

**SYLLABUS**  
**BIOLOGY 276 – COMPARATIVE VERTEBRATE ANATOMY**  
**A.K.A. “EVOLUTION OF VERTEBRATE LIFE”**

**Fall 2009 Course Information:**

The *official* course description: A “*history*” of the human body with emphasis on evolutionary history of vertebrates and anatomical evolution of organ systems.

What this course is really about: A study of the anatomical and embryological attributes of vertebrates in the context of evolution. The first quarter of the course will focus on the origin of vertebrates, the phylogenetic relationships of major vertebrate taxa, and the anatomy and ontogeny of “typical” vertebrates. In the remaining  $\frac{3}{4}$  of the course, the development and anatomy of select body systems will be examined and interpreted in terms of their phylogeny and functional adaptations.

**Lecture:** Tuesday & Thursday @ 2-3:15pm in Bingham Hall 103

**Laboratory:** NOT a co-requisite: 9am or 6:30, Tuesday or Wednesday in Wilson Hall 112.

**Prerequisites:** BIOL 101 & 101L.

**Also useful:** BIOL 252. Having taken 252 will make life a lot easier. Or, taking this course will make 252 easier. I don't recommend any particular order should you desire to take both courses.

**About your Instructor:**

Dr. Corey Johnson ([johnsonc@med.unc.edu](mailto:johnsonc@med.unc.edu)).

Feel free to contact me by email. I'm difficult to reach by phone. I am 100% committed to being available to answer questions or explain difficult material. If you need help in understanding anything, please stop by my office for help. My office hours will be from 1-3pm Mondays and Fridays in Wilson 104A. I will meet anytime outside of those hours (by appointment) for those who cannot make it during regular office hours.

**Textbook:**

*Vertebrates: Comparative Anatomy, Function, Evolution, 5th edition.* Kardong ISBN: 9780073040585. An online version of the 5th edition is available at [www.coursesmart.com](http://www.coursesmart.com). The 4nd edition can still be found if your budget is tight. Not required, but highly recommended.

**Philosophy of grading:**

I believe strongly in offering a difficult course that challenges the student. The student who receives an A will have mastery of the subject matter. The testing for this course will be based on the lectures. The most successful students always read and study the text.

**Grading policy and other information:**

Outside of lecture, I will make any important information known through the ‘announcements’ section of Blackboard. Grades will be posted to blackboard as soon as they are available after exams. Your grade for this course will be determined by 4 non-cumulative exams.

**Exams (3):** Each exam will be 1/3 of your final grade.

**Grading scale:**

93-100	A	87-89	B+	77-79	C+	67-69	D+
90-92	A-	83-86	B	73-76	C	60-66	D
		80-82	B-	70-72	C-		

**LECTURE SCHEDULE**  
**BIOLOGY 276 – COMPARATIVE VERTEBRATE ANATOMY**

<b>DATE</b>	<b>TOPICS</b>
T Aug 25	Intro, History, Major Concepts
R Aug 27	Chordates
T Sept 1	Fish
R Sept 3	Tetrapods
T Sept 8	Comparative Embryology
R Sept 10	Embryology II
T Sept 15	Teeth
R Sept 17	Bone Development, Histology, Evolution*
T Sept 22	<b>Exam I</b>
R Sept 24	Integument
T Sept 29	The Cranial Skeleton
R Oct 1	Cranial skeleton II: Feeding Mechanisms
T Oct 6	Axial Skeleton
R Oct 8	Appendicular Skeleton
T Oct 13	Muscular System I
R Oct 15	Muscular System II
T Oct 20	<b>No class; Lab Exam (Section 404; Wed @6:30)</b>
R Oct 22	<b>FALL BREAK</b>
T Oct 27	Circulatory System
R Oct 29	Respiratory System
T Nov 3	<b>Exam II</b>
R Nov 5	Digestive System
T Nov 10	Urinary System
R Nov 12	Reproductive System I
T Nov 17	Reproductive System II
R Nov 19	Nervous System
T Nov 24	Nervous System
R Nov 26	<b>THANKSGIVING BREAK</b>
T Dec 1	Sensory Organs
R Dec 3	Sensory Organs
T Dec 8	<b>FINAL EXAM</b>