

BIOL 4101-Seminar in Integrative Biology-4 credits
Texas A&M University-San Antonio
Department of Natural Sciences
Spring 2024 Syllabus

Instructor: Dr. Davida Smyth

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Office hours (student help time/one-on-one time): T 12-1 pm

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Class Meeting Times and Location(s)

Lecture: T 11-11.50 am

Classroom Hall 307

As a writing intensive course, students will

- develop their scientific writing skills by completing summaries of articles
- complete peer-review assignments of each other's work.
- Improve their critical writing skills by critiquing articles
- generate an oral and slide presentation that highlights elements of a chosen article
- learn how to critique information, interpret data and results, and ask the right questions.

Catalog Description

Student-led reviews of current scientific literature and historic significance on topics in integrative 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 writing. Prerequisite(s): BIOL 3402 and ENGL 2311 or ENGL 1302 must be completed first.

Note: Modern Biology is an integrative discipline, incorporating elements of Mathematics, Chemistry, Computer Science, and Writing. We expect that you have at least a basic understanding of each of these elements.

Course Content:

This course is designed as a writing intentional course to give students maximum opportunity to hone their scientific skills by accessing the scientific research literature directly and communicating their understanding of these scientific articles in written form. As such, class periods will include workshops aimed at improving scientific writing as well as student-driven discussions 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.

Required Textbooks and Other Course Materials:

A computer with internet access. You will need to install Hypothes.is

Attendance Policy:

Synchronous attendance is mandatory, and points will be assessed every class period. Discuss unavoidable absences with Dr. Smyth before missing class.

Blackboard:

This class uses the learning management system (LMS) Blackboard to administer content and evaluate understanding. I will post links to lecture videos, notes, reading materials (other than your textbook), and digital supplements, and you will submit your work in this LMS.

Course Components:

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 an alternate article is available in cases of inappropriate first choices. The article will be posted on the course website a week before the discussion for your classmates to give them a week to read it. You will lead the discussion for ½ of the class period. The order of discussions will be randomly assigned using a random number generator.

Preparation for the Discussion: You will submit annotations of each of the articles containing written questions and comments before the discussion via Hypothes.is. This annotation will both 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 link to hypothes.is containing your annotations must be submitted before 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 guide you in how to write these.

Grading:

- Article Summaries: 20 points (3) = 60 points
- Pre-Discussion Annotations: 20 points (10) = 200 points
- Pre-Discussion Questions: 20 points (10) = 200 points
- Discussion Attendance: 10 points (10) = 100 points
- Contributions to Discussion: 30 points (3) = 90 points
- Written Critique: 150 points (3) = 450 points
- Discussion Leader: 400 points (1) = 400 points

Total: **1500 points**

Total number of points earned / 1500 = % grade. A = 90%+, B = 80%+, C =70%+, D =60%+, F < 60%

IMPORTANT POLICIES AND 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@tamusa.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@tamusa.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.tamusa.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://tamusa.bbcportal.com/>.

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

Option 3 – Broader Use of Generative AI Permitted Within Guidelines

Use of artificial intelligence (AI) tools, including ChatGPT, is permitted in this course for students who wish to use them. To adhere to our scholarly values, students must cite any AI-generated material that informed their work (this includes in-text citations and/or use of quotations, and in your reference list). Using an AI tool to generate content without proper attribution qualifies as academic dishonesty and violates Texas A&M-San Antonio's standards of academic integrity.

NOTE: Guidance for how to cite AI-generators, like ChatGPT, can be found here <https://apastyle.apa.org/blog/how-to-cite-chatgpt>

BIOL 4101 – Seminar (Topic: Integrative Biology)

Schedule

January 16th:	Syllabus – Searching for scholarly journal articles
January 23rd:	Workshop 1 – Reading and annotating articles
January 30th:	Workshop 2 – How to write critiques
Due:	3 chosen article with brief summaries
February 6th:	Workshop 3 – Leading and contributing to discussions
February 13th:	Discussions - A&B
February 20th:	Discussions - C&D
February 27th:	Discussions – E&F
March 5th:	Discussions – G&H
Due:	Critique 1 (From articles A-F)
March 19th:	Discussions – I&J
March 26th:	Discussions – K&L
April 2nd:	Discussions - M&N
Due:	Critique 2 (From articles G-L)
April 9th:	Discussions - O&P
April 16th:	Discussions – Q&R
April 23rd:	Discussions – S&T
Due:	Critique 3 (From articles M-T)

Important Dates:

January 16	First day of class
March 11-17	Spring Break – No classes
March 29	Study Day – No classes
April 13	Last day to drop with an automatic “W”
April 20	Last day to drop a course or withdraw from the University
April 29	Last day of classes
April 30	Study Day – No classes
May 1-7	Final exams

The complete academic calendar is available online:

<https://www.tamusa.edu/academics/academic-calendar/index.html>