

Research Experience in Biology - BIOL 3104 – 501
M-F: STEM 364
Meeting Times: Variable

Course Description and Prerequisites: Research Experience in Biology is aimed at providing an introductory research experience in a biology faculty laboratory. Through this experience the student will gain an understanding of how research is conducted outside of a classroom and how the scientific method is actively applied in the specific discipline of the faculty research interests. Students will become part of the research team and will participate in laboratory or field activities as well as meetings/discussions. This course can be repeated for credit for a maximum of 2 credits, the second of which must be under a different faculty member and thus a different discipline in Biology. This course is recommended to be taken before BIOL 4304: Research Projects in Biology. Prerequisites: BIOL 1306, BIOL 1106, BIOL 1307, BIOL 1107. This course does not fulfill "Undergraduate Research".

Course Objectives:

- Practice Laboratory etiquette, protocols and techniques in biological research, as related to studying invertebrate evolution
- Gain laboratory experience, including DNA extraction and sequence data processing
- Exposure to phylogenetic/genomic approaches including data processing and analyses
- Develop critical thinking skills as prerequisites for practicing science.

Instructor Information:

Name	Liz Borda, Ph.D.
Telephone number	210-784-2811
Email address	eborda@tamusa.edu
Office hours	By appointment
Office location	STEM 311P
Lab location	STEM 364

Course Material:

All laboratory procedures, data collection and note taking are kept in manuals and designated notebooks in the lab and on lab computers. All equipment and project reagents are provided in the lab.

COURSE POLICIES

Instructor 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 expected at all times throughout the course. The faculty and staff of TAMUSA 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: Grades in this course will be based on assessments of student performance, participation and attendance, as evaluated by the faculty member. If you believe an error was made in grading please do not hesitate to bring it to my attention as soon as possible. If you find yourself struggling with this course, please talk to the instructor as soon as possible and **do not wait until the end of the semester**. You are always welcome to stop by my office or email me to make an appointment to discuss your concerns.

Grade Scale and Points Distribution

A = >899 B = 799 - 898 C = 699 - 798 D = 599 - 698 F = < 598

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. This will be the e-mail address that is used for any communication between you and your instructor. E-mail may be sent from student-to-student, or student-to-instructor using the e-mail feature in Blackboard's Communication area. Students who e-mail the instructor Monday-Thursday ordinarily can expect a response within 24 hours. Students who e-mail Friday-Sunday ordinarily can expect a response by Monday morning. The preferred method of communication will always be e-mail or making an appointment (in person or virtually).

Student Support and University Policies:

Please refer to **Important Policies and Resources** in separate document available on Blackboard (Syllabus tab), that provides detailed information on academic accommodations, tutoring and writing support, counseling and wellness resources, emergency preparedness, financial aid attendance requirements, student rights and responsibilities, diversity and inclusion expectations, military and religious accommodations, and other essential university policies and service