



## BIOL 1107L – Principles of Biology I Laboratory

### Course Syllabus – Spring 2016

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Individuals with disabilities who need to request accommodations should contact the Disability Services Coordinator, Edgewater Hall 255, (678) 466-5445, [disabilityservices@mail.clayton.edu](mailto:disabilityservices@mail.clayton.edu).

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#### INSTRUCTOR INFORMATION

**Ann Showalter**

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*Office hours*    MON 2:10-3:25pm, TUES 12-2pm, WED 11-12:30 & 2:10-3:25pm

The best way to contact me is via email. If you do not get a response within one business day, assume I did not get your email. I do not always check email on weekends.

#### COURSE DETAILS

**Course title:** BIOL 1107L – Principles of Biology I Laboratory (CRN 20725)

**Classroom location:** Natural and Behavioral Sciences, Room 120

**Class meeting day and time:** Tuesday, 2:10pm – 5:00pm

**Textbook:** Custom lab manual available in the CSU bookstore.

**Required supplies:** Safety glasses or goggles; laboratory notebook

**Credit hours:** 1.0 semester credit hour

**Catalog description:** Laboratory accompanying BIOL 1107, Principles of Biology I

**Co-requisites:** BIOL 1107

**Note:** Due to the co-requisite nature of BIOL 1107 and BIOL 1107L, if the lecture course is dropped, the lab course must also be dropped. Similarly, if the lab course is dropped, the lecture course must also be dropped. Any exceptions to this rule must be approved by the department chair.

#### LEARNING GOALS & OUTCOMES

Upon completion of this course, students will be able to:

- Design studies that appropriately investigate scientific questions.
- Manipulate and graph data using Microsoft Excel.

- Clearly communicate the details of scientific studies through writing.
- Use a microscope and other tools used in biological investigations.
- Have a better understanding of biological principles learned in lecture.

This course supports outcomes 1, 2, 4, and 5 of the Biology major.

- (1) Effectively demonstrate knowledge of the basic principles of major fields of biology.
- (2) Demonstrate mastery of a broad range of basic lab skills applicable to biology.
- (4) Able to communicate orally and in writing in a clear concise manner.
- (5) Demonstrate the ability to collect, evaluate and interpret scientific data, and employ critical thinking to solve problems in biological science and supporting fields.

**General education outcomes:**

The Clayton State University Core Curriculum outcomes (see Area D) are located on pages 107 and 108 of the [Academic Catalog and Student Handbook](#).

**Teacher education standards:**

The content of this course syllabus correlates to education standards established by national and state education governing agencies, accrediting agencies and learned society/ professional education associations. Please refer to the course correlation matrices located at the following web site: <http://www.clayton.edu/teachered/Standards-Outcomes>

## EVALUATION & GRADING

You will be evaluated with the following assignments/criteria:

	Points	%
Lab practical examinations (2 exams @ 50 pts)	100	29%
Quizzes (10 quizzes @ 5 pts)	50	14%
Science skills assignments (10 assignments @ 5 pts)	50	14%
Lab Reports	100	29%
Lab notebook checks	25	7%
Participation*	25	7%
<b>TOTAL</b>	<b>350</b>	<b>100%</b>

\* Participation in each lab period is worth 2.5pts, with deductions for tardiness, unexcused absences, lack of preparation, and inappropriate use of electronic devices.

