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 (as much as possible in an online lab), 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 engage in scientific investigations in major conceptual areas in biology. You will also develop 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

This is an online lab course. We will be using virtual labs or simulations as much as possible to help you with learning concepts. This portion of the course offers you the opportunity to explore and apply concepts to answer research questions. Success in the laboratory involves designing and conducting experiments, performing pre-lab and lab activities and report writing. In addition, you will conduct activities designed to develop and improve critical thinking and problem-solving skills related to the topics discussed in lectures.

Even though BIOL 1306 and 1106 are different courses, you only get one grade for the combined points for each course (see lecture syllabus). Your course grade in 1306 will be the letter grade reported for both courses on your transcript.

Lab Course Materials (required):
- You do not need a lab manual this session. All materials will be provided to you.
- Access to Connect. Your lecture textbook provides you with this access.
- 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. You MUST earn 180 of the 300 points to pass the lab and thus the course.

Points for the lab are earned as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points Each</th>
<th>Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 Lab Reports</td>
<td>15</td>
<td>120</td>
</tr>
<tr>
<td>Pre-lab Activities, Quizzes and Homework</td>
<td>Varies</td>
<td>180*</td>
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<tr>
<td>Total Points</td>
<td></td>
<td>300</td>
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NOTE: It is the course policy that NO late work will be accepted.

*These points are capped at 180; however, there will most likely be 210-220 points available—the “extra” points (~30) can be “banked” and used as insurance (see below) to make up lab report points missed if you fail to complete an assignment.

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 turning in a lab assignment?
There are opportunities to earn points every lab day. There are an additional 30 points over the 180 point cap for Pre-labs, quizzes, and homework. If you have to miss lab, you may make up the points missed for that day by taking advantage of the few extra-credit 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 miss turning in an assignment. Remember – unless you have a technical problem that you contact me about prior to the deadline - the ONLY way to earn points for labs you miss turning in by the deadline is by using any additional points earned over the cap.

· 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.

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.