

BIOL 1108 Principles of Biology II Lab Syllabus

Instructor: Dr. Theresa J. Grove

Office: BC 1099

Office hours: Wednesday 8:30 – 9:30 a.m. and Thursday 9:30 a.m. - 11:30 a.m. or by appointment

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

Lab (BC 1073): Section A: Monday 9:00 a.m. - 11:50 p.m.
Section B: Monday 12:30 p.m. - 3:20 p.m.
Section C: Tuesday 9:30 a.m. - 12:20 p.m.
Section H: Monday 3:30 p.m. - 6:20 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. In the lab portion of BIOL1108 communication skills will be exercised through laboratory assignments and lab practicals. Information processing skills will be developed because of the nature of biology. Learning and retain the information presented to you in BIOL1108; it will prepare you for future courses and will be useful in your life outside of college.

Learning goals include:

- Increase your understanding of structure-function relationships in biology
- Increase your understanding of the physiology of the major systems in plants and animals including:
 - Structure/function relationships
 - Nutrition
 - Transport
 - Movement
 - Reproduction
 - Development
 - Sensory systems
- Strengthen your ability to critically analyze scientific data and test scientific hypotheses
- Cultivate the linkage of biology with math, physics and chemistry.

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

Lab Manual: Required: Biology Lab Manual (Great River Learning, ISBN 9781680750201)
Recommended: Van De Graaff's Photographic Atlas (Morton Publishing, ISBN 9781617310584)

Attendance: Attendance in lecture is expected by all students. Attendance in laboratory is mandatory; see lab policy below.

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 on its website, which will be discussed in the first lab period. It is the student's responsibility to make sure they understand this policy.

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 cannot 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).

Lab Conduct

- 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 you miss three labs for any reason you cannot earn higher than a D for your final grade. If you have an excused absence from a lab you may attend one of my other lab sections, but you must get my approval. Students are responsible for all lab content even if they received an excused absence.
- Arrive on time.
- Emailed assignments will not be accepted.
- It is strongly advised that you keep a laboratory notebook, which will help you complete assignments and study for lab practicals.
- No eating or drinking during the lab. There are NO exceptions! If you come to lab with food or drink you will be asked to put it away or out in the hall.
- 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 for each infraction being subtracted from the student’s total lab points (not the final percentage). For example if you leave a slide on the stage, it’s not on the lowest objective and the light hasn’t been dimmed you will lose 3 points.
- Cell phones are not allowed to be used in lab with the exception of using them as timers or cameras or when I approve their use.
- There are no “open” lab periods.

How to Use the Lab Manual

The lab manual is an online manual. I will go over how to use this manual at the beginning of the first two lab periods. But, briefly, each lab includes all the content necessary to understand and complete the lab. You should at least look through the background information before coming to lab. At the end of the background information is a pre-lab assignment that must be completed prior to coming to lab. The page after the pre-lab assignment contains pdfs of the exercises that you will complete for that lab and another pdf with all the background information. You can either view these documents on your phone, tablet, laptop computer, etc. in lab, OR you can print them off. You will need to be able to view the background information during lab in order to complete each lab, but you do NOT need to print them off if you have an electronic method for looking at the information. There are no computers in the lab for you to use. The recommended and optional Van De Graaff’s Photographic Atlas has other images that may help you in lab; however, it is not required.

I will bring handouts for the first statistics lab, but I will not bring handouts for any of the later labs. If you have problems buying the manual because of slow financial aid see me. I will work with you until you are able to purchase the manual.

