

BIOLOGY 4412 – SPRING 2022 - MWF @ 11:00 – Cav. 123

Date	Lecture Topic	Reading assignment
Jan. 19, 21 & 24	General Introduction, Salinity & Osmoregulation	Chapter 1 & 2, pp. 40-48, 72-75, 278-281
Jan. 26	Marine Habitats	pp.33-38, Chaps. 10, 11 & 12, pp. 225-226, 373-375
Jan. 28 – 31	Currents & Tides (in lab)	48-57, 256-258, 57-62
Feb. 2, 4 & 7	Phytoplankton, Algae & Sea Grasses	64-71, 85-97, 344-346, 373-375, Chap. 6
Feb. 9 – 11	Forams, Radiolarians & Sponges	97-99, 117-121
Feb. 18 – 23	Cnidaria & Ctenophora	121-125, Chap. 14
Feb. 25 (Fri.)	<b>FIRST HOUR EXAM</b>	
Feb. 28 – Mar. 11	Mollusca	130-137, 376
Mar. 14 – 18	<b>SPRING BREAK</b>	
Mar. 25 - 27	<b>FIELD TRIP TO SOUTH PADRE ISLAND (Tentative)</b>	
Mar. 28 - 30	Annelids	128-130
Apr. 1, 4 & 6	Crustaceans & other Marine Arthropods	137-143
Apr. 8 (Fri.)	<b>SECOND HOUR EXAM</b>	
Apr. 11 – 13	Echinoderms	141-145
Apr. 15 – 18	Hemichordata, Urochordata, Cephalochordata & Chaetognatha	148-149, 127-128
Apr. 20 -22	Marine Fishes	Chap. 8
Apr. 25 – 27	Marine Reptiles	179-184
Apr. 29 – May 2	Marine Birds & Mammals	184-213
May 4	Zooplankton	225-235, 347-350 357-371, 375-383
May 6	Marine Pollution Select Topic	Chapter 18
May 11 (Wed. 10:30 – 12:30)	<b>FINAL EXAM</b>	

Textbook: *Marine Biology* by P. Castro & M. E. Huber 11th Edition. The 9<sup>th</sup> edition is available on the Internet and will do fine for this course. There is no formal lab manual for this course.

## BIOLOGY 4412

Grading - Your grade in this course will be determined in the following manner. Each of the three hour exams is worth 25% of your final numerical average. The remainder of your grade will be determined by the average of your three laboratory exams. This lab average is also worth 25%. Your grade will be determined solely by these six exams. Your hospitalization is the only excuse for missing a scheduled lecture or laboratory exam. Students participating in off-campus University excused activities will be required to complete exams before departing the University campus. There is no additional make-up work that can be done to improve your final average. Excessive absenteeism will affect your final grade in this course and is discussed below.

Attendance - You are allowed three absences during the course of this semester. These three absences are considered excused (no questions asked). Each additional absence in excess of these three will be considered unexcused and will result in the loss of one point each from your final numerical average at the end of the semester. Example - 13 absences will result in the loss of a letter grade from your final average. Attendance is defined as being present when the roll is taken at the beginning of the class period. Students who are continually tardy to class will be considered absent and will consequently receive a lowering of their final average. The same rule applies to students who depart class without obtaining prior permission. Cell phones and beepers should be left at home or in the lab - do not bring them to class. Additionally, no food or drink is allowed to be consumed during the class period as this is distracting to other students. This class meets too close to the lunch hour for this to be permitted.

Field Trip - Due to the loss of dormitory space at the coast site and the rising cost of university van expenses, it is no longer possible to take all members of the class on the collecting trip to the Gulf of Mexico. Current travel space will accommodate only eight students on the field trip. Those eight students with the highest lecture and laboratory averages on the first exams will be eligible to participate in the field trip. Should an eligible student not be able to go on the field trip, then the person with the next highest average (#9) will be allowed to attend. A student with a high average will not be allowed to give his or her "spot" to another student. Excess absenteeism will be factored into those student averages wishing to attend the field trip. In the case of a "numerical tie" between two students, the selection will be decided by a coin toss. Participation in this field trip will add five points to your final lab average. Students participating in the field trip will, however, be required to make collections of 20 species of common mollusk shells and 10 species of algal herbarium mounts. These collections will be turned in, graded, and returned to you. Failure to properly make these collections will result in the loss of a letter grade from the student's final average.

Angelo State University expects its students to maintain complete honesty and integrity in their academic pursuits. Students are responsible for understanding the Academic Honor Code, which is contained in both print and web versions of the Student Handbook. Persons with disabilities which may warrant academic accommodations must contact the Student Life Office, Room 112 University Center, in order to request such accommodations prior to any accommodations being implemented. You are encouraged to make this request early in the semester so that appropriate arrangement can be made. Religious holidays will be observed in accordance with OP 10.19.

**Information About COVID-19** - Please refer to ASU's [COVID-19 \(Coronavirus\) Updates](#) web page for current information about campus guidelines and safety standards as they relate to the COVID-19 pandemic.

## **BIOLOGY 4412 - BIOLOGICAL OCEANOGRAPHY**

### **LABORATORY SCHEDULE – THURSDAY 2:00 –5:00 - CAV. 110**

#### **SPRING - 2022**

- Jan. 20 - Microscope use & misuse
- Jan. 27 - Tide Exercise & Salinity Determination
- Feb. 3 - Phytoplankton, Algae & Sea Grasses
- Feb. 10 - Forams, Radiolarians & Sponges
- Feb. 17 - Cnidaria & Ctenophora
- Feb. 24 - **FIRST LAB PRACTICAL**
- Mar. 3 - Mollusca
- Mar. 10 - Marine Aquariums
- Mar. 17 - **SPRING BREAK**
- Mar. 24 - Mollusca (Cont.)
- Mar. 25 - **FIELD TRIP TO SOUTH PADRE ISLAND - DEPART FRIDAY &  
RETURN LATE SUNDAY**
- Mar. 31 - Annelids & Crustaceans
- Apr. 7 - **SECOND LAB PRACTICAL**
- Apr. 14 - Echinoderms
- Apr. 21 - Chordates
- Apr. 28 - Zooplankton
- May 5 - **FINAL LAB PRACTICAL**

#### **LECTURE EXAM SCHEDULE**

- Feb. 25 (Friday) - FIRST HOUR EXAM
- Apr. 8 (Friday) - SECOND HOUR EXAM
- May 11 (Wed.) - FINAL EXAM (1:00 to 3:00)

**Student Learning Outcomes** – Students are expected to acquire both a knowledge and understanding of the physical, chemical, and biological characteristics of the marine environment. Special emphasis will be given to the marine and estuarine environments of the western Gulf of Mexico.