Texas A&M University San Antonio College of Arts and Sciences General Biology II Laboratory BIOL 1107 - 1 credit Fall 2024 Syllabus

Teaching Assistant: Email: Office Hours:

Mentor: Marie Tipps Email: <u>tmtipps@tamusa.edu</u> Office: STEM 311K Office Hours: : MW 1:00-3:00; or by appointment Class meeting times and location: STEM 371

**Required co-requisite for Biology Majors**: BIOL 1307 General Biology II **Recommended prerequisite:** MATH 1314 Successful completion of College Algebra or Concurrent enrollment in higher-level mathematics is recommended.

Materials Required: Laboratory instruction handouts provided on Blackboard.

\*You are also **HIGHLY** encouraged to work off of a <u>computer or laptop</u> for your pre-/post-lab coursework. *If* <u>you need a computer or wi-fi</u>, please contact IT directly for assistance. IT contact information can be found in the Table of Contents in Blackboard as well as the University website. Furthermore, <u>computer labs on campus</u> <u>are open and available to you!</u> Finally, it is up to the student to have a **stable internet/browser connection** when conducting any online coursework.

**Course Description:** This course provides hands-on laboratory exercises that highlight the fundamental principles concerning the biology of organisms: biodiversity, evolutionary relationships among major groups of organisms, structural/functional characteristics of these organisms, and general ecological principles of organism relationships. This course is designed for students majoring in science fields. Biology majors taking this course must be concurrently registered for BIOL 1307.

## **Learning Outcomes:**

- 1. Students will develop Critical Thinking Skills, Communication Skills, and Empirical and Quantitative skills. Students will learn to work as a team.
- 2. Students will understand and apply the Scientific Method to novel questions to develop a strategy to answer those questions.
- 3. Students will learn how to collect and analyze scientific data through hands-on activities in which they gather the data.

# **Required:**

- <u>Signed safety agreement</u> prior to start of second lab period.
- You must wear closed toed shoes and pants to lab each week. Students not in proper attire will be asked to leave.
- <u>Lab coats must be purchased and worn in the lab during *designated weeks on the syllabus* <u>schedule</u>. If you forget your lab coat, you will be required to rent one for \$2 or leave the lab for the day and take a zero. Renting is <u>dependent on lab coat availability</u>.</u>
- Students must log-in regularly to both the Blackboard site and to their TAMUSA email account to keep updated on information related to the class.

#### **Grading Scheme:**

*Attendance* – Mandatory. There will be 12 labs worth 5 points each for a total of 60 attendance points. However, if a student <u>misses more than 3 laboratory classes</u> in a regular semester then the student will *automatically fail the course*. Please see a more detailed description below in the Laboratory Attendance Policy.

*Assignments* – There are 11 assignments due worth 20 points, the *lowest assignment grade will be dropped* each for a total of 200 points for the semester. These will be explained each week before they are due and will require additional work outside of class.

*Pre-lab Quizzes* – There are 10 quizzes with each quiz worth 10 points, for a total of 100 points for the semester. These will be <u>pre-lab</u> quizzes due at 11:59PM per due date in Blackboard. Pre-lab Quizzes will also be <u>timed at 20 minutes with 5-10 questions</u>. These quizzes are to *ensure your <u>preparedness</u> for lab*.

*Laboratory Proposal* – This will be a group document that I will provide more information during the Scientific Writing and Animal Behavior Lab. I will also provide a grading rubric to ensure you understand the requirements for your grade including the appropriate animal behavior topic. Your group proposal will be worth 100 points and <u>must be submitted via Turnitin.com</u>. You must also submit on the original due date a **completed** proposal. The original proposal is worth 100 points.

This is much like a real grant or research proposal and you will have to gain approval on your proposal to move forward. In other words, I will either accept or reject your proposal. If <u>rejected</u> (score less than 70/100), you will be <u>required to resubmit for approval</u>. If you receive <u>greater</u> than 70/100, resubmission is <u>optional</u>. All **resubmissions must be done in <u>track changes</u> and will be regraded for points up to the instructor's discretion.** Again, to be eligible for resubmission, you <u>must submit a completed proposal</u> on the <u>original due date found in the lab syllabus schedule</u>.

**Presentation** – During the Scientific Writing and Animal Behavior Lab mentioned above, you will <u>form groups</u> during lab and conduct an independent study on animal behavior based on your experimental design outlined in the proposal (see above). <u>As a group</u>, you will <u>present the results of this study during the final lab</u>. A grading rubric will be distributed to the groups during the semester to ensure you understand the requirements for the presentation. In addition, <u>each person will be anonymously graded by your other group members on your participation to ensure that everyone pulls their own weight</u> (see below regarding group participation). If I receive a bad report from your group for your performance, this will be reflected on your <u>individual</u> grade. The presentation is worth 50 points.

