

BIOL 4104 Seminar-Ecology Spring 2026 (1 credit)

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Hours 12:30-2:00 pm TR, 3:30-4:30 pm R

Course Meeting Time: SciTech 105 Thursday 3:30 - 4:20 pm

Course description: Student-led reviews of current scientific literature on various topics in biology with critical class analyses. Students will refine their ability to search, read, understand, discuss and critique the primary scientific literature, both orally and in written form. Prerequisite(s): BIOL 3402 and ENGL 2311 or ENGL 1302 must be completed first.

Course objectives: This course is designed as a writing intentional course in order to give students maximum opportunity to hone their scientific skills by accessing scientific research literature directly and communicating their understanding of these scientific articles in written and oral form. As such, class periods will include workshops aimed at improving scientific writing as well as student-driven discussion with my role as facilitator. For effective discussion, all students must come prepared for each class by reading the assigned article(s) in sufficient depth to participate knowledgeably. Attendance for the workshops and discussions is highly important and will be a portion of your grade. Active and thoughtful participation in both workshops and discussions is a key component for your grade in this course.

Attendance policy: Attendance is mandatory, and points will be assessed every class period. If you have a documented university excused absence, you will not be penalized for attendance, but you will still be responsible for make-up work.

Workshops: There will be 3 in-class workshops designed to teach aspects of the course required for performance assessment. Some workshops have out-of-class assignments associated with them (see below). However, the workshop must be attended to be eligible to submit a work assignment to reflect your learning of the workshop topic. These workshops cannot be made up.

Discussions: You will be responsible for leading one discussion based on one journal article you have selected. You will submit your first-choice article and two backup articles as pdfs, so that a ready alternate is available in cases of inappropriate first choices. The article will be posted on the course website a week prior to the discussion for your classmates in order to give them a week to

read it. You will lead the discussion for $\frac{1}{2}$ of the class period. Come to class with the materials you need for your discussion (e.g., flash drive, on your student drive, etc.).

Preparation for the discussion: You will submit annotations of each of the articles containing writing questions and comments prior to discussion. This annotation will prepare you for the discussion, and provide evidence of your preparation. If there are terms or other things you do not understand in the paper, be sure to look them up and include them in the annotation, but questions make the best preparation for discussion, and increase your performance score. You may annotate the paper by writing directly in the margins of the PDF, alternately you can write your annotations in a text file. **In your annotation include two questions or thoughtful comments you had about each article. A file containing your annotations must be submitted prior to the discussion.**

Relative contribution to the discussion: In recognition of potential learning by listening to the discussion, and providing an audience, you will earn 10 points for each pair of discussions that you attend and participate in (there are 2 discussions per class period) resulting in a total of 100 points. The other 90 points will be earned by thoughtfully participating 3 times during the discussions. This participation can include asking a good question or making a supportive or critical comment about the paper being discussed or mentioning outside material that adds to the discussion. I will be keeping a checklist each class period to keep track of your participation effort.

Journal Article Critiques: You will write three papers that analyze scientific journal articles. The workshops will provide instructions on how to write scientific critiques.

Grading:

Assignment	Points	Total Points
3 articles with short descriptions	$20 \text{ pts} \times 3$	60 pts
Pre-discussion annotations	$20 \text{ pts} \times 10$	200 pts
Pre-discussion questions	$20 \text{ pts} \times 10$	200 pts
Discussion attendance	$10 \text{ pt} \times 10$	100 pts
Contribution to discussion	$30 \text{ pts} \times 3$	90 pts
Written critique	$150 \text{ pts} \times 3$	450 pts
Discussion leader	$400 \text{ pts} \times 1$	400 pts
		1500 pts

Grades will be assigned at the end of the term based on the percentage of points earned, where 90% = A, 80% = B, 70% = C, and 60% = D.

Schedule:

Date	Class Activity	Items Due
Jan. 22	Syllabus	
Jan. 29	Searching for scholarly journal articles	
Feb. 5	WS 1: Reading and annotating articles	
Feb. 12	WS 2: How to write critiques	3 articles w/ brief description
Feb. 26	WS 3: Leading and contributing to discussions	
Mar. 5	Discussion 1 and 2	
Mar. 19	Discussion 3 and 4	
Mar. 26	Discussion 5 and 6	
Apr. 2	Discussion 7 and 8	Critique 1 (choice of articles 1-6)
Apr. 9	Discussion 9 and 10	
Apr. 16	Discussion 11 and 12	
Apr. 23	Discussion 13 and 14	Critique 2 (choice of articles 9-12)
Apr. 30	Discussion 15, 16 and 17	
Final Exam week	NO CLASS	Critique 3 (choice of articles 13-17)

IMPORTANT POLICIES AND RESOURCES

Use of Generative AI: Use of artificial intelligence (AI) tools, including (but not limited to) ChatGPT, is **NOT** permitted in this course. Using an AI tool to generate content without proper permission and attribution qualifies as academic dishonesty and violates Texas A&M-San Antonio's standards of academic integrity.

University Policies & Resources

Academic Accommodations for Persons with Disabilities: Texas A&M University-San Antonio is committed to providing all students with reasonable access to learning opportunities and accommodations in accordance with The Americans with Disabilities Act, as amended, and Section 504 of the Rehabilitation Act. If you experience barriers to your education due to a disability or think you may have a disability, please contact Disability Support Services in the Central Academic Building, Suite 210, or at (210) 784-1335 or visit <https://www.tamusa.edu/index.html> or email us

at dss@tamus.edu. Disabilities may include, but are not limited to, attentional, learning, mental health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability-related needs with Disability Support Services and their instructors as soon as possible.

