

COURSE INFORMATION
PRINCIPLES OF BIOLOGY I LABORATORY (BIOL 1107L)
PRINCIPLES OF BIOLOGY I LABORATORY - HONORS (BIOL 2107L)

BIOL 1107L (lab) and BIOL 2107L (lab) are required co-requisites of BIOL 1107 (lecture) and BIOL 2107 (lecture), courses in cellular and molecular biology for science majors. This means that participation in BIOL 1107L/2107L **requires** concurrent enrollment in both BIOL 1107/2107 (lecture) and BIOL 1107L/2107L (lab) classes. Students who do not enroll in both the lecture and the lab classes or who drop either the lecture or the lab during the drop/add period without permission from the Instructor or the Biology Division will be administratively dropped from the other course as well. Students who withdraw from the course after the drop/add period will be assigned a WP or WF based on completed assignments and class participation up to the time of withdrawal.

BIOL 1107L is a one-credit hour course.

The course syllabus is a general plan for the course; deviations may be necessary and will be announced to the class by the instructor and/or posted on the lab's web-site.

COMMUNICATION: To comply with the Family Educational Rights and Privacy Act (FERPA), all communication that refers to individual students must be through a secure medium (UGAMail or eLC) or in person. Instructors are not allowed to respond to messages that refer to individual students or student progress in the course through non-UGA accounts, phone calls, or other types of electronic media.

INSTRUCTORS - Graduate Laboratory Assistant (GLA): GLA names, teaching assignments and email addresses will be posted outside of Room 403 (The Biology Instruction Office, located on the 4th floor) and on the eLearning Commons (eLC) web site associated with the lab. Students are strongly encouraged to take advantage of the opportunity to discuss course material directly with their lab instructor during office hours.

LAB PROGRAM COORDINATOR:

Dr. Kris Miller

Office: Room 402, Biological Sciences Building

Office Hours: By appointment – email or call

Phone: 542-1681

Email: krmiller@uga.edu

BIOSCIENCE LEARNING CENTER: The Bioscience Learning Center (BLC) is located in room 406 of the Biological Sciences Building. This facility houses computers (both MAC and PC) for use by students enrolled in courses at UGA. All BLC computers are Internet connected. The BLC charges a small fee for printing and photocopying **and only accepts Bulldog Bucks for payment**. BLC hours are from 8:30 AM – 7:00 PM, Monday through Thursday; 8:30 AM – 5:00 PM, Friday. The BLC is closed on weekends.

MATERIALS FOR LAB CLASSES/DRESS CODE:

1. Lab Manual You may purchase your lab manual, “BIOL 1107L/2017L Principles of Biology I Laboratory Manual” from the University Bookstore, Beat the Bookstore, or Off Campus Bookstore. Bring to lab each week. ***Bring your lab manual to lab each week.***
2. Top-Perforated 50 Set Carbonless Notebook. This or its equivalent may be purchased from the University Bookstore and possibly at bookstores off campus. You will need this to turn in assignments each week in lab.
3. Lab Coat –You will not be admitted under any circumstances without a lab coat.
4. Feet and legs must be completely covered. You must wear long pants or skirt. Shorts, skirts above the knee, and open-toed/heeled shoes are NOT allowed.

If you are dismissed from lab because of improper dress, it will count as an excused absence. You will have one week to complete a make-up assignment. If the work is not completed in that time, a minimum of 20 points deducted from your total points for lab. Three or more absences, whether excused or not, will result in receiving 0 points for lab for the semester (refer to “Attendance” section below for details)

5. Access to Mastering Biology for pre-lab homework assignments. You will also need access to this site for the lecture.

Access to Mastering Biology is free if you purchase as new copy of the textbook designated for this course. If you buy a used or other version of the textbook, you may need to purchase access to Mastering Biology. Access can be purchase through the Mastering Biology website if needed. The link for and Mastering Biology and the Class ID for the lab is posted on eLC.

WWW ACCESS TO COURSE INFORMATION, SYLLABUS AND POLICIES: The Division of Biological Sciences has created a lab course page with course information including a copy of the syllabus, assignment due dates, and policy information. The address for the laboratory homepage is <https://www.elc.uga.edu/>.