*Group Project Participation* – You will be graded on your participation in the animal behavior proposal writing, editing, experiment execution, and presentation. You must do your part to receive these points. There will be a peer-evaluation for each of these components. You automatically receive 15 points, unless your peer-evaluations indicate lack of participation in any of these areas.

*Late Work* – <u>I do not accept late work</u> unless it is due to a university approved and documented absence or an unavoidable situation. If such circumstances arise, you are required to communicate with me <u>within 24 hours</u> <u>of the due date</u> for the assignment in question. <u>You will also be required to provide appropriate</u> <u>documentation</u>. If you do not, you will receive a zero. *It is at my discretion whether I will deduct points for approved late work*.

Assignment Points	
Attendance (12 labs at 5 pts each)	60
Quizzes (10)	100
Assignments (11; 1 dropped)	200
Lab Proposal	100
Participation	15
Presentation	50
Total	525

A=525-469.9, B=469.8-417.4, C=417.3-364.8, D=364.7-312.4, F=<312.4 or below. I will round up or down the decimal place on a grade. So if you receive a 459.5, you will get an A for the letter grade. However, a 459.4 will be a B. I will not make a decision about scaling the course grade until course averages have been determined.

**Laboratory Attendance Policy** - Laboratory courses are unique to your education in that they will provide you with hands-on opportunities to gain the skills and critical thinking processes inherent to the study of biology. For these reasons, we have a strict departmental attendance policy:

- Attendance is **mandatory**.
- <u>If you miss more than 3 labs</u> for whatever reason (excused or not), the maximum score you can earn for the laboratory section of a course is 50%.
- If you miss a lab section for a university excused absence, you may attempt to make up the lab in another lab section <u>if the following criteria are met and directions followed</u>: *a*) the absence is considered a university excused absence and was determined to be one by your primary instructor (<u>documentation will be required</u>), *b*) you must contact via e-mail both your instructor and the instructor of the section you would like to attend, and *c*) you must receive written confirmation that you are able to make up the lab. *If you do not receive written confirmation, you will not be allowed to make up the lab. Due to the nature of certain lab topics, not all labs have makeup ability; therefore, missing lab forfeits any associated points.*

## **IMPORTANT UNIVERSITY POLICIES AND RESOURCES**

#### **COVID-19 SYLLABUS ADDENDUM**

The safety of our campus community is paramount to our ability to provide our students, faculty, and staff with a productive and secure learning and working environment. While masks are not required, we do encourage everyone to wear a mask, particularly inside the buildings, in order to reduce the spread of COVID-19. The university maintains a COVID-19 website with current data, safety protocols, and reporting guidelines at <a href="https://www.tamusa.edu/community-safety-together/">https://www.tamusa.edu/community-safety-together/</a>

<u>Disclaimer</u>: Certain classes may transition to fully online when necessary for health and safety. This will be notified via the University systems should it arise.

<u>Academic Accommodations for Persons with Disabilities:</u> The Americans with Disabilities Act of 1990, as amended, and the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights protection for individuals with disabilities. Title II of the ADA and Section 504 of the Rehabilitation Act require that students with disabilities be guaranteed equal access to the learning environment through the provision of reasonable and appropriate accommodations of their disability. If you have a disability that may require an accommodation, please contact Disability Support Services (DSS) for the coordination of services. The phone number for DSS is (210) 784-1335 and email is dss@tamusa.edu.

<u>Academic Learning Center:</u> All currently enrolled students at Texas A&M University-San Antonio can utilize the Academic Learning Center for subject-area tutoring. The Academic Learning Center is an appointment based center where appointments are made through the Navigate platform. Students access Navigate

through Jagwire in the Student Services tab. The Center is active on campus outreaching to students to highlight services offered. You can contact the Academic Learning Center by emailing tutoring@tamusa.edu or calling (210)-784-1332. Appointments can also be made through JagWire under the services tab.

**Counseling Resources:** As a college student, there may be times when personal stressors interfere with your academic performance and/or negatively impact your daily functioning. If you or someone you know is experiencing life stressors, emotional difficulties, or mental health concerns at Texas A&M University – San Antonio, please contact the Student Counseling Center (SCC) located in Modular C, Room 166 (Rear entrance) or call 210-784-1331 between the hours of 8 a.m. and 5 p.m., Monday – Friday. After-hours crisis support is available by calling 210-784-1331. Please contact UPD at 911 if harm to self or harm to others is imminent. All mental health services provided by the SCC are free, confidential (to the extent permitted by law), and are not part of a student's academic or university record. SCC provides brief individual and group therapy, crisis intervention, consultation, case management, and prevention services. For more information, please visit www.tamusa.edu/studentcounseling

**Emergency Preparedness:** JagE Alert is Texas A&M University-San Antonio's mass notification system. In the event of an emergency, such as inclement weather, students, staff, and faculty who are registered in JagE Alert, will have the option to receive a text message, email, and/or phone call with instructions and updates. To register or update your information visit: https://tamusa.bbcportal.com/. More information about Emergency Preparedness and the Emergency Response Guide can be found here: https://www.tamusa.edu/upd/index.html.

