BIOL BIOLOGY I LABORATORY
1615

Course Description
This is an investigative laboratory course with projects emphasizing genetics, cell, and molecular biology. Students ask and answer authentic biological questions while developing the skills and competencies needed for biological research.

Semester Typically Taught: Fall

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 Objectives
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

Instructor
Shana Geffeney, Ph.D.
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Email: shana.geffeney@usu.edu
Office phone: 435-722-1784
Office Hours: Friday 10 AM-12 noon & please contact me by email to make an appointment for another time

Course Resources
You will need a laptop with a spreadsheet program (e.g. Microsoft Excel) to gather, analyze and graph data. You will need a laptop to run multiple simulations and models. You can bring your own laptop to class or check out a laptop and/or Chromebook at the student services desk. Additionally, we will share data in the class through Box folders. As students, each of you has access to a Box folder that you can use to share information with other students in class.

**Course Requirements**

Each student will:
- Complete reading assignments before each laboratory session.
- Thoughtfully and actively participate in discussions during each laboratory session.
- Thoughtfully and actively participate in gathering, organizing and analyzing data during each laboratory session.
- Complete each laboratory assignment.

**Evaluation Methods and Criteria**

**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 Course Summary below for a list of lab report assignment due dates.

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

<table>
<thead>
<tr>
<th>Lab Reports (14 X 10 pts)</th>
<th>140</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Points Possible</td>
<td>140</td>
</tr>
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</table>

You must agree to the safety procedures listed in the Safety Agreement before you can participate in the course. You will receive 2 points for reading and agreeing to the safety procedures.

**Extra Credit**

If 75% of you complete the IDEA course evaluation, you will all earn 5 points!

**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.

**Grade Scheme**

The following grading standards will be used in this class:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100 % to 93.0%</td>
</tr>
<tr>
<td>A-</td>
<td>92.0 % to 90.0%</td>
</tr>
</tbody>
</table>
### Grade Range

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>B+</td>
<td>89.0 % to 87.0%</td>
</tr>
<tr>
<td>B</td>
<td>86.0 % to 83.0%</td>
</tr>
<tr>
<td>B-</td>
<td>82.0 % to 80.0%</td>
</tr>
<tr>
<td>C+</td>
<td>79.0 % to 77.0%</td>
</tr>
<tr>
<td>C</td>
<td>76.0 % to 73.0%</td>
</tr>
<tr>
<td>C-</td>
<td>72.0 % to 70.0%</td>
</tr>
<tr>
<td>D+</td>
<td>69.0 % to 67.0%</td>
</tr>
<tr>
<td>D</td>
<td>66.0 % to 60.0%</td>
</tr>
<tr>
<td>F</td>
<td>59.0 % to 0.0%</td>
</tr>
</tbody>
</table>

### Attendance and Excused Absences Policy

**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.

**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.

**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.

### Nonattendance Policy

**Students May Be Dropped For Nonattendance**

If a student does not attend a class during the first week of the term or by the second class meeting, whichever comes first, the instructor may submit a request to have the student dropped from the course. *(This does not remove responsibility from the student to drop courses which he or she does not plan to attend.)* This option is typically used for classes that are full and the instructor is trying to make a seat available for another student, but may be considered for other courses. Requests must be made during the first 20 percent of the course and will be
Assumption of Risk

All classes, programs, and extracurricular activities within the University involve some risk, and certain ones involve travel. The University provides opportunities to participate in these programs on a voluntary basis. Therefore, students should not participate in them if they do not care to assume the risks. Students can ask the respective program leaders/sponsors about the possible risks a program may generate, and if students are not willing to assume the risks, they should not select that program. By voluntarily participating in classes, programs, and extracurricular activities, a student does so at his or her own risk. General information about University Risk Management policies, insurance coverage, vehicle use policies, and risk management forms can be found at: http://www.usu.edu/riskmgt/ (http://www.usu.edu/riskmgt/)