From time to time, announcements about the lab will be posted on the lab’s web page. ***You are responsible for checking the page for announcements on a regular basis.***

ATTENDANCE: Attendance is required for this class. Missing even one class means that you have missed a significant portion of the course. DO NOT schedule any other appointments or activities during your scheduled lab sessions.

Missing labs with a valid excuse: A “valid” excuse is one that is written, verifiable, and covers the date and time of your scheduled lab class. Oversleeping and job conflicts do not constitute acceptable excuses. Missing a lab with a valid excuse allows you to make-up the lab provided that you contact your lab instructor within **48 hours** of the absence. If you know in **advance** that you will miss a lab with a valid excuse, contact your GLA **before** the lab for possible reassignment to another lab period. Do not simply attend a different section. Doing so without prior approval by your GLA will be marked as an unexcused absence.

Make-up assignments are due within a time limit agreed to between you and your GLA and may include any or all of the following: evidence that you have consulted with your team members regarding missed work and data, completing the lab with a different section, submitting assignments associated with the missed lab, making up a lab assessment, and/or by completing an alternate assignment designated by the GLA or course instructor. Students who fail to complete the make-up work within the allocated time will not receive credit for the lab exercise. *You are responsible for all material and data presented and gathered in lab.*

Missing labs without a valid excuse: If you do not have a valid excuse for missing a lab, you will not be allowed to make up any work and will automatically receive a **minimum** of 20-point deduction from your total lab points (even if the lab is “worth” less than 20 points). If a lab is worth more than 20 points for that day, you will lose the total number of points for that day

Tardiness and leaving lab early without permission are not tolerated in lab. If you arrive to lab more than 15 minutes late you will be marked as absent with a valid excuse but will be allowed to hand in work for that lab as well as stay and complete the lab. If you leave lab early without permission, you will be marked as absent without a valid excuse - even if you have completed all work for that day - and will automatically receive a 20-point deduction from your total lab points for that day.

Assignments are due on the days indicated on the syllabus or by your instructor. Each day that an assignment is late, you will lose 20% of the assignment's total points.

Students who miss THREE or more labs at any point during the semester, even with valid excuses, will earn the grade of an F in BIOL 1107L/2107L. If a student has missed three or more labs due to extenuating circumstances and wishes to avoid a failing grade, s/he should request an Incomplete from Dr. Miller. **Note:** even if you make up the lab in another lab section with GLA approval, this will be recorded as an excused absence.

PREPARATION and PRE-LAB HOMEWORK:

IT IS CRITICAL that you read the lab exercise in the lab manual before coming to lab.

You will frequently be asked to carry out experiments of your own design. To do so effectively, you must come to lab prepared.

Pre-lab homework will be administered through Mastering Biology on several occasions during the semester. **Mastering Biology homework assignments must be submitted the night before the day of your lab or you will receive to a significant point deduction.** Exact deadlines for the assignments are posted on the Mastering Biology website.

You **MUST** register for the correct Mastering Biology class code or you will not receive credit for completed pre-lab assignments. **There are no exceptions to this policy.** The codes are as follows:

- If you are in a Tuesday lab, use this course code: armstrong42314
- If you are in a Wednesday lab, use this course code: armstrong16678
- If you are in a Thursday lab, use this course code: armstrong12975

Use the following link to access the site: <http://pearsonmylabandmastering.com/>

- If you purchased a new book, it should come with a registration code for access to the site.
- If you purchased a used book or a book not specifically designated for this course, you will need to purchase access to MB through the MB website

If you have access to MB from a previous semester:

- You will need to register as a new student for the new website.
- Your old login and password should work if it is less than two years old.
- If your old login and password does not work, contact Dr. Armstrong.

LABS: Labs are scheduled to run for approximately 2 hours. You will need this time to adequately complete the lab exercise, analyze the results and clarify any points with your lab instructor. You are expected to participate and carefully observe all lab exercises, making certain you fully understand the material covered. Remember, your GLA is there to help you with the lab exercises and to evaluate your weekly performance and participation.