Your grade will be determined as follows:

Grade	Percentage
<b>A</b>	89.5 - 100%
<b>B</b>	79.5 – 89.4%
<b>C</b>	69.5 – 79.4%
<b>D</b>	59.5 – 69.4%
<b>F</b>	below 59.4%

**Mid-term progress report:** Laboratory courses do not have a mid-term grade. Students may choose to withdraw from the course and receive a grade of "W." Students pursuing this option must fill out an official withdrawal form, available in the Office of the Registrar, or withdraw on-line using the Swan by mid-term, which occurs on March 4. [Instructions for withdrawing are provided at this link.](#)

**The last day to withdraw without academic accountability is Friday, March 4, 2016.**

## COURSE SCHEDULE

Week	Date	Lab #	Topic
1	Jan 12		<b>Lab safety &amp; introduction</b> Bring your laptop
	Jan 19		<b>NO LAB THIS WEEK</b>
2	Jan 26	1	<b>Scientific Investigation: Week 1</b> Design study & collect data Bring your laptop
3	Feb 2	1	<b>Scientific Investigation: Week 2</b> Analyze data & discuss results Bring your laptop
4	Feb 9	2	<b>Microscopes &amp; Cells</b> Complete draft of Lab 1 report <u>due</u> Lab 2 drawings <u>due</u> at end of lab
5	Feb 16	3	<b>Osmosis: Week 1</b> Design study & collect data Bring your laptop Group data <u>due</u> at end of lab
6	Feb 23	3 4	<b>Osmosis: Week 2</b> Analyze data & discuss results  <b>Enzyme Experiment</b> Design study & collect data Bring your laptop Final draft of Lab 1 report <u>due</u> Lab 4 report <u>due</u> at end of lab
7	Mar 1		<b>PRACTICAL EXAM 1</b> Complete draft of Lab 3 report <u>due</u>
	<b>Mar 4</b>		<b>Last day to withdraw without academic accountability</b>
	Mar 8		<b>NO LAB – Spring Break</b>
8	Mar 15	5	<b>Respiration &amp; Fermentation</b> Final draft of Lab 3 report <u>due</u>

9	Mar 22	6	<b>Photosynthesis: Week 1</b> Design study & collect data Bring laptop Lab 5 report <u>due</u>
10	Mar 29	6	<b>Photosynthesis: Week 2</b> Discussion & peer-review
		7	<b>Corn Genetics: Week 1</b> Bring laptop Complete draft of Lab 6 report <u>due</u>
11	Apr 5	7	<b>Corn Genetics: Week 2</b> Bring laptop Second draft of Lab 6 report <u>due</u>
12	Apr 12	8	<b>Gene Expression &amp; Molecular Biology</b> Lab 7 report <u>due</u> <u>LAB NOTEBOOK CHECK</u>
13	Apr 19		<b>PRACTICAL EXAM 2</b> Final draft of Lab 6 report <u>due</u>

PLEASE NOTE: BIOL 1107L Lab course ends after Lab Practical II.

## COURSE POLICIES

### 1. Attendance is required for all lab periods, and labs CANNOT be made-up.

*The good:* If you miss lab for legitimate reasons (e.g., jury duty, etc.), you must contact me immediately to discuss your options, and I expect documentation from an authority (doctor, judge, etc.) for your absence. Students with valid excuses must bring the excuse to the instructor within one week of the absence. Ideally, you would attend another lab section for the week. If that is not possible, then the missed points (for participation and any assignments) will not count against you. If you cannot provide documentation, then the absence is unexcused. Regular doctor's appointments (check-ups, etc.) are not valid excuses for missing lab.

*The bad:* Unexcused absences will result in a zero for participation points on that day and a zero on any assignments associated with that lab.

*The ugly:* If you miss three or more laboratory classes, you will receive an Institutional Withdrawal. This is not meant as a punishment but to protect you from the "F" that you will likely receive in lab as a result of your absences (students who do not attend regularly generally do not do well in the course).

### 2. Show up on-time for lab each week. You will be marked as late if you are more than 5 minutes late for lab. You can be late one time during the semester without penalty (a freebie!), but for every other tardy, you will lose half of your participation points for the day. If you are more than 20 minutes late, you will be counted as absent and incur the

penalties associated with unexcused absences. There are no freebies for showing up <20 minutes late to class.

**Lab is scheduled for three hours**, and you are expected to remain in lab for the full lab period. Students who leave lab early will lose participation points for the day and may receive a penalty on assignments associated with the lab.

