Principles of Biology I - BIOL 1107L (Fall, 2023)

Instructor Information

Instructor name: Dr. Jonghoon Kang

Instructor contact: Bailey Science Center 2217, 229-333-7140,

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Instructor office hours: Monday 1:00 PM - 4:00 PM / Tuesday 1:00 PM - 3:00 PM

(or by appointment by email)

Course Information

BIOL 1107L. Principles of Biology Laboratory I. 1 Hour.

Pre- or Co-requisite: BIOL 1107. A laboratory course to accompany BIOL 1107, with exercises dealing with the cellular nature of life.

Time Table

Section	CRN	Day	Time	Location
J	83341	W	2:00 PM - 4:50 PM	1085
L	83345	R	9:30 AM - 12:20 PM	1085

Required materials

R. H. Goddard. Methods and Investigations in Basic Biology 7th Edition. ISBN: 978-1-5339-4342-2

Lab notebook (Any regular notebooks are fine)

Lab Conduct (Policies)

- Arrive on time. Students who miss two labs without an excuse or three labs total cannot receive a lab grade above a "D" (60%). Attendance will be recorded using the lab quiz, which will be given the first 10 minutes of the lab. So, please be on time. In the event that a student misses a lab with an excuse, s/he should email the instructor within 24 hours of the missed lab. 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. Students are still responsible for all lab content even if they received an excused absence.
- It is strongly advised to maintain a laboratory notebook with drawings, descriptions, data etc. of the laboratory exercises. A dedicated notebook is required. The notebook will help you study for the quizzes.
- No eating or drinking in 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.
- Each student 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 point being subtracted from the student's final lab points. 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 or cameras to take pictures of data when necessary.
- Email: Please email me only from a VSU email account. I am unable to respond to emails from non-VSU accounts.
- -Academic integrity is the responsibility of all VSU faculty and students. Students are responsible for knowing and abiding by the Academic Integrity Policy as set forth in the Student Code of Conduct and the syllabus. All students are expected to do their own work and to uphold a high standard of academic ethics. Cheating (including plagiarism) will not be tolerated. The instructor reserves the right to dismiss you from the course without credit if you are caught cheating. You will be respectful of your instructor and your fellow students at all times, or you will be dismissed from the class and potentially the course.
- Print out this syllabus and keep it in your lab notebook.

Lab Assignments and Evaluation Policy:

Throughout the semester lab assignments will be given. Due dates of these assignments are shown in the lab schedule table in this syllabus.

10 quizzes (10 points each, so in total 100 points) + 1 Research Report (10 points) + Final (100 points) + Assessment Test (10 points) = 220 points.

Lab quizzes. There will be a 10-point quiz at the beginning of each lab session, so do not be late for lab! The quizzes will be based on materials from the previous lab. The number of questions in a quiz will be five. If there is an error with your quiz grade you must contact me on the week the quiz is given, as grades will become final by the following week. No calculators are allowed while taking a quiz. If you miss lab quizzes, there is an opportunity to make up them in the last day of semester (see the schedule). The maximum number of make-ups is three.

Lab Assignments. There will be one assignment. It is worth 10 points. Questions regarding assignment grades must be made during the week the grade has been

given to you, as grades will become final by the following week. Late assignments may be accepted but with a deduction of scores at a rate of 1 point per day.

Your score (%) = Sum of your scores/2.2 Grading criteria

A ≥ 90

 $B \ge 80$

C ≥ 70

 $D \ge 60$

F < 60

Lab Notebook Format: (You can use your notebook while taking quizzes, so it is very important to maintain your notebook in a good shape)

1. Title and Date

2. Introduction

All my writings on the board or presentation before experiments.

3. Materials and Methods

Record the materials and procedure of your experiments

4. Results

Record the results of your experiment, including every pertinent detail. Always transfer your group's results to your lab notebook. This includes recreating any tables or graphs from your lab manual in your lab notebook.

5. Discussion

Answers to the questions you asked in Introduction as well as your own interpretation of the results you obtained.

Required 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.

Required 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. 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/

Classroom demeanor or conduct: Every student should make the lecture a comfortable and enjoyable learning experience. Late entry to the class room or leaving early are not desirable behaviors. Common sense should be practiced and expected.

TENTATIVE LAB SCHEDULE AND TOPICS

J	L	Topics and Assignments		
Aug 16	Aug 17	Course Introduction and Review of Syllabus		
Aug 23	Aug 24	Ex1: Introduction to the Use of the Scientific Method		
Aug 30	Aug 31	Ex2: Basic Light Microscopy		
		Quiz 1		
Sept 6	Sept 7	Labor Day Week-NO LABS		
Sept 13	Sept 14	Ex3: Observation of Living Cells with Light Microscopy		
		Quiz 2		
Sept 20	Sept 21	Ex5: Cellular Water Relations		
		Quiz 3		
Sept 27	Sept 28	Ex6: Basic Techniques for Biochemical Analysis		
		Quiz 4		
Oct 4	Oct 5	Ex7: Protein Extraction and Quantification		
		Quiz 5		
Oct 11	Oct 12	Fall Break – NO LABS		
Oct 18	Oct 19	Ex8: Enzymology: alpha amylase activity		
		Quiz 6		
Oct 25	Oct 26	Ex10: Photosynthesis		
		Quiz 7		
Nov 1	Nov 2	Ex11: Cell Reproduction		
		Quiz 8		
		Assigning Research Report		
Nov 8	Nov 9	Ex15: Plasmid Transformation		
		Quiz 9		
		Research Report Due		
Nov 15	Nov 16	Ex16: Introduction to Bioinformatics		
		Quiz 10		
Nov 22	Nov 23	Thanksgiving Break- NO LABS		
Nov 29	Nov 30	Final (Entire labs)		
		Assessment Test		
		Make-up Quizzes		

August 17: Registration for fall 2023 ends (11:59pm)

October 12: Withdrawal Deadline for full-term VSU courses