

Valdosta State University
Biology Department
BIOL 1107: Unifying Principles of Biology I
Laboratory Syllabus, Spring 2020

Instructor: Dr. Erin Grabarczyk
Office: Bailey Science Center (BSC) 2212
Office Hours: M 8:30 . 9:30 AM, T 8:20 . 9:20 AM, or by appointment
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Lab Time: Tuesday at 9:30 AM . 12:20 PM in BSC Room 1083

Required Textbook: Goddard, RH. Methods and Investigations in Basic Biology. 6th edition.

Required Laboratory Notebook & Brief Instructions: A dedicated 3-ring or spiral or bound notebook must be maintained for each laboratory exercise following the guidelines in the above lab manual. Students must include a table of contents with numbered pages for each lab exercise. In addition, each lab entry in the dedicated notebook must provide **an introduction** with predictions and a testable hypothesis, **results** in the form of collected data (i.e. Tables) or drawings and graphs (i.e. Figures). This is followed by **one short paragraph summarizing** 1) what you found/learned through experimentation and 2) whether or not your hypotheses or predictions were supported. More instructions will be provided by your instructor during lab, but please note that your notebook must always be present with you during lab sessions for data collection and inspection by your instructor.

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

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

Course Objectives: Upon completion of this course the student should be able to:

- 1) Exhibit a broad perspective on the principles unifying various biological disciplines from evolution to molecular biology (DBEO 2 & 5);
- 2) Understand basic biological chemistry from elements to organic compounds to macromolecules;
- 3) Comprehend basic principles of biology at the cellular level to include structure, function, metabolism, communication, reproduction, molecular biology, and gene expression (DBEO 3 & 4);
- 4) Perform, analyze, interpret, and report laboratory experiments (DBEO 1);
- 5) Develop and test a hypothesis using experimental microscopy and quantitative skills acquired in the laboratory (DBEO 1 & 5).

Cheating:

posted through BlazeView course website.

Biology Tutoring: The Academic Success Center (ASC) at Valdosta State University is located in the Odum Library and is available to all students. The ASC provides free peer tutoring in core curriculum courses, including biology, chemistry, math, writing, and foreign languages. The SSC also provides free professional academic advising and on-campus job information in one location. Call 333-7570 to make an appointment, or visit the website: www.valdosta.edu/asc.

Access Office: Students requesting classroom accommodations or modifications due to a documented disability must contact the Access Office for Students with Disabilities located in the Farber Hall. The phone numbers are 245-2498 (V/VP) and 219-1348 (TTY) or visit the website or email access@valdosta.edu.

Campus Gun Carry Statement (HB 280): If you choose to carry and concealed weapon on campus, you are responsible for knowing and following the law. Refer here for FAQ: <https://www.valdosta.edu/administration/finance-admin/police/campuscarry/>

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 when the SOI is available (generally at least one week before the end of the term). SOI responses are anonymous to instructors/administrators, and they will be able to access results only after they have submitted final grades. Before final grade submission, instructors will not be able to see any responses, but they can see the percentage of students who have or have not completed their SOIs. While instructors will not be able to see student names, an automated system will send a reminder email to those who have yet to complete their SOIs. Students who withdraw or drop a course will also be sent invitations to complete the Dropped Course Survey. Complete information about the SOIs, including how to access the survey, is available on the SOI Procedures webpage.

Regarding your lab grade:

*Quizzes are given weekly at the beginning of lab during the first 20 minutes. You will have only the time allotted at the beginning of lab to take the quiz. **There are no make-up quizzes.**

*There will be two notebook checks during the semester.

*Participation (3 points per lab) is awarded based on continuous effort of the student as observed by the instructor.

Grading Scale:

Letter	%	Points
A	90-100	215-239
B	80-89	191-214
C	70-79	167-190
D	60-69	

Laboratory Schedule:

Lab	Date	Lab Activities:
1	Jan 14	Introduction to the Lab, Safety, and Laboratory Notebooks Exercise 1: Introduction to the Use of the Scientific Method
2	Jan 21	MLK Day . NO LABS
-	Jan 28	Exercise 2: Basic Light Microscopy Quiz 1
3	Feb 4	Exercise 3: Light Microscopy Observations of cells and organisms; Basic "5 Kingdom" levels of organization. Quiz 2
4	Feb 11	Exercise 5: Cellular Water Relations Quiz 3 Due: Notebook check # 1 (Labs 1, 2, & 3)
5	Feb 18	Exercise 4: Independent Microscopy Project Quiz 4
6	Feb 25	