3. **Late policy on assignments.** Unless otherwise indicated, all assignments are due at the end of lab. Late assignments are subject to a penalty of 10% of the points for each day (i.e., 24 hour period) that the assignment is late.

Students who miss lab for valid (and documented) reasons are still held to the deadlines for assignments submitted to Dropbox. For example, if you have to miss lab because of jury duty, I still expect you to submit your assignments to Dropbox. Exceptions and waivers of late penalties may be made for extenuating circumstances.

4. **Practical exam procedures.**

- i. Exam dates are fixed and will not change. So mark your calendars. There are no make-up exams.
- ii. Exams start at the beginning of class. Students who arrive late will not be given extra time on the exam.
- iii. The use of or possession on your person of a cell phone, or any other electronic device, is not permitted during an exam. Anyone caught with a cell phone (in your hands, or lap, or pocket, etc.) will be subject to disciplinary action (see Academic Dishonesty below) and will receive a zero on the exam.

5. **Many assignments will be submitted on Dropbox in D2L.** It is your responsibility to ensure that the appropriate documents have been submitted by the deadline. Submit documents as Word (.doc or .docx) or Excel (.xls, .xlsx, or .csv) files only – I will not accept Pages (sorry Mac users!), PDFs, or Google docs for any assignments. If you submit inappropriate documents (e.g., wrong file format or wrong assignment altogether), you will be subject to late penalties until you post the appropriate file to Dropbox.

6. **Plagiarism will NOT be tolerated**, and any instances of plagiarism will be subject to disciplinary action (see Academic Dishonesty below). Ignorance is not an excuse. I consider your completion of the plagiarism awareness quiz as evidence that you understand the various forms of plagiarism. Completion of this quiz is not optional, as I will not accept any homework assignments until you have completed the quiz. If you are ever in doubt about whether or not you are plagiarizing, please ask me (or the Writers' Studio) for help.

7. **Come prepared to each lab**, by downloading all files and printing any handouts before lab begins, and bringing those documents and your computer to class. Details about what is needed for each lab period will be posted on D2L. Students who do not have their computers, when they are necessary for lab activities, will lose participation points for the day.

8. **Students must follow all laboratory safety rules and procedures.** General lab safety procedures will be discussed on the first day of lab. Any additional rules/procedures will be explained at the start of each lab. If I discover that you are not handling the laboratory equipment responsibly and safely, I have the right to ask you to leave immediately and you will receive a zero for that lab.
9. **Respectful behavior is expected.** This means active listening when I am talking or when another student is talking during class discussions. Inappropriate side-conversations and the inappropriate use of laptops/cell phones is distracting to other students and disrespectful to everyone. Students who violate this policy will lose participation points and may be asked to leave the classroom for being disruptive.
10. **Visitors are not permitted without the instructor's permission.** Children are not allowed in the classroom at any time.
11. **General data from this course may be used by the instructor for research.** Data that will be used to improve methods of teaching, leading to presentation or publication, will consist of anonymous data, with no identifying information from particular students (e.g., the overall average for the course, NOT grades from particular students). If you do not wish for your instructor to include your data in such studies, fill out the withdrawal of consent form and bring it to your instructor.

## WRITING ASSISTANCE

The goal of the Writers' Studio is to give rise to better writers, not just to better writing. People who love to write, people who struggle mightily with it, and people who fall anywhere else on the spectrum can find a place at The Writers' Studio—a place for students to come for writing guidance and feedback.

Each student may receive up to 90 minutes of assistance per day and 3 hours per week. Furthermore, both appointments and walk-ins are welcome. Here's The Writers' Studio's contact information:

Location: Arts & Sciences Building, Room G-224

Phone: 678.466.4728

Email: [ws224@clayton.edu](mailto:ws224@clayton.edu)

Website: <http://clayton.edu/writersstudio>

Schedule your appointment online at <http://clayton.mywconline.com> (Note: first-time users need to complete a one-time registration prior to using the online appointment website).