Library Services

All USU students attending classes in Logan, at our Regional Campuses, or online can access all databases, e-journals, and e-books regardless of location. Additionally, the library will mail printed books to students, at no charge to them. Students can also borrow books from any Utah academic library. Take advantage of all library services and learn more at libguides.usu.edu/rc. (http://libguides.usu.edu/rc)

Classroom Civility

Utah State University supports the principle of freedom of expression for both faculty and students. The University respects the rights of faculty to teach and students to learn. Maintenance of these rights requires classroom conditions that do not impede the learning process. Disruptive classroom behavior will not be tolerated. An individual engaging in such behavior may be subject to disciplinary action. Read Student Code Article V Section V-3 (https://studentconduct.usu.edu/studentcode/article5) for more information.

University Policies & Procedures

COVID-19 Classroom Protocols

In order to continue to provide a high standard of instruction at USU, and to limit the spread of COVID-19 during the pandemic, students are asked to follow certain classroom protocols during the fall 2020 semester. These protocols are in place not only for your safety but also the safety of the rest of the campus community. You will be asked to clean your desk area at the start of each class, sit in designated seats, wear face coverings, and follow dismission instructions. There may be individual medical circumstances that prevent some students from using face coverings. These circumstances will be rare, but if they do exist, we ask that everyone be respectful. It is imperative that we each do our part so that on-campus instruction can continue.

Academic Freedom and Professional Responsibilities

Academic freedom is the right to teach, study, discuss, investigate, discover, create, and publish freely. Academic freedom protects the rights of faculty members in teaching and of students in learning. Freedom in research is fundamental to the advancement of truth. Faculty members are entitled to full freedom in teaching, research, and
creative activities, subject to the limitations imposed by professional responsibility. Faculty Code Policy #403 (http://www.usu.edu/hr/files/uploads/Policies/403.pdf) further defines academic freedom and professional responsibilities.

**Academic Integrity – "The Honor System"**

Each student has the right and duty to pursue his or her academic experience free of dishonesty. To enhance the learning environment at Utah State University and to develop student academic integrity, each student agrees to the following Honor Pledge:

*I pledge, on my honor, to conduct myself with the foremost level of academic integrity."

A student who lives by the Honor Pledge is a student who does more than not cheat, falsify, or plagiarize. A student who lives by the Honor Pledge:

- Espouses academic integrity as an underlying and essential principle of the Utah State University community;
- Understands that each act of academic dishonesty devalues every degree that is awarded by this institution; and
- Is a welcomed and valued member of Utah State University.

**Academic Dishonesty**

The instructor of this course will take appropriate actions in response to Academic Dishonesty, as defined the University’s Student Code. Acts of academic dishonesty include but are not limited to:

- **Cheating**: using, attempting to use, or providing others with any unauthorized assistance in taking quizzes, tests, examinations, or in any other academic exercise or activity. Unauthorized assistance includes:
  - Working in a group when the instructor has designated that the quiz, test, examination, or any other academic exercise or activity be done “individually;”
  - Depending on the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments;
  - Substituting for another student, or permitting another student to substitute for oneself, in taking an examination or preparing academic work;
  - Acquiring tests or other academic material belonging to a faculty member, staff member, or another student without express permission;
  - Continuing to write after time has been called on a quiz, test, examination, or any other academic exercise or activity;
  - Submitting substantially the same work for credit in more than one class, except with prior approval of the instructor; or engaging in any form of research fraud.

- **Falsification**: altering or fabricating any information or citation in an academic exercise or activity.

- **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.