WRITTEN ASSIGNMENTS: You will be asked to prepare multiple written assignments of varying length during the semester. Your laboratory schedule and instructor will give you instructions as to the nature of each assignment. For assignments in which you are required to submit an electronic copy of your work, you must use a word processor and a copy submitted through the eLC (online submission does not apply to the library assignment). Microsoft Word, Open Office, or a compatible program is preferred. Your GLA may also request a hard copy of your report for grading purposes. If needed, Microsoft Excel, Open Office, and other spreadsheet software can be used to create graphs that can be inserted into your document. If you cite any articles in your assignment, you must either include a web-address (URL) for the article in your report (for on-line articles) or give photocopies of these articles to your GLA when the assignment is due. If you would like assistance in preparing your assignment, you may contact your GLA during their office hours. GLAs will not read or edit your lab report the day before it is due. Plan ahead and make the most of your time with your instructor.

BIOL 1107L and 2107L are Writing Intensive Lab Courses. They closely follow the guidelines established by The University of Georgia's Writing Intensive Program (WIP). Our goal in following these guidelines is to help you become better writers in your academic field of science, as writing and thinking are parallel cognitive (learning) processes. Writing engages individuals in the information being studied and therefore results in better retention of this subject material.

GRADES: You should keep a record of all your lab grades and save your graded papers until the end of the term. **ANY COMPLAINT ABOUT A GRADE MUST BE BROUGHT TO YOUR GLA's ATTENTION, IN WRITTEN FORM WITH A THOROUGH EXPLANATION AS TO WHY YOU DISAGREE WITH THE GRADE, WITHIN ONE**

WEEK OF THE GRADE BEING POSTED. Under no circumstance will a grade be changed at the end of the semester.

ACADEMIC HONESTY: All academic work must meet the standards contained in “A Culture of Honesty.” Students are responsible for informing themselves about those standards before performing any academic work. This information is available on-line at <http://www.uga.edu/ovpi/honesty/acadhon.htm>. Any form of academic dishonesty will be reported to the Office of the Vice President for Academic Affairs.

GROUP WORK: Many of your laboratory experiences in BIOL 1107L and BIOL 2107L will be based upon work completed in small groups. We encourage you to interact with your GLA and your classmates when completing your in-class work and your homework. However, you are expected to complete all written assignments by yourself (i.e., showing independent thought) unless otherwise directed by your GLA. Students often have difficulties determining how to demonstrate independent effort when they work in groups to complete assignments (i.e. “we all did the same thing so shouldn’t the work that we turn in be the same?”). You are encouraged to carefully review the following page that discusses expectations about group work and plagiarism. If you ever have a question about whether or not you have crossed the fine line between group work and independent work, ask your GLA for assistance **before** you hand in an assignment.

GRADES: Total points assigned in the following categories are given below. More detailed point assignments are given in the Lab Outline.

The total number of points you can earn in this lab is 370. Final grades are based on your accumulated points and will be awarded as follows:

Grade	Total Points
A (≥93%)	≥344 pts
A- (90-93%)	333-344 pts
B+ (87-90%)	322-333 pts
B (83-87%)	307-322 pts
B- (80-83%)	296-307 pts
C+ (77-80%)	285-296 pts
C (73-77%)	270-285 pts
C- (70-73%)	259-270 pts
D (60-70%)	222-259 pts
F (<60%)	<222 pts

Expectations about Group Work & Plagiarism

Just as scientists regularly share ideas, compare notes, and give each other constructive feedback, you are *encouraged* to interact with your GLA and your classmates when completing your in-class work and your homework. However, **you are expected to complete all written assignments by yourself** unless otherwise directed by your GLA. Using another person's written work, referred to as "copying" or "plagiarism," is defined on page 6 of the University of Georgia's academic honesty policy, *Culture of Honesty*, as "Submission for academic advancement the words, ideas, opinions or theories of another that are not common knowledge, without appropriate attribution to that other person." This is the case **no matter how small the assignment**. This policy can be found at http://www.uga.edu/honesty/ahpd/culture_honesty.htm; it provides you with a non-exhaustive list of types of plagiarism. **You acknowledged and signed this document when you first enrolled at UGA and are therefore committed to this policy. You are expected to be familiar with it.**

In regards to group work, the policy states that, "Submitting a group assignment, or allowing that assignment to be submitted, representing that the project is the work of all of the members of the group when less than all of the group members assisted substantially in its preparation" Is considered a violation of academic honesty (Page 7, *Culture of Honesty*, 2008).