## GENERAL UNIVERSITY POLICIES

### General Policy

Students must abide by policies in the Clayton State University Student Handbook, and the [Basic Undergraduate Student Responsibilities](#). The Student Handbook is part of the [Academic Catalog and Student Handbook](#), which begins on page 6.

### **University Attendance Policy**

Students are expected to attend and participate in every class meeting. Instructors establish specific policies relating to absences in their courses and communicate these policies to the students through the course syllabi. Individual instructors, based upon the nature of the course, determine what effect excused and unexcused absences have in determining grades and upon students' ability to remain enrolled in their courses. The university reserves the right to determine that excessive absences, whether justified or not, are sufficient cause for institutional withdrawals or failing grades.

### **Academic Dishonesty**

Any type of activity that is considered dishonest by reasonable standards may constitute academic misconduct. The most common forms of academic misconduct are cheating and plagiarism. All instances of academic dishonesty will result in a grade of zero for the work involved. All instances of academic dishonesty will be reported to the [Office of Community Standards](#). Judicial procedures are described beginning on page 19 in the section of the [Academic Catalog and Student Handbook](#) titled, Procedures for Adjudicating Alleged Academic Conduct Infractions.

### **Disruption of the Learning Environment**

Behavior which disrupts the teaching–learning process during class activities will not be tolerated. While a variety of behaviors can be disruptive in a classroom setting, more serious examples include belligerent, abusive, profane, and/or threatening behavior. A student who fails to respond to reasonable faculty direction regarding classroom behavior and/or behavior while participating in classroom activities may be dismissed from class. A student who is dismissed is entitled to due process and will be afforded such rights as soon as possible following dismissal. If found in violation, a student may be administratively withdrawn and may receive a grade of WF.

More detailed descriptions of examples of disruptive behavior are provided in the Clayton State University [Academic Catalog and Student Handbook](#) starting on page 14.

## **COMPUTER REQUIREMENTS**

Each CSU student is required to have ready access throughout the semester to a notebook computer that meets faculty-approved hardware and software requirements for the student's academic program. Students will sign a statement attesting to such access. For further information on CSU's Official Notebook Computer Policy, please go to:

<http://www.clayton.edu/hub/itpchoice/notebookcomputerpolicy>.

### **Software Requirement**

To properly access the course content you will need to download the following free software:

- Adobe Reader (needed to access files in PDF format): <http://get.adobe.com/reader/>
- Adobe Flash (needed to access video content): <http://get.adobe.com/flashplayer/>

### **Computer Skill Prerequisites**

- Able to use the Windows™ operating system
- Able to use Microsoft Word™ word processing
- Able to send and receive e-mail using the Clayton State University e-mail system using Outlook™
- Able to attach and retrieve attached files via email
- Able to use a Web browser

**In-class Use of Student Notebook Computers**

Laptop computers may be used during lab, and for some lab activities, laptops will be required. However, laptops may only be used for class-appropriate activities, and inappropriate use of laptops may result in a loss of participation points. You will need internet access to download and print certain lab handouts before each class meeting.

**GeorgiaVIEW Desire2Learn (Online Classroom)**

The laboratory materials will be posted on Desire2Learn, and you will submit many assignments through the Dropbox feature of Desire2Learn.

You can gain access to Desire2Learn, by signing on to the SWAN portal and selecting: "D2L" on the top right side. If you experience any difficulties in Desire2Learn, please email or call The HUB at [TheHub@mail.clayton.edu](mailto:TheHub@mail.clayton.edu) or (678) 466-HELP. You will need to provide the date and time of the problem, your SWAN username, the name of the course that you are attempting to access, and your instructor's name.

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**Changes or additions to this syllabus can be made at the discretion of the instructor at any time.**

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*Last update: January 7, 2016*

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