

BIOLOGY 1020 – World of Biology Lab Fall 2019

Lab: T 2:00-4:50 pm N223

Instructor: Dr. Liza Gómez Daglio

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Office Hours: T 12:00 -13:00 hrs. or by appointment

Course Summary

World of Biology is intended to provide students with laboratory experience in various biological contexts. We will explore topics covered in BIOL 1010 with the added luxury of actually performing some of the experiments discussed in lecture. Note that this class is graded separately from BIOL 1010.

GE Outcome Alignment and Assessment

This course satisfies GE area B2. GE area B2 courses are to meet Learning Goals 2.1 and 2.2. Specifically, Learning Goal 2 is to develop broad knowledge of biological and physical sciences, humanities and creative arts, and social sciences. Students attain these goals (goal 2.1) by explaining and applying the basics scientific method and (goal 2.2) by demonstrating an understanding of the living and non-living physical world, for example the effect of the environment on gene expression. Students will be assessed in their knowledge of the scientific method (goal 2.1) during the first lab, first lab homework, and first quiz; and in understanding the living and nonliving physical world (goal 2.2) during the second lab, second lab homework, and second quiz. Once an understanding of these learning goals is attained, they will be used and reinforced throughout the semester.

Student Learning Outcomes

By the end of this course, students will be able to:

1. To provide an overview of basic knowledge, principles, methodologies, theories, and perspectives in biology.
2. To offer opportunities to work in groups with other students to practice effective communication about concepts and issues in biology.
3. To provide a broad understanding and appreciation of biology and encourage continuous inquiry and lifelong learning.
4. To provide the framework to critically evaluate and use information from various scientific sources to answer questions relevant to biology.
5. To understand the relationship between the fields of biology, chemistry, physics, geology, and other sciences.
6. To appreciate the interdependence of humans, natural ecosystems, and diversity of life on earth.
7. To develop more informed and responsible citizens with respect to issues concerning the living world.
8. Use math as it applies to biology. This mostly includes making and interpreting graphs, and may also include calculating averages and variation around an average. I will help you and there will be chances to practice.

Course Textbook: *World of Biology 1020 Laboratory Workbook, 6th ed. by Stevens and Fleming. (2014).* Bring this each week. Photocopies are not allowed.

Grading policies: Student's learning outcomes will be assessed as follows:

Assignment/Exams	Points breakdown	Total Points
Quizzes (12)	11 quizzes * 10 points each	110
Assignments (12)	12 assignments * 10 points each	120
TOTAL		230
Final Exam (optional)	1 exam	30

Letter Grades: Letter grades will be assigned on the following scale:

Score	Letter Grade
100% - 90%	A
89.99% - 80%	B
79.99% - 70 %	C
69.99% - 60%	D
<60%	F

Grading option before census date:

CR ≥ 70% NC ≤ 69%

Final grades: Students will have 2 working days to appeal any discrepancy regarding the grades following the regrading policy state in the syllabus. The course offers many opportunities to the students to earn a passing grade. **The course DOES NOT offer any makeup assignment or evaluation, extra credit assignment, curve, grade shifting or bump up.**

- **Quizzes (110 points):** 11 quizzes (schedule in calendar) will cover the previous lab session.
- **Assignments (120 points):** This includes sharing group data, presenting answers to observation and study questions, displaying graphs, writing lab reports, completion of study questions from the lab manual, graphs, etc. for 10 points in each session. Specific expectations of participation and details of assignment will be discussed during each lab.
- **Final exam: (Optional 30 points):** Opting in is a commitment. Students who opt to take the final will receive a zero if they are not present at the final. Once you start the exam, you may not leave the room and return to complete it.

General Policies

Attendance: Attendance is mandatory in this course. You should expect to work productively both in groups and alone. Please demonstrate proper care and use of lab materials and supplies. Most importantly, please do not disrupt the learning environment, rights, and property of others. **Unexcused absences will result in no points for the week.**

Like any lab course, this one requires your active participation each week. It will be impossible to pass this course without regular, on-time attendance. As per university regulations, students with excessive absences or who are consistently late will be dropped from the course. Since the lab set-up changes each week, it will not be possible to make up missed labs. You may not turn in a lab write-up/assignment for a lab you did not attend. If an assignment is due during your **unexcused** absence, you may not turn it in, even if you were present to do the lab.

