

BIOL 1108 Principles of Biology II (4 credits) Syllabus

Instructor: Dr. Theresa J. Grove

Office: BC 1099

Office hours: By appointment

Email: tjgrove@valdosta.edu (do **NOT** email me on Blazeview)

Lecture (BC 1023): Monday and Wednesday 8:00 – 11:00 a.m.

Lab (BC 1073): Monday and Wednesday 12:00 – 2:50 p.m.

Prerequisite: BIOL 1107 (or the equivalent) or permission of the instructor.

Description: An introduction to physiological processes in plants and animals. Structure, nutrition, transport, coordination, reproduction, and development will be addressed.

Course goals and objectives: The primary goal of this course is to introduce physiological processes of plants and animals. This is the second introductory course, and it is expected that the student is familiar with topics covered in BIOL1107. By the end of the semester students should have sufficient background to successfully complete higher level courses that will cover specific topics in much greater detail.

The Department of Biology seeks to help develop general skills, such as communication skills and information processing skills. Communication skills will be exercised through laboratory assignments and lab practicals and lecture exams. Information processing skills will be developed because of the nature of biology. A lot of information will be given to students in a relatively short period of time, and students are expected to retain this information, not only for the final exam, but for future courses.

Learning goals include:

- Understanding physiology of the major systems in plants and animals that include:
 - Structure/function relationships
 - Nutrition
 - Transport
 - Movement
 - Reproduction
 - Development
 - Sensory systems
- Learning common experimental tools and techniques used in physiology
- Strengthening your ability to think critically and process information and data

These goals support the Department of Biology Education Outcome #2, #3 and #5 and VSU General Education #5.

Lecture Textbook: Life: The Science Biology by Sadava *et al.* 9th ed. Sinauer Associates, Inc.

Lab Manual: Principles of Biology II Lab Manual by T. J. Grove

Attendance: Attendance in lecture and lab is required by all students. More details below.

Access to Slides/Information: Lecture slides will be made available on BlazeView by 5:00pm the day before lecture. These slides will not have all the information on them; it is the student's responsibility to come to class and take notes. Students are responsible for getting the notes from other students if they miss a lecture. The professor will NOT email notes and slides that are missed.

Lecture Conduct:

- Arrive on time. Quizzes missed due to late arrival or leaving early cannot be taken at a later time.
- Turn off cell phones during class and lab; there is no reason you should be texting or calling anyone.
- Don't talk during lecture; if you don't understand something or didn't hear something ask.
- Unless it's an emergency (and using your cell phone does not constitute an emergency) do not get up in the middle of lecture, leave and come back.
- Do not leave class early unless you have informed me prior to the start of the class or if it's an emergency.
- During exams NOBODY can leave the exam and re-enter the exam room. If a student leaves, their exam will be graded as is; the student will not be allowed to finish the exam.

Academic conduct: Cheating and plagiarism will not be tolerated and may result in a failing grade for the assignment, exam, or the class. The Department of Biology has a plagiarism policy, which will be handed out during the first lab period. It is the student's responsibility to understand what constitutes plagiarism.

Privacy Act (FERPA): The Family Educational Rights and Privacy Act (FERPA) prohibits the public posting of grades by social security number or in any manner personally identifiable to the individual student. No grades can be given over the telephone or over email because positive identification can't be made.

Students with disabilities: Students requiring special accommodations because of disability must discuss their needs with me as soon as possible. Those needing accommodations who are not registered with the Special Services Program must contact the Access Office for Students with Disabilities located in Farber Hall. The phone numbers are 245-2498 (voice) and 219-1348 (tty).

Quizzes: During lecture approximately 15 quizzes each worth 5 points. Your highest 10 quiz scores will be combined for a 50 point grade that will be included in your final grade. Make-up quizzes are not available. The format of the quiz will vary, quiz dates and time will NOT be announced.

Exams: The dates for the exams are included in the Tentative Class Schedule. Note, that these are TENTATIVE, therefore the professor reserves the right to adjust the dates of the exams. Four exams (excluding the final) will be given throughout the semester. Each exam will be worth 100 points and will be multiple choice. The lowest exam grade will be dropped.

During the exam all cell phones must be turned off during exams. All bookbags, books, purses etc. must be placed in the front of the classroom; NO EXCEPTIONS. If you do not feel comfortable putting your purse, bag, books, etc. don't bring them with you to class. Hats and hoods cannot be worn during exams. All hands must remain above the desk at all times during exams.

No make-up exams will be given. A missed exam will be the exam dropped. Only students with a University related excuse may take an exam early. Exam grades will be returned in class for the students to examine, but students will not be allowed to keep exams.

