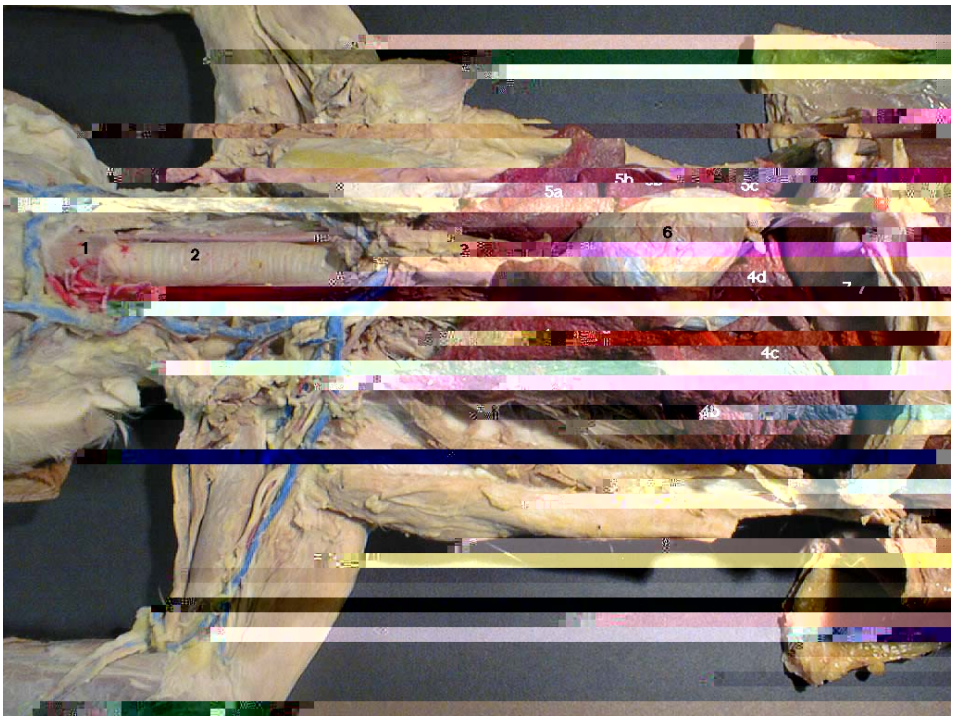
Comparative Vertebrate Anatomy – BIOL 4300
Spring Semester, 2019
CRN – 23622 (section A), 23623 (section B)
Instructor - Dr. J. Mitchell Lockhart
Office – Biology/Chemistry Building, Rm. 2029
Phone: 333-5767 / 333-5759
Email: jmlockha@valdosta.edu
Office Hours: As posted or by appointment
Course hours: Lecture – Tuesday and Thursday, 9:30 AM – 10:45 AM, BCB 1024
Laboratory – Section A - Monday, 11:00 AM – 1:50 PM, BCB 1085
Section B – Wednesday, 10:00 AM – 12:50 PM, BCB 1085
Textbook - Kent and Carr, Comparative Anatomy of the Vertebrates, Ninth Edition, (**Suggested**)
Laboratory Textbook - Fishbeck and Sebastiani, Comparative Anatomy – Manual of Vertebrate Dissection (Third Edition) (**Required**)
Dissection Kit (**Required**)
Specimens (**PROVIDED**)
Course Objectives: As stated in your handbook, this course involves an anatomical and phylogenetic survey of representative vertebrate animals. We will cover objectives in more depth during the first few lectures.
Attendance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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, or 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 and to heredity.

5. Interpret ecological data pertaining to the behavior of the individual organism in its natural environment; to the structure and function of populations, communities, and ecosystems; and to human impacts on these systems and the environment.

Valdosta State University General Education Outcomes:

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, to 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, or statistical packages.

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Spring Semester, 2019
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Tentative Lecture Outline - This is the order in which we will cover topics.

TOPIC

Lecture Exams:

1 – February 19
2 – March 28
3 – May 2
Final Exam – Thur, May 9
8:00 AM – 10:00 AM

Tentative Lab Schedule - This is the order in which we will cover topics.

	Week of	TOPIC
1	January 14	