

**Biology I Laboratory****BIOL 1615****Fall semester, 2018**Instructor: Shana Geffaney, Ph.D.Office: BEERC 221LEmail: shana.geffaney@usu.eduOffice phone: 435-722-1784**Time & Place:** Mondays & Wednesdays 7-8:15 PM, BEERC B120**Office Hours:** Friday 10 AM-12 noon & please contact me by email to make an appointment for another time**Laboratory Fees**

Registration for this course requires payment of a \$95 laboratory fee. This fee is used to buy SimUText simulations, lab supplies and equipment for this separate laboratory course. These fees are not covered by your tuition payment and are not part of the LaunchPad portal that will be used for BIOL 1610.

**COURSE GOALS**

The broad goals for this course are to help you:

- Begin to think like a biologist and understand how biologists construct new knowledge using evidence gained through the scientific method
- Develop skills in observation, experimentation and hypothesis testing
- Learn to gather, organize, analyze and interpret data
- Learn to use basic laboratory equipment and procedures
- Develop science writing skills

**Lab Reports:** There are fourteen (14) lab reports for this course, each worth 10 points each for a total of 140 points. There will be no make-up labs. Figure lab reports are to be uploaded to CANVAS on the day that they are due. Notebook lab reports should be turned into my box in Vernal at USU-UB on the day that they are due. Answers to SimBio questions must be completed in the SimBio portal on the day that they are due. Late lab reports will be accepted, however 10% will be removed from your grade for each day that the report is late. See the schedule below for a list of lab report assignment due dates.

**Grading Scale:**

A	-	93-100%
A-	-	90-92%
B+	-	87-89%
B	-	83-86%
B-	-	80-82%
C+	-	77-79%
C	-	73-76%
C-	-	70-72%
D+	-	67-69%
D	-	63-66%
D-	-	60-62%
F	-	Below 59%

### Shared responsibilities for keeping track of grades

1. It is your responsibility to keep all graded papers. You will need these if you detect a discrepancy between the grade you calculate for yourself and the grade that you are awarded.
2. I will provide a spreadsheet in Canvas that you can use to calculate your grade.

Grades for Biology I Lab (BIOL 1615) will be based on the following evaluations:

<u>Lab Reports (14 X 10 pts)</u>	140
Total Points Possible	140

### **COURSE POLICIES**

Instructor's Responsibilities: I will help you learn by engaging you in the material and challenging you to think like a biologist. You can expect me to attend all laboratory sessions. I will also be available by email, telephone, or in my office during the day to answer questions and provide any needed assistance in writing lab reports.

Student's Responsibilities: You are expected to attend each laboratory, participate in activities, take comprehensive notes, and read the relevant material. You should focus your efforts on achieving the learning objectives by doing the appropriate problems in the lab worksheets, reviewing concepts, practicing problem solving, and completing assignments on time. In the event that there is any difficulty in keeping up with the pace of the course, it is YOUR responsibility to contact me for advice or assistance. If you cannot attend a class meeting, you are still responsible for all content.

Attendance: Attendance is very important to be successful in this course. I will not take attendance for the class but be aware that you are fully responsible for all announcements made, worksheets handed out and material covered in lab.

Use of mobile devices and laptops in class: Laptops and tablets are fine for taking notes as well as gathering and analyzing data. Please do not open social media pages during class or multitask with non-course elements. This is *incredibly* distracting. Please do not text, surf the web, or otherwise play with cell phones during class.

!!! Cell phones and Safety: As a general rule cell phones should be put away during lab. Although we are not using hazardous materials (in general) in class phones can provide a pathway from the lab bench to you that should be avoided!!!

Lab and Assignment schedule

Lab	Topics	Readings	Assignments
August 27	Introduction		
August 29	Properties of Water	Lab 1	
September 3	No Lecture or Lab! Enjoy Labor Day!		
September 5	Properties of Water	Lab 1	Lab 1 Figure report due 9/7
September 10	pH and Protein Function	Lab 2	
September 12	pH and Protein Function	Lab 2	Lab 2 Figure report due 9/14
September 17	Enzyme Reaction Rates	Lab 3	
September 19	Enzyme Reaction Rates	Lab 3	Lab 3 Figure report due 9/21
September 24	SimBio Diffusion	Lab 4	
September 26	SimBio Osmosis	Lab 5	Lab 4 & 5 SimBio answers due 9/28
October 1	SimBio Cellular Respiration	Lab 6	
October 3	SimBio Cellular Respiration	Lab 6	Lab 6 SimBio answers due 10/5
October 8	Photosynthesis	Lab 7	
October 10	Photosynthesis	Lab 7	Lab 7 Figure report due 10/12
October 15	Plant and Animal Tissues	Lab 8	
October 17	Plant and Animal Tissues	Lab 8	Lab 8 Notebook report due 10/19
October 22	SimBio Mitosis	Lab 9	
October 24	SimBio Mitosis	Lab 9	Lab 9 SimBio answers due 10/26
October 29	SimBio Meiosis	Lab 10	
October 31	SimBio Meiosis	Lab 10	Lab 10 SimBio answers due 11/2
November 5	Avida-ED Genetics	Lab 11	
November 7	Avida-ED Genetics	Lab 11	Lab 11 Figure report due 11/9
November 12	SimBio Mendelian Pigs	Lab 12	
November 14	SimBio Mendelian Pigs	Lab 12	
November 19	SimBio Mendelian Pigs	Lab 12	Lab 12 SimBio answers due 11/20
November 21	No Lecture or Lab! Enjoy the Thanksgiving Holiday!		
November 26	Flower Morphology I	Lab 13	
November 28	Flower Morphology II	Lab 13	Lab 13 Notebook report due 11/30
December 3	Animal Development	Lab 14	
December 5	Animal Development	Lab 14	Lab 14 Notebook report due 12/7
Final Exam Week	No lab		