Students who arrive later than 10 minutes won't be allowed in the classroom. There will be **NO opportunity to make up any quizzes or assignment under any circumstance**. If you miss a lab session you will receive a zero for that assessment **UNLESS**:

- 1) You have an excused absence such as a college sanctioned absence (athletic competition, performance, etc.) or state or federally accepted religious observance. It is the student's responsibility to contact the instructor prior to the lab session.
- 2) You have a jury duty commitment. Requires documentation of the commitment by the country.
- 3) You have an unexpected absence due to a severe illness or serious crisis of an immediate family member. It is the student's responsibility to contact the instructor within two working days of the absence. Students are required to document that the absence was excused (note/call from doctor/nurse/dean of students) and provide written and signed evidence within seven days confirming that the illness or crisis was serious enough to justify the absence. Submitted evidence will be verified prior to approval of a provisional grade.

If an absence is due to one of the three situations listed above and the student has followed the procedures outlined, **then a provisional grade based on the average of the student's other quiz or assignment scores shall be granted**.

Late work: Assignments are due at the beginning of class. No credit for late work. If you are late, your work is late.

Electronic Devices: Use of computers will be allowed on certain days when working on assignments during lab session. Electronic devices in this class are viewed as learning tools. Disruptions will not be tolerated. If you are caught texting, gaming or disrupting others, you will be asked to stop and/or leave room. Abuse of this policy may lead to assignment do not be graded.

Communicating: Please write **Bio 1020** in the subject line of your email or it **WILL NOT GET RESPONDED TO**. Please be sure that you follow the e-mail etiquette.



Laboratory Policies: Your attendance and participation are important parts of this course. Please be considerate of your classmates! All phones, electronic devices, and other noisemakers should be off during the

entire class. Please do not disrupt class by arriving late or leaving early. You are expected to attend class, participate in the activities and to take your own notes.

As a group, help each other with clean up. Each instance of not cleaning up will result in a deduction of 5 points for the group.

Regrading: The students can request a regrading for any of the assignments and quizzes no later than 3 days after grades are entered. The students should request a meeting with the instructor and prepare the material for regrading, which include (1) graded assignment and (2) clear statement where the student highlights the credits in question.

Calendar/schedule: Labs schedule (due dates for assignments and quizzes) is tentative. If there are any changes, those will be announced during Lab and Blackboard.

Academic Honesty: Although students are encouraged to study together and even work with each during the lab sessions and homework assignments each student must submit their own work. If (1) identical work is submitted, or (2) students who copy from others or use disallowed material, such as cell phones or cheat sheets on quizzes, students involved will be granted with and **F** in the course and will be officially reported to the Dean of Students.

Recording Lectures and Special Accommodations: Students with documented disabilities should seek special accommodations for all classes through the DRS office on campus. If DRS sends me a file on you that lists recording lectures as an acceptable accommodation, then you may record lectures. Otherwise, you have to do it the old-fashioned way with pen and paper. If you record lectures in any form (video, audio, still pictures, etc.) without accommodation from DRS, that constitutes intellectual property theft, will result in a zero in participation points, and preclude you from turning in any assignments related to the lab session.

Important Dates: Census Date is September 19th. This is the last day to change your grading option through Enrollment Services in MSR. Once you change your grading option, it cannot be changed back.

Lab Schedule

Tentative schedule of topics subject to changes. Notifications will be made during lab and posted in Blackboard.

Date	Tentative Lab Schedule	Quiz (topic)
8/22-23	No labs this week	
27-August	Syllabus, Lab Safety Science vs Pseudoscience	
3 rd - Sep	Lab 5: Cell Cycle & Mitosis	
10-Sep	Lab 1: Scientific Method and Daphnia Lab	Quiz 1 (Lab 5)
17-Sep	Lab 2: Cells and Microscopes	Quiz 2 (Lab 1)
24-Sep	Lab 3: Transport	Quiz 3 (Lab 2)
1-Oct	Lab 4: Metabolism	Quiz 4 (Lab 3)
8-Oct	No LAB	
15-Oct	Lab 6: Genetics and Meiosis	Quiz 5 (Lab 4)
22-Oct	Lab 8: Evolution	Quiz 6 (Lab 6)
29-Oct	Lab 7: Phylogenetics	Quiz 7 (Lab 8)
5-Nov	Lab 9: Plant Biology	Quiz 8 (Lab 7)
12-Nov	Lab 10: Animal Adaptations	Quiz 9 (Lab 9)
19-Nov	Lab 11: Population Parameters, includes an assignment	Quiz 10 (Lab 10)
26-Nov	NO LAB	
3-Dec	Lab 12: Central CA Ecology	Quiz 11 (Lab 11)
13-Dec	OPTIONAL Final Exam- scheduled with instructor	