

LAB SYLLABUS

BIOL 4402/5402 Ichthyology Fall 2019

Instructor: Sean P. Graham, PhD **Email:** sean.graham@sulross.edu **Office phone:** 837-8084

Laboratory: M 3-4:50pm WSB 107

Office: WSB 221 **Office Hours:** T-Th 330-6pm, Fri 2-5pm

MC TA: Tomas Hernandez

Laboratory: Much of the material covered in lecture will be enhanced and expanded in the laboratory component of this course. You will be tested on this material during the scheduled exam periods. You need to **check Blackboard frequently to download and print any lab notes preceding each meeting.** Field trips are tentatively scheduled, and I encourage you to attend. Seeing fish in the field is not only enjoyable but will enhance your appreciation and understanding of the material being presented in lecture and laboratory. People who attend the field trips do better consistently on the exams and practicals. The finalized dates of field trips will be announced in class well ahead of time.

Supplies: field guide (optional, but would be a wise investment); field notebook (required); pencil or waterproof pen; snorkel and facemask; wet suit if you want to go all the way ; Fishing equipment and fishing license. We will go on a few field trips where the goal will be to catch fish and eat them.

Student Learning Outcomes:

The biology student graduating with a BS in Biology should be able to:

SLO1 demonstrate an understanding of basic biological concepts, including but not limited to evolution via natural selection, cell theory, and the role and function of DNA.

SLO2 demonstrate utilization of various field techniques toward addressing scientific questions in the specific discipline. These field techniques can include, but are not limited to, plant collection and processing, various animal collection techniques, ecological surveying and sampling, and biodiversity indexing.

SLO3 use biological instrumentation to solve biological problems using standard observational strategies.

SLO4 develop writing skills by summarizing and critiquing recent relevant biological literature.

Student Learning Outcomes (SLOs) for Biology (Graduate):

1. Understanding and implementation of scientific methodology.
2. Utilization of field techniques toward addressing scientific questions
3. Be able to utilize statistics toward the analysis of data within the discipline.
4. Be able to effectively disseminate scientific findings using both written and oral communication.

Lab Grading:

3 lab practicals @ 100 pts ea 300

Field Notebook/participation 50

Participation: Students must attend all labs and at least two field trips to receive good field notebook grade. I will not call roll but will note if you are absent. Participation means active engagement during labs—no sponging, whining, bad attitudes, antagonizing the teacher or other students, or asking to leave early. There will be no open labs so the best way to get the full lab experience is to finish your lab

and then go back and review older labs or the current lab material. These points are designed to be easy and to help your grade; if you show up to labs and have a good attitude you will receive all points.

TENTATIVE SCHEDULE WEEK	DAY / DATE	TOPIC
1 (Lab first week of class!)	Aug 26	Introduction: Fish external morphology
2	Sep 2 Labor Day No lab	
3	Sep 9	Lamprey dissection
4	Sep 16	Shark dissection
5	Sep 23	Major fish orders and U.S. fish families
Special Graduate Student Field Trip Sep 27-29 Big Bend National Park		
6	Sep 30	Lab Practical #1 Field Trip Balmorhea...return by 9pm
7	Oct 7	
8	Oct 14	Common Texas freshwater fish
9	Oct 21	Common Texas freshwater fish
Oct 18 Friday- Oct 20 Weekend field trip...Independence Creek		
10	Oct 28	Field Trip Ft Stockton...return by 9pm
Nov 1 Friday – Nov 3 Weekend Field trip....Devil’s River Canoeing		
11	Nov 4	Lab Practical #2
12	Veteran’s Day No Lab	
13	Nov 11 Nov 18	Trans Pecos fish species
22-24 Thanksgiving Hoilday		
14	Nov 25	Perch dissection

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Dec 2

Lab Practical #3 last day
of class for lab

Students with disabilities will be provided reasonable accommodations. If you would like to request such accommodations because of a physical, mental, or learning disability, please contact the ADA Coordinator for Program Accessibility at 837-8203, FH 112.