test

Methods of Evaluation

<u>A student's final grade will be determined by both lecture and laboratory scores.</u> Seventy percent (70%) of the final grade will be based on your lecture grade and 30% will be based on your laboratory grade. <u>You will receive the SAME grade in lecture and lab.</u>

<u>In the lecture portion of the course</u>, there will be four regular tests, as well as a comprehensive final test. Opportunities may be available for an additional 10 points of extra credit. All students must take the comprehensive final test. The score on the comprehensive final test may be used to replace the lowest test score (which may be a 0 if the student has missed a test). No make-up tests will be given once a test has been returned to the class. Students MUST inform the instructor before a test if they will be absent: send e-mail to

<u>instructor</u>, <u>phone instructor or phone the Science Department</u>. Students that are absent for college-related activities (e.g., drama, athletic events) are still required to <u>personally</u> inform the instructor in advance of any absences. Make-up tests may be a different format (e.g., essay) than regularly-scheduled tests.

The date of each test will be announced at least one week prior to the test.

Tests may consist of multiple choice, matching, short answer, fill-in-the-blank, true and false and/or discussion questions.

The lecture grades will be based on the average of the five tests with the (optional) extra credit assignment(s).

Categories	Percentage
Test 1	20%; or dropped if lowest test grade
Test 2	20%; or dropped if lowest test grade
Test 3	20%; or dropped if lowest test grade
Test 4	20%; or dropped if lowest test grade
Final Test	20%; or 40% if NOT lowest test grade

To calculate a lecture grade, add the five test grades and the extra credit grade and divide by five.

To calculate a final course grade, take the lecture grade and multiply by 0.70 and the laboratory grade multiplied by 0.30. You add the two resulting numbers together and get the final grade.

e.g., you make a 72% average in lecture and an 86% in the laboratory. So you do the following: (0.72*0.70) + (0.86*0.30) = final grade. If you perform this equation, you calculate 0.50 + 0.26 = 0.76 or 76% as a final course grade

Letter grades will be assigned as follows, based on the final course grade:

90-100	= A
80-89.99	= B
70-79.99	= C
60-69.99	= D
Below 60	= F

Methods of Instruction

Lectures by the instructor will be the main method of instruction. Group work, class discussions, power point presentations, models, etc., may also be incorporated to enhance the learning process. Reading assignments may be from the text, other printed material, or from the Internet. Students <u>will be required</u> to use Canvas (an online learning environment) for certain instruction/assignments.

Student Needs Services

The goal of Needs Services (disabilities and accommodations) is to provide students with educational opportunities when they have some exceptional situation that requires additional support. Needs Services is located on the second floor of the NEW Student Success Center.

The contact information for administrator of the services is: Jeffri Hodge (903) 463-8751 (voice or TTY) hodgej@grayson.edu

It is the student's responsibility to notify his or her professors of the need for any accommodations. Needs Services provides students with letters to present to faculty members to verify that the student has a disability and needs accommodations. Individuals requiring special accommodation should contact the professor after class or during office hours.

Tutoring

This is a FREE service provided by the Student Success Center and administered by Jeffri Hodge as well. You will go to the same location and sign up for services. Note: we are ALWAYS looking for tutors, so please talk to your instructor if you are interested in helping other students with their studies and getting paid.

Withdrawing or Dropping the Course

Students need to initiate this process. Instructors should be consulted and typically sign the drop form. Instructors have set office hours for providing these services. Please check with your instructor and make an appointment for consultation. If you wait until the last drop date in the semester, you or your instructor may be unable to complete the request to the college. If the request is incomplete, you will remain in the course and receive a grade.

Class Attendance

Academic success is closely associated with regular classroom attendance and course participation.

All successful students, whether on campus or online, are expected to be self-motivated. All students are required to participate in courses regularly and are obliged to participate in class activities and complete and submit assignments following their professors' instructions. Students taking courses during compressed semester time frames such as mini-mester, summer sessions, and mid-semester should plan to spend significantly more time per week on the course. Responsibility for work missed because of illness or school business is placed upon the student. More than two (2) absences are considered to be excessive. In addition, students' eligibility to receive financial aid or live in a College dormitory can be affected by withdrawal from courses. When withdrawal occurs, any tuition refund would be made in accordance with state regulations.

Student Conduct & Discipline

Classroom Behavior

Students are expected to maintain classroom decorum that includes respect for other students and the instructor, prompt and regular attendance and an attitude that seeks to take full advantage of the educational opportunity.

Seating

The instructor may assign seating for individual students at any time during the semester. During lectures, the instructor may have students move to other seats in the classroom. The instructor may inform students that they are no longer allowed to sit next to each other for the remainder of the semester.

Defacing College Property

Anyone caught defacing property in the lecture or lab will be responsible for cleaning, repairing or replacing the defaced property. Defacing property includes, but is not limited to, writing, marking or scratching on the tables, tabletops, chairs, cabinets, counter tops, shelving or walls.

Academic Integrity

The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work.

Scholastic Dishonesty, any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts.

Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable and will be dealt with under the college's policy on plagiarism (see GC Student Handbook for details). Grayson College subscribes to turnitin.com, which allows faculty to search the web and identify plagiarized material. Students are prohibited, too, from engaging in self-plagiarism. Self-plagiarism is the act of using work created for another course and submitting that work for credit in this course. This includes work submitted previously for one of this instructor's courses. There are limited circumstances under which the instructor will permit self-plagiarism, and special permission must be received in order to do so. Those who engage in acts of self-plagiarism (without the necessary permission) will be subject to the penalties listed in this syllabus for all other acts of plagiarism

Science Department Policy

Any instance of a) plagiarism b) collusion c) cheating or d) falsifying records, will result in a "0" for the assignment. The "0" assigned for cheating cannot be dropped or replaced by another grade when calculating the final course average.

TITLE IX

GC policy prohibits discrimination on the basis of age, ancestry, color, disability, gender identity, genetic information, national origin, race, religion, retaliation, serious medical condition, sex, sexual orientation, spousal affiliation and protected veterans status.

Furthermore, Title IX prohibits sex discrimination to include sexual misconduct: sexual violence (sexual assault, rape), sexual harassment and retaliation.

For more information on Title IX, please contact:

Dr. Molly M. Harris, Title IX Coordinator (903)463-8714 Ms. Logan Maxwell, Title IX Deputy Coordinator - South Campus (903) 415-2646 Mr. Mike McBrayer, Title IX Deputy Coordinator - Main Campus (903) 463-8753 Website: <u>http://www.grayson.edu/campus-life/campus-police/title-ix-policies.html</u> GC Police Department: (903) 463-8777- Main Campus) (903) 415-2501 - South Campus) GC Counseling Center: (903) 463-8730 For Any On-campus Emergencies: 911

Campus-wide Student Policies

Grayson College campus-wide student policies may be found on our Current Student Page on our website: <u>http://grayson.edu/current-students/index.html</u>

Grayson College is not responsible for illness/injury that occurs during the normal course of classroom/lab/clinical experiences.

These descriptions and timelines are subject to change at the discretion of the Professor.