Final: The final will be cumulative and will be multiple choice. It is mandatory! The date of the final is Friday, July 27 (8:00 a.m. – 10:00 a.m.). **NO EARLY EXAMS WILL BE GIVEN!**

LAB CONDUCT

- Arrive on time.
- Emailed assignments will not be accepted. Assignments must be turned in during the first 5 minutes of class. Late assignments will not be accepted.
- It is strongly advised that students keep a laboratory notebook, which will help students complete assignments and study for lab practicals.
- No eating or drinking during the lab. There are **NO** exceptions!
- Attendance is mandatory. Excused absences are usually given for medical emergencies and documentation must be provided; the professor determines whether or not an absence is "excused" or not. If a student misses three labs for any reason the student cannot earn higher than a D for his/her final grade. Labs cannot be made up outside of scheduled laboratory sessions. Students are still responsible for all lab content even if they received an excused absence.
- Students must take care of lab equipment. Notify the professor if something is not working properly or if something breaks during the course of the lab.
- Students will be assigned a microscope. It is the student's responsibility to properly use the microscope. After lab the professor will check each scope to make sure that it was put away properly. Failure to do so will result in one (1) point being subtracted from the student's total lab points (not the final percentage) each week it is not put away properly. Notify the professor if your microscope is not functioning properly.
- Cell phones are not allowed to be used in lab with the exception of using them as timers.

Lab assignments

Throughout the semester students will complete assignments that deal with either data analysis or comprehension of topics covered in the lab. No late assignments and no emailed assignments will be accepted.

Lab Practicals

Two lab practicals will be given, one covering animals and one covering plants. Anything that the student had to examine or study in the lab is fair game for a lab practical. The lab practicals will be timed. More information will follow.

Grade Scale:

For Biology majors, a grade of C or higher is required for this course.

- A 90-100%
- B 80-89%
- C 70-79%
- D 60-69%
- F < 60

To Calculate your Final Grade:

Final grades will be based on both the lecture and laboratory components of the course.

Lecture is worth 75% of your final grade, and lab is worth 25% of the final grade.

Lecture component (total 600 points):

- 3 lecture exams (each worth 100 points; total 300 points)
- 10 quizzes (each worth 5 points; total 50 points)
- Cumulative final (worth 100 points)

Lab component:

- Lab assignments and quizzes (variable points)
- 2 lab practicals (each worth 50 points; total 100 points)

To calculate your final grade:

- Lecture component: Add points earned from each of the exams, quizzes and final and divide by 450. Multiply this number by 0.75.
- Laboratory component: Add points earned from each of the laboratory assignments and practicals and divide by total points possible. Multiply this number by 0.25
- Finally, do the following: Take the lecture component and laboratory component numbers you just calculated and add them together. Multiply this number by 100. This will give you your final percentage your earned.

Summer 2012 TENTATIVE LECTURE AND LAB SCHEDULE

June

- 6 **Lecture:** Introduction to Phylogenies
Chapter 28: Seedless Plants
Chapter 29: Evolution of Seed Plants
Lab: No Lab
- 11 **Lecture:** Chapter 34: The Plant Body and Chapter 35: Transport in Plants
Note: Lecture will be held during lab time, 12:00-2:50, in room 1073
Lab: How to Use Excel
Note: Lab will be held during lecture time, 8:00-11:00, in room 3019)
- 13 **Lecture:** Chapter 36: Plant Nutrition
Chapter 37: Regulation of Plant Growth
Lab: Non-Vascular Plants
- 18 **Lecture:** **Exam 1** (8:00-9:15am)
Chapter 38: Reproduction in Flowering Plants (9:45- 11:00)
Lab: Vascular Plants
- 20 **Lecture:** Chapter 39: Plant Responses to Environmental Challenges
Lab: Roots, Stems and Leaves
Angiosperm Development
- 25 **Lecture:** **Exam 2** (8:00-9:15)
Chapter 40: Homeostasis in Animals and the Role of Physiological Systems (9:45- 11:00)
Lab: Angiosperm Development
Growth and Transpiration
- 27 **Lecture:** Chapter 41: Animal Hormones
Chapter 43: Animal Reproduction
Lab: **Plant practical**

July

- 2 **Lecture:** Chapter 45: Neurons and the Nervous System
Chapter 47: Mammalian Nervous System
Lab: Diversity of Porifera and Cnidaria
Introduction to Animal Tissues
- 4 **No Class – 4th of July Holiday**
- 9 **Lecture:** Chapter 46: Sensory Systems
Lab: Diversity of Platyhelminthes
Introduction to Vertebrate Anatomy
- 11 **Lecture:** **Exam 3** (8:00-9:15)
Chapter 48: Muscles (9:45- 11:00)
Lab: Diversity of Annelida and Mollusca
Introduction to Sensory Systems
- 16 **Lecture:** Chapter 49: Gas Exchange and Chapter 50: Circulatory System
Lab: Diversity of Nematoda and Arthropoda
Introduction to Cardiovascular Systems
- 18 **Lecture:** Chapter 51: Nutrition and Digestion
Chapter 52: Salt and Water Balance
Lab: Diversity of Echinodermata and Chordata
Introduction to Excretion
- 23 **Lecture:** **Exam 4**
Lab: **Animal Practical**

FINAL EXAM: July 27, 2012 at 8:00 a.m.