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 <u>Technology, Mathematics & Sciences</u> 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:

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:

• 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:

- Inquiry and Analysis
- Problem-Solving
- 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 at 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 it. This is a hands on/in-person lab, so 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 (before 7 pm), 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 out 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 online 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/post lab assignments for any reason.

Lab assignments

Each week there will be a ten-point assignment that you 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 over 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		Grade breakdown	
5 Points	Attendance/syllabus quiz	Α	495 – 550
93 points	Pre – lab assignments	В	440 – 494
142 points	Post – lab assignments	6	
110 points	Lab assignments		385 – 439
200	Lab Practical Exams	D	330 – 384
550 points	Class total	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 or 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 illness or 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 policy. If you are absent from lab or know you will be absent from lab, please contact me within 24 hours with the reason. If I consider it an excused absence, I may be able to give you an opportunity to attend another lab session during that same week.

No labs can be made up once the week has ended.

Athletes and other University representatives: Please let me know in advance if you will be missing a lab due to an away game or other required event. We can make arrangements for you to attend an alternative lab section.

Lab Conduct:

- Arrive on time I do not block students from coming in late, however, I will not stop in the middle of lab to get you caught up. This does not apply for lab practical days.
- You will maintain a lab notebook for taking lecture notes, recording lab data, preparing drawings of specimens and microscopic slides, etc. The notebook, along with the online lab manual, will be a great help to you as you prepare for the lab practical exams.
- No eating or drinking during the lab!!
- 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
- No phone calls!! Cell phones are only to be used for lab purposes (taking pictures, calculator, timer, etc.)

Academic Integrity: Academic integrity is the responsibility of all VSU faculty and students. Students are responsible for knowing and abiding by the <u>Academic Integrity Policy</u> as set forth in the <u>Student Code of Conduct</u> and this syllabus. All students are expected to do their own work and to uphold a high standard of academic ethics. Any violations of this policy may result in the academic penalties outlined in the syllabus and may also be referred to Student Affairs for further disciplinary action.

VSU's <u>Academic Student Conduct Code</u> states that "no student shall engage in plagiarism, which is presenting the words or ideas of another person as if they were the student's own." Content generated by an Artificial Intelligence third-party service or site (AI-generated content) without proper citation is another form of plagiarism. If you are unsure about whether something may be plagiarism or another form of academic dishonesty, please reach out to me as soon as possible.

Mid-term, or in-progress grades: The instructor is required to submit in-progress grades prior to mid-term. I will assign an overall average grade at this point on the normal scale of A-F viewable on Banner. Students receiving a grade of "D" or lower should therefore carefully evaluate their option of dropping this course by midterm without academic penalty.

Academic support center: The Academic Support Center (ASC) provides unlimited, inperson, free peer tutoring in core courses such as math, English/writing, sciences, social sciences, and languages. We also offer 8 hours of free online tutoring via Tutor.com (8 hours per student, available 24/7). Click the Free Tutoring link in any Blazeview course to make appointments. Please drop by our space in Odum Library, 2nd floor, or call 229-333-7570, email asc@valdosta.edu, or visit the website www.valdosta.edu/asc for more information.

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.

Non-Discrimination and Title IX Statement

Valdosta State University (VSU) upholds all applicable laws and policies regarding discrimination on the basis of race, color, sex (including sexual harassment and pregnancy), sexual orientation, gender identity or expression, national origin, religion, age, veteran status, political affiliation, or disability. The University prohibits specific forms of behavior that violate Title IX of the Education Amendments of 1972 prohibits discrimination on the basis of sex in education programs and activities that receive federal funding. VSU considers sex discrimination in any form to be a serious offense. Title IX refers to all forms of sex discrimination committed against others, including but not limited to: sexual harassment, sexual assault, sexual misconduct, and sexual violence by other employees, students or third parties and gender inequity or unfair treatment based on an individual's sex/gender. The designated Title IX Coordinator for VSU is Ms. Selenseia Holmes. To view the full policy or to report an incident visit: https://www.valdosta.edu/administration/student-affairs/title-ix/

Accommodations Statement:

Students with disabilities who are experiencing barriers in this course may contact the Access Office (https://www.valdosta.edu/student/disability/) for assistance in determining and implementing reasonable accommodations. The Access Office is located in University Center Room 4136 Entrance 5. The phone numbers are 229-245-2498 (V), 229-375-5871. For more information, please visit VSU's Access Office or email: access@valdosta.edu. To request reasonable accommodations for pregnancy and childbirth, contact Ms. Myia Miller, Title IX Compliance Officer, at maburden@valdosta.edu. Please note, you will be required to provide documentation from an appropriately licensed medical professional indicating the requested accommodations are medically necessary.

SOI Statement: At the end of the term, all students will be expected to complete an online Student Opinion of Instruction survey (SOI) that will be available through SmartEvals. Students will receive an email notification through their VSU email address.

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	