

# **Biology 1107L: Principles of Biology I Laboratory**

Department of Biology, College of Science and Mathematics, Valdosta State University  
Summer 2022 Laboratory Syllabus

**Instructor:** Mr. Joshua I. Brown

**Section:** A

**Room Number:** Bailey Science Center 1083

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**Office hours:** Tuesday 12:00 – 2:00 or by appointment

**Course Description:** A laboratory course designed to accompany BIOL 1107 lecture, with exercises dealing with the cellular nature of life.

**Pre- or Corequisite:** BIOL 1107 Unifying Principles of Biology I. Note a grade of C or higher is required in both lecture and lab.

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

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

These objectives support the Department of Biology Educational Outcomes # 1-5 listed above (DBEO 1-5) and the University General Educational Outcomes # 5 as listed in the VSU Undergraduate Catalogue

**Required material:** One dedicated notebook for the class. Whether it be a 3 ringed binder or a composition book. You will not need a lab manual because I will provide handouts to complete lab tasks.

## Grading:

Grade component	Total points
Pre – quizzes	60
Post – quizzes	120
Assignments	60
Notebook	60
<b>Class total</b>	<b>300</b>

Desired Grade	Scale
A	270 – 300
B	240 - 269
C	210 - 239
D	180 - 209
F	0 - 179

**Pre/post quizzes:** There are a total of 12 labs we will conducting throughout this semester. Each lab will have its own pre and post quiz. The pre-quiz will be used to prime you for the upcoming lab. There will be short videos associated with these labs that will help you do well on the pre-quiz. The post – quiz will be based on the lab completed that week.

**Assignments:** There will be two assignments given during the semester. They will be worth 30 points each. We will discuss these more in depth when they come up.

**Notebook:** You are to keep a dedicated notebook for this lab. You will need to write up a brief summary of every lab we complete. There are certain components necessary to receive full credit. I will discuss what those components are at the beginning of class. You will have to turn in your lab notebook at the end of the semester for a grade.

**LATE WORK WILL NOT BE ACCEPTED.** I strongly recommend you do not wait until the last minute to take quizzes/turn in assignments. If you are having technical difficulties an hour before the due date, there is not much I can do to fix the situation in the given time.

This is a summer course, so things move a bit faster than normal...twice as fast to be specific. It is important you realize this and adjust accordingly.

**Attendance Policy: Laboratory attendance is mandatory. Students who miss 3 or more labs, with or without a documented excuse, cannot receive a lab grade above a 60% (D) for the course.**

If students must be absent due to a quarantine or isolation requirement for COVID-19, they must report this situation via the COVID Self Reporting Link in MyVSU and through the Dean of Students Office. Report any other type of absence as well to the Dean of Student Office, which will send an absentee notice by email to all your instructors.

Given that this is an actual lab that requires you to physically be here to get valuable experience and data, it is imperative that you try to come every week. Missing lab will affect your post quizzes and potentially your assignments as you are not there to gather your data. Being absent **does not** excuse you from any work done that week. You are still responsible for any quizzes and assignments.

I will not be taking attendance for a grade, but I will be monitoring it as to abide by the university policy.

**Lab Conduct:**

- Please arrive on time. If you are more than 15 minutes it is very likely you will miss out on the entire lab.
- No eating or drinking in the lab is allowed.
- Dress appropriately
- You must take care of lab equipment. Notify the instructor if something is not working properly or if something breaks during the course of the lab.
- You will be assigned a microscope. It is your responsibility to properly use the microscope. At the conclusion of the lab I will check each scope to make sure that it was put away properly. Please notify me if the microscope is not functioning properly.
- I recommend you do not use your cell phones during class

**Make up labs:** Unfortunately, there will be no make up labs for this course. The activity we do on Monday will be taken down to setup for the activity we do on Wednesday.

**Communication:** The best way to contact me is through VSU email ([Joshuabrown@valdosta.edu](mailto:Joshuabrown@valdosta.edu)). I try to respond as soon as possible. If you do not get a response within 24 hours don't hesitate to send a POLITE reminder to me about it.

You can try to reach me through BlazeVIEW but I do not recommend it. I do not get notifications from it and am likely to miss a message for a prolonged period of time.

Please be professional and courteous..." You can catch more flies with honey than vinegar".

## **NO CHEATING!**

You are here to be assessed on YOUR work. You are only doing yourself a disservice by cheating as you will have a harder time in upper division courses. Plagiarism is a form of cheating. You cannot copy someone else's work and pass it off as your own.

Incidents of cheating or plagiarism will result in an automatic F for the course and referral to The Office of Student Conduct for disciplinary action. For VSU's Academic Integrity Code please see <http://www.valdosta.edu/administration/student-affairs/student-conduct-office/> For VSU's Academic Honesty policies and procedure please see <http://www.valdosta.edu/academics/academic-affairs/vp-office/academic-honesty-policies-and-procedures.php>

**Biology Tutoring:** The Academic Support Center (ASC) at Valdosta State University is located on the second floor of the Odum Library. The ASC provides free peer tutoring in core curriculum courses, including biology. Call 333-7570 to make an appointment, or visit their website at <https://www.valdosta.edu/asc/>

**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.

**Access Statement:** Students with 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 (VP) and 229-219-1348 (TTY). For more information, please visit VSU's Access Office or email: [access@valdosta.edu](mailto:access@valdosta.edu).

**Title IX Statement:** Valdosta State University (VSU) is committed to creating a diverse and inclusive work and learning environment free from discrimination and harassment. VSU is dedicated to creating an environment where all campus community members feel valued, respected, and included. Valdosta State University prohibits discrimination on the basis of race, color, ethnicity, national origin, sex (including pregnancy status, sexual harassment and sexual violence), sexual orientation, gender identity, religion, age, national origin, disability, genetic information, or veteran status, in the University's programs and activities as required by applicable laws and regulations such as Title IX. The individual designated with responsibility for coordination of compliance efforts and receipt of inquiries concerning nondiscrimination policies is the University's Title IX Coordinator: Maggie Viverette, Director of the Office of Social Equity, [titleix@valdosta.edu](mailto:titleix@valdosta.edu), 1208 N. Patterson St., Valdosta State University, Valdosta, Georgia 31608, 229-333-5463.

Campus Gun Carry Statement (HB 280): If you choose to carry a 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/>

### Tentative Lab Schedule

Class	Date	Topic
1	6/8	Course intro and syllabus review
2	6/13	<b>Lab 1:</b> Scientific method & basic stats
3	6/15	<b>Lab 2:</b> Basic light microscopy
4	6/20	<b>Lab 3:</b> Microscopy of living organisms
5	6/22	<b>Lab 4:</b> Microscopy project
6	6/27	<b>Lab 5:</b> Cellular water relations
7	6/29	<b>Lab 6:</b> Protein extraction & quantification
None	7/4	<b>Independence Day – NO CLASS</b>
8	7/6	<b>Lab 7:</b> Enzymology
9	7/11	<b>Lab 8:</b> Photosynthesis
10	7/13	<b>Lab 9:</b> Cellular reproduction
11	7/18	<b>Lab 10:</b> Gel electrophoresis
12	7/20	<b>Lab 11:</b> Transformation of pGLO plasmid into bacteria
13	7/25	<b>Lab 12:</b> Complete transformation experiment

**This syllabus is subject to changed at the discretion of the instructor.**