Biology 1106- Principles of Biology I

Lab Syllabus – Spring 2020

Introduction & Student Learning Outcomes:
Welcome to Principles of Biology Lab! This lab is designed to develop and enhance your independent, investigative skills as a biologist by giving you hands-on, practical experience in expanding your science process skills. These are skills that will be necessary for biologists and health-care professionals alike. This semester you will collaborate with others in your lab and engage in scientific investigations in major conceptual areas in biology. By working in groups you will also develop both verbal and written communication skills critical to effective transfer of information in biology. As a successful student, by the end of the semester, you should be able to:

- Develop science process skills
- Test hypotheses and make predictions
- Design experiments
- Collect and organize data
- Critically analyze information
- Draw conclusions
- Effectively communicate ideas and information
- Use the library and internet as a resource
- Critically evaluate sources of information for reliability and credibility

Instructor Information:

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<th>Instructor:</th>
<th>Email:</th>
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<tbody>
<tr>
<td>Phone:</td>
<td>Office:</td>
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Lab Course Materials (required):
- Heimann C.P. and D.P. French. 2019. Investigating Biology. FountainHead Press: Southlake TX. This book should be available in the bookstore by the first week of classes. Any additional lab materials you will need will be provided to you as a free download from BlackBoard.
- Microsoft Office 365. You have access to this software as an ASU student. You are expected to complete assignments in both Word and Excel.
- Access to your ASU P: drive OR Flash (USB) drive

Grading: Lab constitutes 30% of your overall grade which come from activities, planning forms, and written reports. You will not pass the course if you fail the lab. This 30% represents 300 of the 1000 combined 1306/1106 points.

***You MUST earn 180 of the 300 points to pass the lab and thus the course.

NOTE: It is the policy of ALL the lab instructors that NO late work will be accepted.
Lab Report Re-grading Procedure: After each Graded Lab Report is returned to you, you should look over the document and determine why you lost points. If you find an error or disagree with the deduction, you may request a re-grade using the procedure outlined on BlackBoard.
What do you do if you miss a lab?
There are opportunities to earn points every week. There are an additional 50 points over the 300 point cap— you’ll have 350 chances to earn 300 points. If you have to miss lab, you may make up the points missed for that week by taking advantage of these opportunities and by completing all of the pre-lab and homework activities. If you complete these throughout the semester, you will have earned the “extra” points you might need if disaster strikes and you are forced to miss. Remember - you CANNOT attend other lab sections - the ONLY way to earn points for labs you miss for ANY reason is by using any additional points earned over the cap.

Attendance:  Due to the collaborative nature of this lab, it is CRITICAL that you attend lab every week. Why?

· Many of the investigations are designed to take two weeks to complete. If you miss one week of the investigation, your partners have to take up the slack for you AND you miss information critical to successfully completing the lab.

· You MUST attend the lab section for which you are registered. You WILL NOT be allowed to attend any other lab section during the same week. Again, this is because you complete the work as a group. You will not be allowed to disrupt another group’s work in another lab AND you don’t want to leave your own group short-handed. There are NO EXCEPTIONS so don’t even ask.

· Your lab will meet on the same day at the same time every week. So don’t schedule doctor or dentist appointments, vacations, or work at that time. We understand that emergencies or other circumstances beyond your control can happen and that you might have to miss lab. If so, it is your responsibility to contact your instructor and your partners AS SOON AS possible.

· There are NO MAKE-UPS. If you miss an opportunity to earn points due to an absence you can’t make up the assignment. We have structured the grading system (see above) so that you can earn points that can be “banked” and used to make up the POINTS that you missed. So while you can’t make up the assignment, you will have opportunities to make up the points if you just take advantage of them.

Use of electronics for non-class related activities: More and more students are bringing their laptops/tablets, etc. to class to take notes. In lab, having your laptop with you so that you can work together to complete the assignment is welcomed and encouraged. Sadly, some students use these devices for non-class related activities. Viewing movies, videos, checking social media, etc. can be distracting to other students. This will not be tolerated. You will be given one warning and then asked to leave. You will have to make an appointment with your instructor to be allowed re-entry to class.

Lab Safety: Lab is conducted in a manner to ensure that everyone is able to learn in a safe environment. Students are required to take a Chemical Safety Training BlackBoard Course before you can attend lab following the first week of classes. The course will eventually be part of your course feed in BlackBoard. If you have already taken the course for another class, you do not have to take it again. You must pass the class with a grade of 90 or better on the quiz. You may take the quiz as many times as necessary. Please contact your lab instructor if you have any problems accessing the quiz.
General Lab Rules & Information

All students are required to adhere to the following lab rules.

1. Class will begin promptly on the hour. BE ON TIME!!

2. Various assignments for this course are turned in at different times and locations depending on what the assignment is and what day your lab meets. It is YOUR responsibility to know when assignments are due for your lab section and to make sure that you complete assignments on time and turn them in to the correct location.

3. Student behavior in the lab is to be maintained in a manner conducive to learning and study. No horseplay, rough housing or any type of disruptive behavior is allowed in the lab at any time. Likewise, no degrading or offensive language will be tolerated. You will be asked to leave and subject to further disciplinary action from the biology department and/or the university if you are disruptive in any way in the laboratory.

4. Turn off cell phones and pagers during lab. No texting, no talking, NO EXCEPTIONS! Points may be deducted at the discretion of your instructor.