Academic Learning Center: The Academic Learning Center provides free course-based tutoring to all currently enrolled students at Texas A&M University-San Antonio. Students wishing to work with a tutor can make appointments through the Brainfuse online tutoring platform. Brainfuse can be accessed in the Tools section of Blackboard. You can contact the Academic Learning Center by emailing tutoring@tamus.edu, calling (210) 784-1307, or visiting the Central Academic Building, room 202.

Counseling/Mental Health 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 are experiencing emotional difficulties or mental health concerns, support is available to you through the Student Counseling Center (SCC). To schedule an appointment call 210-784-1331 or visit Madla 120.

All mental health services provided by the SCC are free and confidential (as the law allows). The Student Counseling Center provides brief individual and group therapy, crisis intervention, consultation, case management, and prevention services.

Crisis support is available 24/7 by calling the SCC at 210-784-1331 (after-hours select option '2'). For more information and self-help resources, please visit www.tamus.edu/studentcounseling

Emergency Preparedness: JagE Alert is Texas A&M University-San Antonio's mass notification. In the event of an emergency, such as inclement weather, students, staff and faculty, who are registered, will have the option to receive a text message, email with instructions and updates. To register or update your information visit: <https://tamus.bbcportal.com/>.

More information about Emergency Operations Plan and the Emergency Action Plan can be found here: <https://www.tamus.edu/about-us/campus-information/safety/university-police-department/documents/emergency-operations-plan.pdf> and <https://www.tamus.edu/about-us/campus-information/safety/university-police-department/documents/emergency-action-plan.pdf>

Download the SafeZone App for emergencies or call (210) 784-1911. Non-Emergency (210) 784-1900

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.

Writing, Language, and Digital Composing Center: The Writing, Language, and Digital Composing Center supports graduate and undergraduate students in all three colleges as well as faculty and staff. Tutors work with students to develop reading skills, prepare oral presentations, and plan, draft, and revise their written assignments. Our language tutors support students enrolled in Spanish courses and students composing in Spanish for any assignment. Our digital studio tutors support students working on digital projects such as eportfolios, class presentations, or other digital multimedia projects. Students can schedule appointments through JagWire under the Student Services tab. Click on “Writing, Language, and Digital Composing Center” to make your appointment. The Center offers face-to-face, synchronous online, and asynchronous digital appointments. 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 <https://bit.ly/WLDCCenter>.

Meeting Basic Needs: 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. Furthermore, please notify the professor if you are comfortable in doing so. This will enable them to provide any resources they may possess.

Military Affairs: Veterans and active-duty military personnel are welcomed and encouraged to communicate, in advance if possible, and 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.va@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 the 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 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, gender expression, or pregnancy/parenting status. 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 providing 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's Title IX Coordinator can support those impacted by such conduct 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 Title IX Coordinator. Please be aware that all A&M-San Antonio employees (other than those designated as confidential resources such as counselors and trained victim advocates) are required to report

information about such discrimination and harassment to the university. This means that if you tell a faculty member about a situation of sexual harassment or sexual violence, or other related misconduct, the faculty member must share that information with the university's Title IX Coordinator (titleix@tamus.edu, 210-784-2061, CAB 439K). If you wish to speak to a confidential employee who does not have this reporting requirement, you can contact the Student Counseling Center at (210) 784-1331 or visit them in Madla 120.

Pregnant/Parenting Students: Texas A&M-San Antonio does not require a pregnant or parenting student, solely because of that status or issues related to that status, to (1) take a leave of absence or withdraw from their degree or certificate program; (2) limit the student's studies; (3) participate in an alternative program; (4) change the student's major, degree, or certificate program; or (5) refrain from joining or cease participating in any course, activity, or program at the University. The university will provide reasonable accommodations to pregnant students that would be provided to a student with a temporary medical condition and that are related to the health and safety of the student and the student's unborn child. These could include maintaining a safe distance from substances, areas, and activities known to be hazardous to pregnant individuals and their unborn child; excused absences because of illness or medical appointments; modified due dates for assignments; rescheduled tests/exams; taking a leave of absence; and being provided access to instructional materials and video recordings of lectures for excused absences, if these would be provided to any other student with an excused absence. Pregnant/parenting students are encouraged to contact the Title IX Coordinator with any questions or concerns related to their status (titleix@tamus.edu; 210-784-2061; CAB 439K).

Texas A&M-San Antonio has also designated the Title IX Coordinator as the liaison officer for current or incoming students who are the parent or guardian of a child younger than 18 years of age. The Title IX Coordinator can provide students with information regarding support services and other resources.

Students' Rights and Responsibilities: The following statement of students' rights and responsibilities is intended to reflect the philosophical base upon which University Student Rules are built. This philosophy acknowledges the existence of both rights and responsibilities, which is inherent to an individual not only as a student at Texas A&M University-San Antonio but also as a citizen of this country.

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 administrative rule 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, 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 administration.
2. A student has the responsibility to be fully acquainted with the published University Student Rules found in the Student Handbook, Student Code of Conduct, on our website, University Catalog and to comply with them, as well as federal, state, and local laws.
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 an environment for learning.
5. A student has the responsibility to check their university email for any updates or official university notification.

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.

Students are expected to exhibit a high level of honesty and integrity in their pursuit of higher education. Students engaging in an act that violates the standards of academic integrity will find

themselves facing academic and/or disciplinary sanctions. Academic misconduct is any act, or attempt, which gives an unfair advantage to the student. Additionally, any behavior specifically prohibited by a faculty member in the course syllabus or class discussion may be considered as academic misconduct. For more information on academic misconduct policies and procedures please review the Student Code of Conduct.