

BIOL 1108L: Principles of Biology II Laboratory
 Department of Biology, College of Science and Math, Valdosta State
 University Spring 2024; Syllabus

Instructor: Mr. Joshua Brown

Laboratory: BSC 1073

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Office hours: Mon/Wed & Th 12:00 – 2:00 PM or by appointment.

Course Description: A laboratory course to accompany BIOL 1108, with exercises dealing with anatomy and physiology of plants and animals.

Course Prerequisites: Grade of C or better in BIOL 1107 and 1107L or permission of instructor

Course Overview: This lab is a companion to BIOL 1108. Lab exercises will provide you greater insight into the physiological processes of plants and animals. The lab will also introduce you to the diversity of life within the animal and plant kingdoms as well as highlight evolutionary relationships among the phyla within these Kingdoms.

See Department of Biology Educational Outcomes and the University General Educational Outcomes as listed at the end of this syllabus

BIOL 1108L: Principles of Biology II

This is a Core IMPACTS course that is part of the Technology, Mathematics & Sciences area. Core IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help master course content, and support students' broad academic and career goals.

This course should direct students toward a broad Orienting Question:

- x How do I ask scientific questions or use data, mathematics, or technology to understand the universe?

Completion of this course should enable students to meet the following Learning Outcome:

- x Students will use the scientific method and laboratory procedures or mathematical and computational methods to analyze data, solve problems, and explain natural phenomena.

Course content, activities and exercises in this course should help students develop the following Career-Ready Competencies:

- x Inquiry and Analysis
- x Problem-Solving
- x Teamwork

Required materials:

Lab Text: Grove, T. 2015. Biology Lab Manual. This is an e-book lab manual. You can purchase the lab manual in one of two ways:

1. Purchase an Access Cod at the Valdosta State University Bookstore and use the code to access the lab manual <https://www.grlcontent.com/>
2. Purchase the Access Code directly through the publisher at the web site <https://www.grlcontent.com/> The second option is less expensive than option #1 but you cannot use your VSU student aid, you must use a credit or debit card.

How to Use the Lab Manual: The lab manual is entirely online and mandatory. Each lab includes all

the content necessary to understand and complete the lab. You are required to read the background information and complete the pre-lab assignment before coming to class. The page after the pre-lab assignment contains pdfs of the exercises that you will complete during 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. However, there are no computers in the lab for you to use.

Attendance: Lab will be held weekly, and you are expected to attend each class. Attendance will be marked but you will not be graded on this. This is a hands on/in-person lab, it requires you to be in class to obtain the information necessary to do well. If you miss class for any reason, you are still responsible for any work/information missed when you were absent. If you miss a day where we do an experiment, there is limited opportunity to make it up (see lab Make-up policy below).

Communication: I mainly use Outlook for communication. I check email often and am usually quick to respond. Please only email during appropriate hours (9-5pm), if you email me during odd hours of the night, I will not respond. Do not email me a couple of hours before an assignment is due. If you are having issues, there is nothing I can do to help in such a short time frame. I strongly recommend you check your email often. You could potentially miss on important information from me if you don't.

"I didn't see your email" is not an excuse....

Be courteous I will not respond to rude/overtly negative emails.

Lab/homework assignments, attendance and practical exams

Pre-lab and Post lab assignments:

Each week there will be Pre-lab and Post-lab assignments. Pre-lab online assignments must be completed by the start of the lab session.

Online post-lab assignments will open immediately at the end of class, and you will have until the next class to complete it. I will provide you with a schedule of due dates for pre-lab and post-lab assignments.

Be aware that some assignments are worth more than others. Point values range from four to twenty points.

I will not be reopening pre/postlab assignments for any reason.

Lab assignments

Each week there will be a ten-point assignment that must be present to complete. These assignments will range from completion of simple drawings to graph construction and statistical analysis. We will discuss what is required for each assignment as they come up.

Lab Practical Exams:

There will be two lab practical exams. They will each cover half of the material in lab. The first practical will cover the animal portion of lab and the second will cover the plant portion. Questions will be based on everything discussed in class and the lab manual. Lab practical exams can only be taken the day that they are scheduled.

Lab grade

5 Points	Attendance/syllabus quiz
93 points	Pre – lab assignments
142 points	Post – lab assignments
110 points	Lab assignments
200	Lab Practical Exams
550 points	Class total

Grade breakdown

A	495 – 550
B	440 – 494
C	385 – 439
D	330 – 384
F	0 – 329

Attendance Policy/Lab Makeup :This course follows the university policy on class absences:

“Whether online or face-to-face, a student who misses does not participate in more than 20% of the scheduled course or course activities could be subject to receiving a failing grade in the course” – 2023-2024 Undergraduate Catalog

Also, as stated in the Undergraduate Catalog, “The university does not issue an excuse to students for class absences. In case of absences as a result of special situations, instructors may be informed of reasons for absences, but these are not excuses”. I will consider all absences on a case-by-case basis.

Students who miss 3 or more labs during the course of the semester could be subject to the above

Mid-term, or in-progress grades: The instructor is required to submit in-progress grades prior to mid-

TENTATIVE LAB SCHEDULE AND TOPICS Spring 2024

Week 1: Aug 14-18	Lab 1 – Introduction and Basic Statistics
Week 2: Aug. 21-25	Lab 2 – Non-vascular plants
Week 3: Aug. 28- Sep. 1	Lab 3 – Vascular Plants
Week 4: Sep. 4-8	PRACTICAL 1
Week 5: Sep. 11-15	Lab 4 – Plant cells, organs, and growth
Week 6: Sep. 18-22	Lab 5 – Angiosperm development
Week 7: Sep. 25-29	Lab 6 – Growth and transpiration
Week 8: Oct. 2-6	PRACTICAL 2 and Lab 7 – Animal diversity I
Week 9: Oct. 9-13	Fall break: No class
Week 10: Oct. 16-20	Lab 8 – Animal diversity II
Week 11: Oct. 23-27	Lab 9 – Intro to Animal tissue
Week 12: Oct. 30 – Nov 3	PRACTICAL 3
Week 13: Nov. 6-10	Lab 10&12 – Fetal pig/cardiovascular
Week 14: Nov. 13-17	Lab 11 – Sensory systems
Week 15: Nov. 20-24	Thanksgiving holiday: No class
Week 16: Nov. 27- Dec 1	PRACTICAL 4

Important dates	
Mon, Aug 14	First Class Day
Mon, Sep 4	Labor Day Holiday
Thur, Oct 5	Official Midterm
Mon-Tues, October 9-10	Fall Break
Wed-Fri, Nov 22-24	Thanksgiving Holidays
Mon, Dec 4	Last Class Day