In other words, it is okay if you confer with your GLA or other students how to set up an experiment or interpret results and then use **what you have learned** from the conversation as a basis for writing up an assignment. It is **NOT** okay to simply copy what someone else has written or tells you to write or to do less than your fair share of the work in a group assignment. Possible honor code violations will be reported to the Office of the Vice President for Instruction for an academic hearing.

If you ever have a question about whether or not you have crossed the fine line between group work and independent work, ask your GLA for assistance before you hand in an assignment.

Schedule for BIOL 1107L/2107L – Spring 2013

Below is the schedule for the Biol-1107 lab for this semester. Changes to the schedule will be announced in lab and posted on eLC. Check eLC regularly for such changes.

***NOTE:** We will be implementing a new laboratory series surrounding the topic of bioinformatics beginning March 18th and continuing for the duration of the semester. Please pay particular attention to the topics being covered for each week as well as supplementary information given in lab and on eLC for these labs.

Week of:	Lab Topic	Assignments Due in Lab
1/14/13	Introduction, Safety Lab 1: A Quicker Picker Upper? Lab 2: Practicing Science	In lab experimental design: (PT, 5 pts)
1/21/13	Lab 3: Organic Molecules I	Organic molecules I Pre-lab (Mastering Biology): (M1P, 10 pts) In lab experimental design: (M1X, 5 pts)
1/28/13	Lab 4: Organic Molecules II	Organic molecules I Post-lab: (M1B, 20 pts) Organic molecules II Pre-lab (Mastering Biology): (M2P, 35 pts) In lab experimental design: (M2X, 5 pts)
2/4/13	Lab 5: Lab Practical	Organic molecules lab practical: (MLP, 25 pts)
2/11/13	Lab 6: Enzymes	Organic molecules II Post-lab: (M2L, 20 pts) Enzymes Pre-lab (Mastering Biology): (EP, 20 pts) In lab experimental design: (EX, 5 pts)
2/18/13	Lab 7: The Science Library: Orientation, Tutorial, Assignment, How to Avoid Plagiarism	In-class library assignment: (LA, 2 pts)
2/25/13	Lab 8: Photosynthesis I Pipetman training	Enzymes Post-lab: (EB, 20 pts) Micropipette training video (on eLC)
3/4/13	Lab 9: Photosynthesis II Pipetman practical quiz	Library Assignment: (LIB, 25 pts) In lab experimental results: (P2X, 5 pts) Pipetman practical: (PP, 10 pts)
3/11/13	SPRING BREAK – Labs do not meet this week	
3/18/13	NEW: Introduction to Bioinformatics Gel electrophoresis introduction Gel loading	NEW: Bioinformatics Pre Lab: (BPL, 15 pts) Agarose Gel video (on eLC)
3/25/13	NEW: Digesting DNA I Lab 12, Part 2: PCR I	NEW: Bioinformatics Post Lab (BPol, 15 pts) - hand in one per pair of students In lab graphing assignment: (DR1G, 5 pts) PCR video (on eLC) Photosynthesis Post-Lab: (PC, 30 pts)

4/1/13	Lab 11, Part 1: Digesting DNA II - gel electrophoresis and analysis of restriction enzymes Lab 13, part 2: Case It	DNA Restriction II Pre-lab (Mastering Biology): (DR2P, 30 pts) NEW: In-lab DNA analysis (DNA, 28 pts) - hand in one per pair of students
4/8/13	Lab 13, part 1: PCR II - gel electrophoresis and analysis of personal PCR product NEW: Presentation preparation/final analysis of case	NEW: Preparing and Delivering a PowerPoint Presentation
4/15/13	NEW: Week 1 of final presentations from bioinformatics project	NEW: Group presentations (GP, 30 pts) NEW: Group peer evaluation (GPPR, 5 pts)
4/22/13	NEW: Week 2 of final presentations from bioinformatics project	