

Principles of Biology I - BIOL 1107L (Fall, 2020) Section A

1. Course Information

- Course number and section: BIOL 1107L Section A (83331)
- Course name: Principles of Biology I Lab
- Hours of credit: 1
- Lab location and time: Bailey Science Center 1083
- Time: Sub-Group Alpha: 9:00 am - 10:20 am, Monday
Sub-Group Beta: 10:30 am - 11:50 am, Monday

2. Instructor Information

- Instructor name: Dr. Jonghoon Kang
- Instructor contact: BC 2217, 229-333-7140, jkang@valdosta.edu
- Instructor office hours: **Thursday, 2:00 PM - 3:00 PM**

3. Course Description

Required materials

- Lab Manual: Goddard, R.H. 2013. Methods and Investigations in Basic Biology. 6th edition.
- Calculator
- Lab notebook

4. 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.**

5. Lab Assignments:

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

6. Assessment or Evaluation Policy

10 quizzes (100) + A (10) + N (10) + Online Lab Assessment (10) = 130.

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 material from the previous labs. 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.

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. The Assignment is due at the start of class unless otherwise directed. Late assignments may be accepted but with a **deduction of scores at a rate of 1 point per day.**

Lab Notebook Format: (Your lab notebook will be checked)

1. Title and Date

2. Introduction

Theory, hypothesis, and questions (purpose). In addition, include all my writings on the board before experiments.

3. Materials and Methods

Provide sufficient details to allow the work to be reproduced by an independent researcher.

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.

7. Additional Statements

Accommodations Statement

Students with documented disabilities who are experiencing barriers in this course may contact the Access Office for assistance in determining and implementing reasonable accommodations. The access Office is located in Farbar Hall. 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.

Title IX Statement

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8. TENTATIVE LAB SCHEDULE AND TOPICS

Date	Topic	Assignments
Aug 17	Syllabus and General Lab Introduction	
Aug 24	Exercise 1: Introduction to the Use of the Scientific Method	
Aug 31	Exercise 2: Basic Light Microscopy	Quiz 1
Sept 7	<i>Labor Day Week-NO LABS</i>	
Sept 14	Exercise 3: Observation of Living Cells with Light Microscopy	Quiz 2
Sept 21	Exercise 4: Independent Group Microscopy Project (Data collection); Read Appendix B; Assigning A (Research Paper)	Quiz 3
Sept 28	Exercise 5: Cellular Water Relations	A due
Oct 5	Exercise 6: Protein Extraction and Quantification from Living Tissues; Midterm (Oct 8)	Quiz 4
Oct 12	Exercise 7: Enzymology: alpha amylase activity	Quiz 5
Oct 19	Exercise 8: Enzyme Regulation	Quiz 6
Oct 26	Exercise 9: Photosynthesis	Quiz 7
Nov 2	Exercise 10: Cellular Reproduction	Quiz 8
Nov 9	Special Topic: DNA Nano-technology	Quiz 9
Nov 16	Special Topic: Kang's Research; Notebook check	Quiz 10; N
TBA		Lab Assessment

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	A	N	LA	Sum	Final

Final (%) = Sum/1.3

Grading criteria

- A, if your Final ≥ 90;**
- B, if your Final ≥ 80**
- C, if your Final ≥ 70;**
- D, if your Final ≥ 60**
- F, if your Final < 60**