

Comparative Vertebrate Anatomy ±BIOL 4300  
Fall Semester 2017  
CRN ±82099  
Instructor - Dr. J. Mitchell Lockhart  
Office ±Biology/Chemistry Building, Rm. 2029  
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Office Hours: As posted or by appointment

The final grade will be a combination of your lecture exam score, laboratory exam score, final exam score, and dissection project

Lecture Exam 1, 2, and 3	40% (each worth equal)
Lab Exam 1, 2, 3	30% (each worth equal)
Dissection Project	15%
Comprehensive Final Exam	15%

Grade Scale: 90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, <60 = F

Privacy Act: Because of the Buckley Amendment or Privacy Act, grades will not be discussed over the phone, given to friends, or given to relatives. Final grades will be posted, only at your request, under an anonymous 6 digit number which you choose later in the semester.

Cheating: Refer to the Student Code of Ethics in the Valdosta State University Student Handbook. A student caught cheating will be penalized ranging from receiving a zero for that assignment or test to failing the class.

Important Dates: Midterm - October 5 / Final Exam - Thursday Dec 7, 8:00AM - 10:00 AM

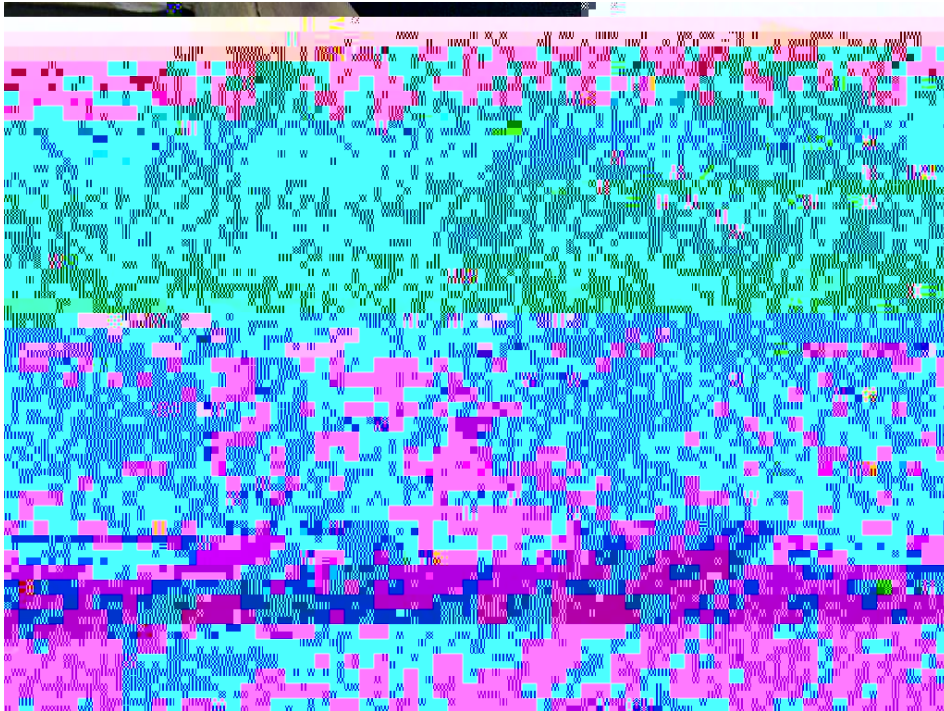
\* The Instructor reserves the right to modify the above contents with proper notification.

## DISSECTION ASSIGNMENT

You will work in groups of two, with the partner you have in lab, to prepare a powerpoint chronology of the dissections you are performing. This will stimulate you to do excellent, meticulous dissections in the laboratory. I want each group to take digital photographs of their dissections, import them into powerpoint, and label all parts that you are required to learn in the laboratory. Label anatomical parts clearly within powerpoint with either NUMBERS or LETTERS. Then on the following powerpoint slide, provide a key for the previous photograph.

You are not required to do this for the lamprey (it will be a bonus point opportunity) but I do want photographs of the mudpuppy, shark, and cat. Your laboratory guide gives you an EXCELLENT reference and should you come anywhere close to the quality found in the lab guide, you will do well on the project.

This project will be due on Monday, December 4 at NOON. You will turn in a CD or jump drive copy of your project that I CAN OPEN on my computer.



Course Outcomes:

Course:

By the end of BIOL 4300 students who successfully complete the course should have

1. Gained factual knowledge, to include anatomy and physiological terminology, methods, and principles, about Comparative Vertebrate Anatomy. (DO ±2,3,5; VSUGEO±5)
2. Learned fundamental principles, generalizations and theories of Comparative Vertebrate Anatomy. (DO ±2,3,5; VSUGEO±5)
3. Learned to apply course material (to improve thinking, problem solving, and decisions) in Comparative Vertebrate Anatomy. (DO ±2,3,5; VSUGEO±5)
4. Developed specific skills, competencies and points of view needed by professional in the fields most closely related to Comparative Vertebrate Anatomy. (DO ±2,3,5; VSUGEO±5)
5. Acquired an interest in learning more by asking questions and seeking answers about Comparative Vertebrate Anatomy. (DO ±2,3,5; VSUGEO±5)

Department:

1. Develop and test hypotheses, collect and analyze data, and present the results and conclusions in both written and oral formats used in peer-reviewed journals and at scientific meetings.
2. Describe the evolutionary processes responsible for biological diversity, explain the phylogenetic relationships among the major taxa of life, and provide illustrative examples.
3. Demonstrate an understanding of the cellular basis of life.
4. Relate the structure and the function of DNA/RNA to the development of form and function of the organism. (DO ±2,3,5; VSUGEO±5)

1. Students will demonstrate understanding of the society of the United States and its ideals They will possess the requisite knowledge of the society of the United States, its ideals, and its functions to enable them to become informed and responsible citizens. They will understand the connections between the individual and society and the roles of social institutions. They will understand the structure and operational principles of the United States government and economic system. They will understand United States history and both the historical and present role of the United States in the world.
2. Students will demonstrate cross-cultural perspectives and knowledge of other societies They will possess sufficient knowledge of various aspects of another culture, including the language, social and religious customs, aesthetic expression, geography, and intellectual and political history, enable them to interact with individuals within that society from an informed perspective. They will possess an international viewpoint that will allow them to examine critically the culture of their own nation and to participate in global society.
3. Students will use computer and information technology when appropriate They will demonstrate knowledge of computer concepts and terminology. They will possess basic working knowledge of a computer operating system. They will be able to use at least two software tools, such as word processors, spreadsheets, database management systems. will po4(cr)-52ff\* EMC /P <</MCID 486 will allow th

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Tentative Lecture Outline - This is the order in which we will cover topics.

TOPIC

Nature of Vertebrate Morphology/Introduction

Origin and Classification of Vertebrates/Early Chordates

Fishes

Tetrapods

Development/Embryology

Integument and Derivatives

Coelom and Mesenteries

Head Skeleton

Teeth