**Financial Aid and Verification of Attendance:** According to the following federal regulation, 34 CFR 668.21: U.S. Department of Education (DoE) Title IV regulation, a student can only receive Title IV funds based on Title IV eligibility criteria which include class attendance. If Title IV funds are disbursed to ineligible students (including students who fail to begin attendance), the institution must return these funds to the U.S. DoE within 30 days of becoming aware that the student will not or has not begun attendance. Faculty will provide the Office of Financial Aid with an electronic notification if a student has not attended the first week of class. Any student receiving federal financial aid who does not attend the first week of class will have their aid terminated and returned to the DoE. Please note that any student who stops attending at any time during the semester may also need to return a portion of their federal aid.

Jaguar Writing Center: The Jaguar Writing Center provides writing support to graduate and undergraduate students in all three colleges. Writing tutors work with students to develop reading skills, prepare oral presentations, and plan, draft, and revise their written assignments. Students can schedule appointments with the Writing Center in JagWire under the student services tab. More information about what services we offer, how to make an appointment, and how to access your appointment can be found on our website at www.tamusa.edu/Writing-Center. The Writing Center can also be reached by emailing writingcenter@tamusa.edu.

<u>Meeting Basic Needs</u>: Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact the Dean of Students (DOS@tamusa.edu) for support. In addition, you may notify the instructor if you are comfortable doing so.

<u>Military Affairs</u>: Veterans and active-duty military personnel are welcomed and encouraged to communicate, in advance if possible, about special circumstances (e.g., upcoming deployment, drill requirements, disability accommodations). You are also encouraged to visit the Patriots' Casa in-person, Room 202, or to contact the Office of Military Affairs with any questions at military@tamusa.edu or (210)784-1397.

**Religious Observances:** Texas A&M University-San Antonio recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holidays according to their tradition. Under A&M System policy, students are provided an opportunity to make up any examination, study, or work requirements that may be missed due to a religious observance provided they notify their instructors before the end of the second week of classes for regular session classes.

**The Six-Drop Rule:** Students are subject to the requirements of Senate Bill (SB) 1231 passed by the Texas Legislature in 2007. SB 1231 limits students to a maximum of six (6) non-punitive course drops (i.e., courses a student chooses to drop) during their undergraduate careers. A non-punitive drop does not affect the student's GPA. However, course drops that exceed the maximum allowed by SB 1231 will be treated as "F" grades and will impact the student's GPA.

**Statement of Harassment and Discrimination:** Texas A&M University-San Antonio is committed to the fundamental principles of academic freedom, equality of opportunity, and human dignity. To fulfill its multiple missions as an institution of higher learning, A&M-San Antonio encourages a climate that values and nurtures collegiality, diversity, pluralism, and the uniqueness of the individual within our state, nation, and world. All decisions and actions involving students and employees should be based on applicable law and individual merit. Texas A&M University-San Antonio, in accordance with applicable federal and state law, prohibits discrimination, including harassment, on the basis of race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation, gender identity, or gender expression. Individuals who believe they have experienced harassment or discrimination prohibited by this statement are encouraged to contact the appropriate offices within their respective units.

Texas A&M University-San Antonio faculty are committed to helping create a safe learning environment for all students and for the university as a whole. If you have experienced any form of sex- or gender-based discrimination or harassment, including sexual assault, sexual harassment, domestic or dating violence, or stalking, know that help and support are available. A&M-San Antonio has staff members trained to support survivors in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, and more. The university strongly encourages all students to report any such incidents to the university. Please be aware that all A&M-San Antonio employees (other than those designated as confidential resources such as counselors and other healthcare providers) are required to report information about such discrimination and harassment to the university. This means that if you tell a faculty member must share that information with the university's Title IX Coordinator. If you wish to speak to a confidential employee who does not have this reporting responsibility, you can contact the Student Counseling Center at (210) 784-1331, Modular C.

<u>Students' Rights and Responsibilities:</u> The purpose of the following statement is to enumerate the essential provisions of students' freedoms and responsibilities to learn at Texas A&M University-San Antonio. All students are required to follow all policies and regulations as set forth by The Texas A&M University System, including the A&M-San Antonio Student Code of Conduct.