5. You are required to work in groups in a manner conducive to learning. No disruptive behavior, laziness, or poor attitude will be tolerated.

6. No children are allowed in the lab at any time.

7. You are not allowed to remove any materials from the laboratory, except by special permission from the instructor. You must always return materials to their proper place.

8. Food, drinks, and all tobacco products are not allowed in the laboratory. You may take breaks at your discretion outside the lab.

9. You are expected to treat all lab materials with the utmost respect. Any person caught defacing, throwing, carelessly handling, etc., lab materials will be asked to leave the lab immediately and subject to further disciplinary action from the biology department and university.

10. Wastes and other scraps should be discarded in designated containers only. Please do not put them in the sinks, drawers, etc.

11. At the end of each lab session, each lab group is responsible for cleaning their work area. You must clean the table with provided cleaners. You will not be allowed to leave lab unless your table is cleaned and your stools pushed under the table. Points may be deducted at the discretion of your instructor if your area is not cleaned properly.

12. No form of academic dishonesty will be tolerated. Please refer to your student handbook for the University’s policies regarding the penalties and procedures involved.

General Policies Related to This Course

All students are required to follow the policies and procedures presented in these documents:

- Angelo State University Student Handbook
- Angelo State University Catalog

Academic Integrity

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.
The College of Science and Engineering adheres to the university’s Statement of Academic Integrity.

Accommodations for Students with Disabilities

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student’s responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the Student Disability Services website. The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dallas Swafford
Director of Student Disability Services, Office of Student Affairs
325-942-2047
dallas.swafford@angelo.edu
Houston Harte University Center, Room 112

Incomplete Grade Policy

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 Grading Procedures for more information.

Student Absence for Observance of Religious Holy Days

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 Student Absence for Observance of Religious Holy Day for more information.

Title IX at Angelo State University

The University prohibits discrimination based on sex, which includes pregnancy, sexual orientation, gender identity, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination including: sexual assault, sex-based discrimination, sexual exploitation, sexual harassment, public indecency, interpersonal violence (domestic violence and/or dating violence), and stalking. As a faculty member, I am a Responsible Employee meaning that I am obligated by law and ASU policy to report any allegations I am notified of to the Office of Title IX Compliance.

Students are encouraged to report any incidents of sexual misconduct directly to ASU’s Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator at:

Michelle Boone, J.D.
Director of Title IX Compliance/Title IX Coordinator
Mayer Administration Building, Room 210
325-942-2022
michelle.boone@angelo.edu

You may also file a report online 24/7 at www.angelo.edu/incident-form.
If you are wishing to speak to someone about an incident in confidence you may contact the University Health Clinic and Counseling Center at 325-942-2173 or the ASU Crisis Helpline at 325-486-6345.

For more information about Title IX in general you may visit www.angelo.edu/title-ix.

Details of what assignments will be due each week will be posted on the BlackBoard site for the lab. When in doubt, check BlackBoard!

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a [https://www.angelo.edu/student-handbook/](https://www.angelo.edu/student-handbook/)
b [https://www.angelo.edu/catalogs/](https://www.angelo.edu/catalogs/)
c [https://www.angelo.edu/student-handbook/community-policies/academic-integrity.php](https://www.angelo.edu/student-handbook/community-policies/academic-integrity.php)
d [https://www.angelo.edu/services/disability-services/](https://www.angelo.edu/services/disability-services/)
e [https://www.angelo.edu/content/files/14197-op-1011-grading-procedures](https://www.angelo.edu/content/files/14197-op-1011-grading-procedures)
f [https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of](https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of)

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<thead>
<tr>
<th>WEEK/DATE</th>
<th>LAB ACTIVITIES</th>
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<tbody>
<tr>
<td>1 January 13-17</td>
<td>Graphing/Excel/Uploading/Scientific Method</td>
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<tr>
<td>2 January 21-24</td>
<td>Labs do NOT meet this week. PLOP PLOP experiment homework and Organelle Homework</td>
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<td>3 January 27-31</td>
<td>Habitat Choice in Isopods (common name Rolly Pollies 😊)</td>
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<td>4 February 3-7</td>
<td>Osmosis</td>
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<td>5 February 10-14</td>
<td>Enzymes</td>
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<td>6 February 17-21</td>
<td>Metabolic Rate</td>
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<td>7 February 24-28</td>
<td>Photosynthesis</td>
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<td>8 March 2-6</td>
<td>Transcription and Translation</td>
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<tr>
<td>March 9-13</td>
<td>SPRING BREAK -- No Labs</td>
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<td>9 March 16-20</td>
<td>Cell Cycle Week 1</td>
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<td>10 March 23-27</td>
<td>Cell Cycle Week 2</td>
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<tr>
<td>11 March 30-April 3</td>
<td>DNA Fingerprinting</td>
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<td>12 April 6-9</td>
<td>Labs do not meet this week.</td>
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<tr>
<td>13 April 13-17</td>
<td>Bacterial Transformation Week 1</td>
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<tr>
<td>14 April 20-24</td>
<td>Bacterial Transformation Week 2</td>
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<td>15 April 27-May 1</td>
<td>Final Lab Quiz</td>
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<tr>
<td>16 May 4-6</td>
<td>Final Exams – Labs do not meet</td>
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