For additional information go to: ARTICLE VI. University Regulations Regarding Academic Integrity (https://studentconduct.usu.edu/studentcode/article6)

**Sexual Harassment/Title IX**

Utah State University is committed to creating and maintaining an environment free from acts of sexual misconduct and discrimination and to fostering respect and dignity for all members of the USU community. Title IX and USU Policy 339 (http://www.usu.edu/policies/339) address sexual harassment in the workplace and academic setting.
The university responds promptly upon learning of any form of possible discrimination or sexual misconduct. Any individual may contact USU's Office of Equity (https://equity.usu.edu/) for available options and resources or clarification. The university has established a complaint procedure to handle all types of discrimination complaints, including sexual harassment (USU Policy 305 (http://www.usu.edu/policies/305/)), and has designated the Office of Equity Director/Title IX Coordinator as the official responsible for receiving and investigating complaints of sexual harassment.

**Withdrawal Policy and "I" Grade Policy**

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.

**Students with Disabilities**

USU welcomes students with disabilities. If you have, or suspect you may have, a physical, mental health, or learning disability that may require accommodations in this course, please contact the Disability Resource Center (DRC) (http://www.usu.edu/drc/) as early in the semester as possible (University Inn # 101, (435) 797-2444, drc@usu.edu (mailto:drc@usu.edu)). All disability related accommodations must be approved by the DRC. Once approved, the DRC will coordinate with faculty to provide accommodations.

Students who are at a higher risk for complications from COVID-19 or who contract COVID-19 may also be eligible for accommodations.

**Diversity Statement**

Regardless of intent, careless or ill-informed remarks can be offensive and hurtful to others and detract from the learning climate. If you feel uncomfortable in a classroom due to offensive language or actions by an instructor or student(s) regarding ethnicity, gender, or sexual orientation, contact:

- Division of Student Affairs: https://studentaffairs.usu.edu (https://studentaffairs.usu.edu/), (435) 797-1712, studentservices@usu.edu (mailto:studentservices@usu.edu), TSC 220
- Student Legal Services: https://ususa.usu.edu/student-association/student-advocacy/legal-services (https://ususa.usu.edu/student-association/student-advocacy/legal-services), (435) 797-2912, TSC 326,
- Access and Diversity: http://accesscenter.usu.edu (http://accesscenter.usu.edu/), (435) 797-1728, access@usu.edu (mailto:access@usu.edu); TSC 315
- Multicultural Programs: http://accesscenter.usu.edu/multiculture (http://accesscenter.usu.edu/multiculture), (435) 797-1728, TSC 315
- LGBTQA Programs: http://accesscenter.usu.edu/lgbtqa (http://accesscenter.usu.edu/lgbtqa/), (435) 797-1728, TSC 3145
- Provost’s Office Diversity Resources: https://www.usu.edu/provost/diversity (https://www.usu.edu/provost/diversity/), (435) 797-8176

You can learn about your student rights by visiting:
The Code of Policies and Procedures for Students at Utah State University: https://studentconduct.usu.edu/studentcode (https://studentconduct.usu.edu/studentcode/)

**Grievance Process**

Students who feel they have been unfairly treated may file a grievance through the channels and procedures described in the Student Code: Article VII (https://studentconduct.usu.edu/studentcode/article7).
Emergency Procedures

In the case of a drill or real emergency, classes will be notified to evacuate the building by the sound of the fire/emergency alarm system or by a building representative. In the event of a disaster that may interfere with either notification, evacuate as the situation dictates (i.e., in an earthquake when shaking ceases or immediately when a fire is discovered). Turn off computers and take any personal items with you. Elevators should not be used; instead, use the closest stairs.

Mental Health

Mental health is critically important for the success of USU students. As a student, you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce your ability to participate in daily activities. Utah State University provides free services for students to assist them with addressing these and other concerns. You can learn more about the broad range of confidential mental health services available on campus at Counseling and Psychological Services (CAPS) (https://counseling.usu.edu).

Students are also encouraged to download the “SafeUT App” (https://healthcare.utah.edu/uni/programs/safe-ut-smartphone-app) to their smartphones. The SafeUT application is a 24/7 statewide crisis text and tip service that provides real-time crisis intervention to students through texting and a confidential tip program that can help anyone with emotional crises, bullying, relationship problems, mental health, or suicide related issues.

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