Students' Rights

1. A student shall have the right to participate in a free exchange of ideas, and there shall be no university rule or procedure that in any way abridges the rights of freedom of speech, expression, petition, and peaceful assembly as set forth in the U.S. Constitution.

2. Each student shall have the right to participate in all areas and activities of the university, free from any form of discrimination, including harassment, on the basis of race, color, national or ethnic origin, religion, sex, disability, age, sexual orientation, gender identity, gender expression, genetic information, or veteran status in accordance with applicable federal and state laws.

3. A student has the right to personal privacy except as otherwise provided by law, and this will be observed by students and University authorities alike.

4. Each student subject to disciplinary action arising from violations of university student rules shall be assured a fundamentally fair process.

## Students' Responsibilities

1. A student has the responsibility to respect the rights and property of others, including other students, the faculty and staff, and the administration.

2. A student has the responsibility to be fully acquainted and compliant with the University Student Rules found in the Student Handbook, Student Code of Conduct, on our website, and in the University Catalog.

3. A student has the responsibility to recognize that student actions reflect upon the individuals involved and upon the entire University community.

4. A student has the responsibility to recognize the University's obligation to provide

a safe environment for learning.

5. A student has the responsibility to check their University email for any updates or official University notifications.

6. We expect that students will behave in a manner that is dignified, respectful, and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation, or disability. Behaviors that infringe on the rights of another individual will not be tolerated.

The complete academic calendar is available online: <u>https://www.tamusa.edu/provost/academic-calendar.html</u>

*Tentative* Schedule: Every effort will be made to keep with the following schedule.

\*All labs will meet <u>in-person</u> on campus in STEM 371 and count towards your "Attendance" points.\*

\*\*All pre-lab quizzes and assignments outlined in the Due Dates column count toward your final grade\*\*

Week	Lab Meeting Date <u>(Tuesdays)</u>	LAB TOPICS	Quiz/Assignment Due Dates *Note all due dates are <u>11:59PM</u> <u>PRIOR to your lab meeting day.*</u>
1	8/27	Lab Intro., Syllabus, Lab Safety, & Science: A Way of Knowing	Lab Safety Agreement (during lab) Scientific Method Assignment (Mon. 9/2)
2	9/3	Modeling Processes in Evolution	Pre-Lab Quiz 1 ( <b>Mon., 9/2</b> ) Evolution Lab Assignment ( <b>Mon., 9/9</b> )
3	9/10	Dealing with Diversity; Introduction to Classification (Dichotomous Keys)	Pre-Lab Quiz 2 (Mon., 9/9) Dichotomous Key Assignment (Mon., 9/16)
4	9/17	Simple Statistics & Introduction to Scientific Writing, the Proposal, and Animal Behavior Experiment	Pre-Lab Quiz 3 (Mon., 9/16) Statistics Handout / Proposal Planning Assignment & Annotated Bibliography (Mon., 9/23)
5	9/24	Population Ecology (Mark-Recapture Simulation)	Pre-Lab Quiz 4 (Mon., 9/23) Population Ecology Assignment (Mon., 9/30)
6	10/1	Community Ecology (Simpson's Diversity Index)	Pre-Lab Quiz 5 (Mon., 9/30) Proposal Due (Mon., 9/30) Community Ecology Assignment (Mon., 10/7)
7	10/8	Pollinator Ecology	Pre-Lab Quiz 6 (Mon., 10/7) Pollinator Assignment (Mon., 10/14) <i>Optional</i> Proposal Re-submission (Mon., 10/14)
8	10/15	Animal Behavior Experiment - Conduct	
9	10/22	<b>Presentations</b> on Animal Behavior Experiment	Copy of Presentation submitted via Blackboard (Mon. 10/21)
10	10/29	Animal Skull Diversity	Pre-Lab Quiz 7 (Mon., 10/28) Skull Assignment (Mon., 11/4)
11	11/5	Protist Diversity	Pre-Lab Quiz 8 (Mon., 11/4) Protist Diversity Assignment (Mon., 11/11)
12	11/12	Plant Diversity	Pre-Lab Quiz 9 (Mon., 11/11) Plant Assignment (Mon., 11/18)
13	11/19	Animal Diversity – Dissections *Lab Coat Mandatory*	Pre-Lab Quiz 10 (Mon., 11/18) Dissection Assignment (Mon. 11/25) Self/Peer Evaluation submitted via Blackboard (Mon., 11/25)
14	11/26	No Lab Meeting – Thanksgiving Week	
15	12/3	NO LAB – Study for your finals/finish projects/etc!	