



Graduate Thesis – 24199 - BIOL 5306 – 003
M-F: SciTech 364
Meeting Times: Variable

Course Description: This course enables dedicated hours for proposal writing and research activities, including written and oral communication, research design, field and/or lab work and data analyses, that will lead to a written thesis. The preparation and defense of a master's thesis is the culminating experience in the M.S. in Biology Program. Students are expected to work with a high level of self-motivation. Successful students exercise initiative and exhibit strong communication skills in working with their advisors and committee members. This course requires individual effort that is overseen by Thesis Advisor/Committee Chair. Weekly or bi-weekly meetings will be held to discuss progress and review submitted documents. Once the research, necessary analysis and/or results compilation are completed, the thesis proposal or thesis chapter(s) will be written and revised iteratively between the student and thesis advisor until the document(s) is/are ready for submission to the Thesis Committee. If the committee agrees, then research activities should commence / continue (e.g., with approved thesis proposal) or a thesis Defense will be held (Note: Thesis should be submitted to Committee no later than 2-3 weeks prior to proposed thesis defense date).

Prerequisites: Graduate status in MS Biology, thesis track, and establishment of graduate advisory committee.

Recommendation: To repeat this course (>3 CR), students should have an approved Thesis Proposal on record. Course may be repeated up to 3 times.

Required: Instructor Approval.

Course Objectives

- Identify different styles and qualities of writing, critically evaluate written work, and improve writing skills
- Conduct literature review to establish topic background, methods, and research objectives / questions / hypothesis.
- Design and execute research project that demonstrates critical thinking and use of knowledge and skills for biological data analyses, interpretation, and communication.
- Describe thesis research clearly and succinctly, in written and oral forms, to faculty, mentors, and potential sponsors.

Instructor Information:

Name: Liz Borda, Ph.D.
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Email address: eborda@tamusa.edu
Office hours: By appointment
Office location: SciTech 311P
Lab location: SciTech 364

COURSE POLICIES

Expectations: Personal and academic integrity, to be open to new ideas, and to share in a community where individuals from diverse backgrounds and cultures help one another grow intellectually, socially, and personally is always expected throughout the course. TAMUSA faculty and are here to help; however, students must take responsibility for their own learning. Students should strive for a high level of academic performance and to be responsible, respectful, contributing citizens within the university and in outside communities. Above all, students should develop a love of learning that will last a lifetime, along with a life-long interest in maintaining emotional and physical wellness.

Assessment: There are no formal assignments in this course. In consultation with your Thesis Advisor, students develop a personal work schedule with specified deliverables. Weekly or bi-weekly individual meetings will be held to discuss submitted deliverables and revise the work plan if needed. Completion of this course is determined when each member of the Thesis Committee approves the proposal and/or thesis. After thesis defense, Thesis Approval form is signed after successful completion of the oral defense and acceptance by each committee member of the thesis document.

Blackboard and Course Communication: All grades will be posted and accessible through the course's Blackboard site. Students must login regularly to both the Blackboard site and to their TAMUSA email account to keep updated on information or changes related to the class. Each student MUST have an active TAMUSA e-mail account. The preferred method of communication will always be e-mail or making an appointment (in person or virtually).

Course Schedule:

In consultation with the Thesis Advisor, the student will develop a work schedule for the course. There are three timeline options to follow in this course.

Option 1: Thesis Proposal Writing (and preliminary data collection/analyses)	
Date	Tasks
Week 1	Meet with advisor and prepare writing and work schedule.
Week 2–9	Write full thesis proposal draft via iterative sections submission to advisor for review. Collect preliminary data, if applicable.
Week 10	Prepare final revision of the thesis proposal draft.
Week 11	Submit proposal draft to committee.
Week 12-13	Proposal Defense.
Week 14	Final Revision and Thesis Proposal Approval Form signed.
Week 15–16	Submit Thesis Approval Form and Thesis Proposal to Graduate Studies Office (graduate.studies@tamusa.edu).

