DAKOTA COLLEGE at BOTTINEAU

Course Outline

GENERAL ZOOLOGY LABORATORY-BIOLOGY 170

Number of credits: 1.0 unit

COURSE DESCRIPTION: An opportunity to learn hands-on experience about the diversity of life by becoming acquainted with the principal groups of animals and to recognize the unique anatomical features that characterize each group as well as the patterns that link animal groups to each other. Lab work includes macroscopic (some microscopic) study and dissection.

INSTRUCTOR: Elma Severson

OFFICE: NSC 108

OFFICE HOURS: By appointment

OFFICE PHONE: 701-228-5467

E-MAIL: elma.severson@dakotacollege.edu

LECTURE: 11:00-11:50 am on MWF in NSC 104 by A. Aufforth

LAB: 1-00-2:50 pm on Tuesdays in NSC 128

LAB MANUAL: General Zoology Laboratory Guide by C. Lytle and J. Meyer 15th ed.

GRADING: Grading is based on a standard college curve, where students earn a grade based on the percent of the total points possible they obtain. The laboratory component of this course consists of a100 points (four lab exams @ 20 points each, 10 points for lab reports and 10 points for participation.) There is a one week grace period to make up for any missed lab or lab exam. Any missed lab exam not made up within the allotted time will bee given a zero. (Note: It is the responsibility of the student to schedule make-up labs and lab exams with the instructor at a time convenient to both parties.)
Letter grades are assigned based on the following criteria:

A= 90-100% of the total points
B= 80-89% of the total points
C= 70-79% of the total points
D= 60-69% of the total points
E= <60% of the total points

ZOOLOGY LABORATORY SCHEDULE
FALL 2011

August 30- Orientation (Go over lab schedule/exam schedule)

Sept. 6- Mollusks
= Objectives 2-3-4
= Clam dissection
= Identify the principal internal organs.
= Explain the pattern of water flow through the clam.
= Explain the reproductive and life cycles of the clam.

Sept. 13- Arthropods (2 labs)
= Objectives 2-3-4-5-7
= 1st Lab Identify the external features of the horseshoe crab.
= Identify the external features of the crayfish.
= Identify the external features of the spider.

Sept. 20- Arthropods
= Objectives 13-14
2nd Lab Class= Insecta (insects)
= Identify the external features of the grasshopper.
= Identify specific types of antennae and wings.

Sept. 27- First Lab Practical Exam

Oct. 4- Echinoderms
= Objectives 3-4-5
= Identify the external features of a starfish.
Identify the parts of the digestive tract.
= Identify the parts of the water vascular system.

Oct.11 - Amphibians
Objectives 2-3-4-7
= Identify the major divisions of the frog skeleton.
= Identify the principal parts of the digestive system.
= Identify the basic pattern of blood circulation and the major blood vessels.

Oct. 18& 25 No class

Nov. 1- Second Lab Practical Exam (Echinoderms & Amphibians)

Nov.8 - Class Aves (Birds)

= Identify major skeletal bones.
= Identify major flight muscles.
= Identify the major parts of the digestive tract.
= Dissect owl “pellets” and identify the mammalian parts found.

Nov. 15- Shark Anatomy

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= Identify the principal external features of a shark.
= Identify the parts of the digestive system.
= Identify the male and female reproductive systems.
= Identify the parts of the heart & the function of each.

Nov. 22- Third Lab Practical Exam = (Birds & Sharks)

Nov. 29- Fetal Pig Anatomy (2 labs)

= 1st Lab – Objectives 1-3-5
= Identify the principal external features.
= Locate five major skeletal muscles and explain their origins, insertions and actions.
= Locate and identify the organs of the digestive system.

Dec. 6-Fetal Pig Anatomy

= 2nd Lab-Objectives 7-9-10
= Locate the main arteries and veins on a dissected specimen.
= Identify the 5 divisions of the brain.
= Review for Final Exam

Dec. 13- Final Lab Practical Exam