## **UNIVERSITY POLICIES**

### Students with Disabilities

The Americans with Disabilities Act states: "Reasonable accommodation will be provided for all persons with disabilities in order to ensure equal participation within the program." If a student has a disability that will likely require some accommodation by the instructor, the student must contact the instructor and document the disability through the Disability Resource Center (797-2444), preferably during the first week of the course. Any request for special consideration relating to attendance, pedagogy, taking of examinations, etc., must be discussed with and approved by the instructor. In cooperation with the Disability Resource Center, course materials can be provided in alternative format, large print, audio, diskette, or Braille. For more information go to <http://www.usu.edu/drc/>

### Withdrawal and Incomplete Grade

Students are required to complete all courses for which they are registered by the end of the semester. In some cases, a student may be unable to complete all of the coursework because of extenuating circumstances, but not due to poor performance or to retain financial aid. The term 'extenuating' circumstances includes: (1) incapacitating illness which prevents a student from attending classes for a minimum period of two weeks, (2) a death in the immediate family, (3) financial responsibilities requiring a student to alter a work schedule to secure employment, (4) change in work schedule as required by an employer, or (5) other emergencies deemed appropriate by the instructor. If an incomplete grade is to be given, an Incomplete Grade Documentation Form must be filed by the instructor in the department or college office. Students may not be given an incomplete grade due to poor performance or in order to retain financial aid. An incomplete grade may be granted only if the student has completed the majority of the course and is passing the class at the time. More information can be found at <http://www.usu.edu/policies/pdf/Incomplete-Grade.pdf>

### Plagiarism

Plagiarism includes knowingly "representing, by paraphrase or direct quotation, the published or unpublished work of another person as one's own in any academic exercise or activity without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials." To help you learn how to identify and avoid committing plagiarism, go to <http://ocw.usu.edu/English/english-1010/plagiarism.html>

The penalties for plagiarism are severe. They include warning or reprimand, grade adjustment, probation, suspension, expulsion, withholding of transcripts, denial or revocation of degrees, and referral to psychological counseling. More about USU policy on plagiarism can be found at <http://www.usu.edu/policies/pdf/Acad-Integrity.pdf>

### Academic Honesty – The “Honor System”

Each student has the right and duty to pursue his or her academic experience free of dishonesty. The Honor System is designed to establish the higher level of conduct expected and required of all Utah State University students.

The University expects that students and faculty alike maintain the highest standards of academic honesty. For the benefit of the students who may not be aware of specific standards of the University with regards to academic honesty, the following paragraph discussing infractions of academic integrity is quoted from the Student Policy Handbook (<http://www.usu.edu/policies/pdf/Acad-Integrity.pdf> )

### Infractions

*Acts of academic dishonesty include, but are not limited to:*

- 1. Cheating. (1) Using or attempting to use or providing others with any unauthorized assistance in taking quizzes, tests, examinations, or in any other academic exercise or activity, including working in a group when the instructor has designated that the quiz, test, examination, or any other academic exercise or activity be done “individually”; (2) depending on the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; (3) substituting for another student, or permitting another student to substitute for oneself, in taking an examination or preparing academic work; (4) acquiring tests or other academic material belonging to a faculty member, staff member, or another student without express permission; (5) continuing to write after time has been called on a quiz, test, examination, or any other academic exercise or activity; (6) submitting substantially the same work for credit in more than one class, except with prior approval of the instructor; or (7) engaging in any form of research fraud.*
- 2. Falsification. Altering or fabricating any information or citation in an academic exercise or activity.*
- 3. Plagiarism. Representing, by paraphrase or direct quotation, the published or unpublished work of another person as one’s own in any academic exercise or activity without full and clear acknowledgment. It also includes using materials prepared by another person or by an agency engaged in the sale of term papers or other academic materials.*

### Penalties

*A. An instructor has full autonomy to evaluate a student’s academic performance in a course. If a student violates the Honor System, the instructor may sanction the student as part of the course evaluation. Such sanctions may include: (1) verbally warning the student; (2) giving the student a written reprimand; (3) requiring the student to rewrite a paper/assignment or to retake a test/examination; (4) adjusting the student’s grade—for either an assignment/test or the course; or (5) giving the student a failing grade for the course. A sanction by the instructor is not a disciplinary penalty. If the instructor believes that, in addition to any sanction, the student should be disciplined and a penalty imposed, the instructor shall refer the student for disciplinary proceedings.*