Option 2: Thesis Research (and thesis writing) if anticipated graduation is following semester. Required: Approved Thesis Proposal submitted.	
Date	Tasks
Week 1	Meet with advisor and prepare writing and research schedule.
Week 2–12	Begin / continue research activities. Prepare Thesis draft via iterative sections submission to advisor for review.
Week 13–14	Finalize data collection and analyses.
Week 15–16	Finalize Thesis draft (Introduction, Materials and Methods, Results, if applicable, Discussion, if applicable).

Option 3: Thesis Writing if anticipated graduation is same semester. Required: Approved Thesis Proposal submitted.	
Date	Tasks
Week 1	Meet with advisor and prepare writing and research schedule.
Week 2–5	Finalize data collection and analyses. Prepare Thesis draft via iterative section submission to advisor for review.
Week 6–7	Submit Thesis to Thesis Committee
Week 8–10	Defense (at least 2 weeks before Final Thesis Submission Deadline)
Week 9–11	Final Revisions
Week 10–12	Final Thesis Submission to Office of Graduate Studies Spring: April 1 , or first Monday in April (May Graduation) Fall: November 1 , or first Monday in November (December Graduation)
Week 13–15	Edits/Suggestions back to the student from Office of Graduate Studies Spring: April 25th , or following Monday if date falls on a Saturday Fall: November 22nd , or following Monday if date falls on a Saturday
Week 14–16	Final Draft (with all corrections made) due to the Office of Graduate Studies Spring: May 4th , or following Monday if date falls on a Saturday Fall December 1st , or first Monday in December
Week 15–17	Review Decision (accepted/not accepted) by Office of Graduate Studies Spring: May 11th , or following Monday if date falls on a Saturday Fall December 8th , or following Monday if date falls on a Saturday

IMPORTANT POLICIES AND RESOURCES

Academic Accommodations for Persons with Disabilities: The Americans with Disabilities Act Amendments Act (ADAAA) of 2008 and the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights protection for persons with disabilities. Title II of the ADAAA 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 accommodation of their disability. If you have a diagnosed 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 dssupport@tamusa.edu.

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.

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>

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 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 Modular C, Room 166 (Rear entrance).

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 Preparedness and the Emergency Response Guide can be found here: <https://www.tamusa.edu/uploadfile/folders/sdbowen23/pdf/pdf-635073426137928167-10.100.20.116.pdf>

Financial Aid and Verification of Attendance: 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.

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@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.

Respect for Diversity: We understand that our students represent diverse backgrounds and perspectives. When we are equity-minded, we are aware of differences and inequalities and are willing to discuss them so we can act to resolve them. The University is committed to building cultural competencies, or the attitudes, skills, and knowledge that enable individuals and organizations to acknowledge cultural differences and incorporate these differences in working with people from diverse cultures. Respecting and accepting people different than you is vital to your success in the class, on campus, and as a future professional in the global community. While working together to build this community we ask all members to:

- Share their unique experiences, values, and beliefs.
- Be open to the views of others.
- Honor the uniqueness of their colleagues.

- Value each other's opinions and communicate respectfully.
- Keep confidential discussions that the community has of a personal (or professional) nature.
- Use this opportunity together to discuss ways in which we can create an inclusive environment in this course and across the A&M-San Antonio community.

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 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 victims 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 responsibility, you can contact the Student Counseling Center at (210) 784-1331, Modular C.

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.

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>.

Important Academic Dates:

August 28	First day of class
November 10	Last day to drop with an automatic "W"
November 21	Last day to withdraw from the University
November 22	Study Day – No Classes
November 23-25	Thanksgiving Holiday
December 7	Last day of classes
December 8	Reading days
December 9-15	Final exams

The complete academic calendar is available online:

<https://catalog.tamusa.edu/undergraduate/academic-calendar/>