



## **ZOOLOGY 430 - COMPARATIVE ANATOMY OF THE VERTEBRATES**

**Credits: 5**

**Course URL:** <https://canvas.wisc.edu/courses/118460>

### **Course Designations and Attributes**

Biological Science. Counts toward the Natural Science requirement.  
Counts as Liberal Arts and Science credit in L&S. Intermediate.

### **Meeting Time and Location:**

Lecture: T/Th 4:00-5:15 in Psychology 103

Lab: T/TH 8:50-11:50 or T/Th 12:30-3:30 in Noland Hall 321

### **Instructional Mode**

Face to face instruction in lecture and laboratory settings.

45 Hours Per Credit – One credit is the learning that takes place in at least 45 hours of learning activities, which include time in lectures or class meetings, in person or online, labs, exams, presentations, tutorials, reading, writing, studying, preparation for any of these activities, and any other learning activities.

## **INSTRUCTORS AND TEACHING ASSISTANTS**

**Instructor:** Scott Hartman

### **Availability**

Office hours are Wednesday 2-4 in Noland Hall 314, and by appointment.

**Email:** [sahartman@wisc.edu](mailto:sahartman@wisc.edu)

### **Teaching Assistants:**

Jacki Whisenant ([whisenant@wisc.edu](mailto:whisenant@wisc.edu)) - Available in lab Sun 5-7, Wed 6-8, and by appointment

Aaron Kufner ([akufner@wisc.edu](mailto:akufner@wisc.edu)) - Available in lab Monday 2-4

## **OFFICIAL COURSE DESCRIPTION**

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Basic vertebrate anatomical systems and a consideration of variations, using functional embryological and evolutionary approaches. Lab dissection and study of representative vertebrate material.

### **Requisites**

Introductory course in zoology (e.g. ZOO 151/152 or ZOO 101.102).

## LEARNING OUTCOMES

- Recall anatomical terms and orientations, and differentiate between terminologies used by medical and biological fields.
- Identify anatomical features in a broad range of vertebrates.
- Demonstrate competency of finding and dissecting out requested anatomical features in a laboratory setting.
- Connect the historical role of phylogeny in shaping functional anatomy in living vertebrates.
- Develop increased comfort reading and summarizing relevant scientific articles.
- Evaluate scientific claims for evidentiary status and potential bias.

## GRADING

Course Grading Scale	90-100% = A	78-79.99% = BC
	88-89.99% = AB	70-77.99% = C
	80-87.99% = B	60-69.99% = D

Grades are not based on a curve. Attendance mandatory. Lab and lecture components each count for 50% of the final grade. There are 600 possible points lecture, divided as follows:

Exam 1: 133 points

Exam 2: 133 points

Exam 3: 134 points

Written assignments: 200 points (roughly 10 points each)

## LABORATORY: GRADE WEIGHTING & DUE DATES

Sept 27: Lab Exam I - A: Skeletology (25 pts)

Oct 4: Lecture Exam I (150 pts)

Oct 9: Lab Exam I - B: Skeletology (75 pts)

Oct 29: Muscle Dissection Complete for grading (50 pts)

Oct 30: Lab Exam II: Muscle (100 pts)

Nov 1: Lecture Exam II (150 pts) Lecture responses due!

Nov 19: Circulatory Dissection Complete for grading (50 pts)

Nov 20: Lab Exam III: Circulatory System (100 pts)

Dec 11: Lecture Exam III (150 pts)

Dec 5 OR Dec 16: Nervous System Digestive/Urogenital Dissection Complete (50 pts)

Dec 6 OR Dec 17: Nervous/Digestive/Urogenital Exam 4 (100 pts)

## REQUIRED COURSE MATERIALS

- No required textbook - electronic reading material for lecture will be posted on the course website under Files->Readings.
- A CVA lab manual is required and may be purchased in the first week of lab.
- A dissection kit including forceps, scissors, needle probe and blunt probe, available at the University Bookstore.

## LECTURE EXAMS

Exam 1 - October 4th

Exam 2 - November 1st

Exam 3 - December 11th

All exams are in-class, and non-cumulative (though some concepts build upon earlier topics). They are closed-book and closed-note, with no access to electronic devices. Make up dates and alternative test times are scheduled after in-class exams according to student/instructor availability.

## HOMEWORK & OTHER ASSIGNMENTS

- 12 complimentary scientific articles are assigned (in non-exam weeks). Students summarize the main points and provide insight (questions, objection, personal relevance, etc.) and turn in their summaries online. One half to 2 pages in length.
- ~8 in-class and/or short-writing assignments. These range from feedback, to conceptual application, and concept-mapping. Under a page in length. Turned in online

All written assignments will be turned in on the course website, either in doc/docx format, or entered into an online text editor as specified at the time of assignment. Reading summaries may be turned in late for partial credit with instructor approval *prior to them being due*, with a 10% per day penalty up to 3 days. In-class assignments are designed to be done within the time provided and cannot be turned in late, except for excused absences.

## OTHER COURSE INFORMATION

Honors credit can be provided with additional lab and writing assignments. Contact instructor for approval prior to signing up.

## RULES, RIGHTS & RESPONSIBILITIES

See the Guide's to [Rules, Rights and Responsibilities](#)

## ACADEMIC INTEGRITY

By enrolling in this course, each student assumes the responsibilities of an active participant in UW-Madison's community of scholars in which everyone's academic work and behavior are held to the highest academic integrity standards. Academic misconduct compromises the integrity of the university. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these acts are examples of academic misconduct, which can result in disciplinary action. This includes but is not limited to failure on the assignment/course, disciplinary probation, or suspension. Substantial or repeated cases of misconduct will be forwarded to the Office of Student Conduct & Community Standards for additional review. For more information, refer to [studentconduct.wiscweb.wisc.edu/academic-integrity/](http://studentconduct.wiscweb.wisc.edu/academic-integrity/).

## **ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES**

**McBurney Disability Resource Center syllabus statement:** "The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities is a shared faculty and student responsibility. Students are expected to inform faculty [me] of their need for instructional accommodations by the end of the third week of the semester, or as soon as possible after a disability has been incurred or recognized. Faculty [I], will work either directly with the student [you] or in coordination with the McBurney Center to identify and provide reasonable instructional accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA." <http://mcburney.wisc.edu/facstaffother/faculty/syllabus.php>

## **DIVERSITY & INCLUSION**

**Institutional statement on diversity:** "Diversity is a source of strength, creativity, and innovation for UW-Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals.

The University of Wisconsin-Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background – people who as students, faculty, and staff serve Wisconsin and the world." <https://diversity.wisc.edu/>