Lab assignments

Throughout the semester students will complete the following types of assignments. Online pre-lab assignments will be available through the lab manual one week prior to the lab period and will be due at the start of the lab period. Pre-lab assignments will be worth 0 or 2 points (0 points if not completed and 2 points if completed). In-class assignments will be described at the start of lab and will be due at the end of lab. Online post-lab assignments through the lab manual will be available for completion at the start of lab and will be due at the start of your next lab period. All online assignments should automatically open and close at the start of your lab period. Data analysis for a lab will be discussed during the lab you collect data and will be due at the start of the next lab period. In-class and post-lab assignments will be worth variable points. No late assignments (unless I approve an exception) and no emailed assignments will be accepted. Do not assume that you will have time immediately before lab to print assignments or finish online assignments; nonfunctional printers, no paper, slow internet etc. are not acceptable reasons for why you did not complete an assignment. It is good practice to plan ahead and have assignments completed and/or printed the day before your lab.

Lab Practicals and Quizzes

Two lab practicals (50 points each) will be given, one covering animals and one covering plants. Anything that the student examined or studied in the lab is fair game for a lab practical. The lab practicals will be timed and will be a powerpoint presentation. More information will be given in lab. To help prepare you for the practicals and check your progress in lab, there will be short quizzes (~5 points each) each week. These quizzes will be cumulative for plant or animal information from lab. If missed they cannot be made up.

Grade Scale:

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

Final Grade:

Your final grade in BIOL1108 will be based on both lecture and lab components. I will post your grades on Blazeview so you can keep track of your grade in lab. To calculate your laboratory grade add all your earned points and divide by the total points possible. Multiply by 100 to get a percentage. See your lecture professor's syllabus on how your final grade will be calculated.

Spring 2016 Lab Schedule

| Lab | Date | ¹ Online Pre-lab (open – close dates) | ¹ Online Post-lab (open –close dates) |
|--|----------------------------|---|---|
| Intro to Statistics (Lab 1) | Jan 11, 12 | None | None |
| MLK Holiday: No Lab | Jan 18, 19 | | |
| Diversity Part I (Lab 7) | Jan 25, 26 | Jan 18, 19 – Jan 25, 26 | Jan 25, 26 – Feb 1, 2 |
| Diversity Part II (Lab 8) | Feb 1, 2 | Jan 25, 26 – Feb 1, 2 | Feb 1, 2 – Feb 8, 9 |
| Animal Tissues (Lab 9) | Feb 8, 9 | Feb 1, 2 – Feb 8, 9 | Feb 8, 9 – Feb 15, 16 |
| Fetal Pig Anatomy (Lab 10) | Feb 15, 16 | Feb 8, 9 – Feb 15, 16 | Feb 15, 16 – Feb 22, 23 |
| Sensory System (Lab 11) | Feb 22, 23 | Feb 15, 16 – Feb 22, 23 | Feb 22, 23 – Feb 29, Mar 1 |
| Cardiovascular System (Lab 12) | Feb 29, Mar 1 | Feb 22, 23 – Feb 29, Mar 1 | Feb 29, Mar 1 – Mar 7, 8 |
| Excretory System (Lab 13) | ² Feb 29, Mar 1 | Feb 22, 23 – Feb 29, Mar 1 | Feb 29, Mar 1 – Mar 7, 8 |
| Animal Practical | Mar 7, 8 | | |
| Spring Break: No lab | Mar 14-18 | | |
| Nonvascular Plants (Lab 2) | Mar 21, 22 | Mar 14, 15 - Mar 21, 22 | Mar 21, 22 – Mar 28, 29 |
| Vascular Plants (Lab 3) | Mar 28, 29 | Mar 21, 22 – Mar 28, 29 | Mar 28, 29 – Apr 4, 5 |
| Plant Cells, Organs and Growth (Lab 4) | Apr 4, 5 | Mar 28, 29 – Apr 4, 5 | Apr 4, 5 – Apr 11, 12 |
| Angiosperm Development (Lab 5) | Apr 11, 12 | Apr 4, 5 – Apr 11, 12 | Apr 11, 12 – Apr 18, 19 |
| Growth and Transpiration (Lab 6) | Apr 18,19 | Apr 11, 12 – Apr 18, 19 | Apr 18, 19 – Apr 25, 26 |
| Plant Practical | Apr 25, 26 | | |

¹Lab assignments will open and close on the dates at the same time your lab starts

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