



UNIVERSITY OF CALGARY
FACULTY OF SCIENCE
DEPARTMENT OF BIOLOGICAL SCIENCES
COURSE OUTLINE

1. **Course:** ZOOL 403, An Introduction to Vertebrate Zoology -- Fall 2018

Instructor Name	Email	Phone	Office	Hours
<i>L01:</i> (MWF 10:00 - 10:50 in ENG 224)				
Jessica Theodor	jtheodor@ucalgary.ca	403 210-9819	BI 353	W 11 am - 1 pm, or by appointment

Lab sections: Lab is held in BI 044. Lab coats are required.

B01 - Tu 9 AM - 11:50 AM

B02 - Tu 12 PM - 2:50 PM

B03 - Th 9 AM - 11:50 AM

B04 - Th 12 PM - 2:50 PM

Course Site:

D2L: ZOOL 403 L01-(Fall 2018)-Intro Vertebrate Zoology

Department of Biological Sciences:

Office: BIO 186
Phone: 403 220-3140
Email: biosci@ucalgary.ca

Note:

Students must use their U of C account for all course correspondence.

2. **Requisites:**

See section [3.5.C](#) in the Faculty of Science section of the online Calendar.

Prerequisite(s): Biology 371 or 233.

Antirequisite(s): Credit for Zoology 379 or 403 and either Zoology 477.01 or 477.02 will not be allowed. Also known as: (formerly Zoology 379)

3. **Grading:**

The University policy on grading and related matters is described in [F.1](#) and [F.2](#) of the online University Calendar. In determining the overall grade in the course the following weights will be used:

Component(s)	Weighting %	Date
Surveys	3%	posted on D2L
Midterm Lecture Exam - In Class	20%	October 19
Midterm Laboratory exam - In Lab	10%	October 23/25
Lab assignments	20%	in lab
Quizzes (on D2L)	7%	posted on D2L
Final Laboratory exam (Registrar scheduled)	15%	TBA
Final Lecture exam (Registrar scheduled)	25%	TBA

Note: Letter grades are not determined for any individual component but the table may be used to give you an approximate sense of your standing during the term.

* There will be a final exam and a final laboratory exam scheduled by the Registrar's office

Passing grades in both the lab and lecture components are essential if the student is to pass the course as a whole.

Each piece of work (reports, assignments, quizzes, midterm exam(s) or final examination) submitted by the student will be assigned a grade. The student's grade for each component listed above will be combined with the indicated weights to produce an overall percentage for the course, which will be used to determine the course letter grade.

The conversion between a percentage grade and letter grade is as follows.

	A+	A	A-	B+	B	B-	C+	C	C-	D+	D
Minimum % Required	90 %	85 %	80 %	77%	73%	70 %	67 %	63%	60%	55 %	50 %

This course has a registrar scheduled final exam.

4. Missed Components of Term Work:

The regulations of the Faculty of Science pertaining to this matter are found in the Faculty of Science area of the Calendar in [Section 3.6](#). It is the student's responsibility to familiarize himself/herself/themself with these regulations. See also [Section E.3](#) of the University Calendar.

5. Scheduled out-of-class activities:

There are no scheduled out of class activities for this course.

6. Course Materials:

Required Textbook(s):

Pough, F. H. and C. M. Janis, *Vertebrate Life, 10th edition*: Sinauer Associates .

Lab handouts are available on the course D2L site for each week.

7. Examination Policy:

No aids are allowed on tests or examinations.

Students should also read the Calendar, [Section G](#), on Examinations.

8. Approved Mandatory and Optional Course Supplemental Fees:

There are no mandatory or optional course supplemental fees for this course.

9. Writing across the Curriculum Statement:

For all components of the course, in any written work, the quality of the student's writing (language, spelling, grammar, presentation etc.) can be a factor in the evaluation of the work. See also [Section E.2](#) of the University Calendar.

10. Human & living organism studies statements:

If you agree, your course work may be used for research purposes. Your responses will remain anonymous and confidential. Grouped data (no individual responses) may be used in academic presentations and publications. Participation in such research is voluntary and will not influence grades in this course. Students' signed consent forms will be withheld from instructors until after final grades are submitted. More information will be provided at the time student participation is requested.

See also [Section E.5](#) of the University Calendar.

Surveys

There will be surveys announced throughout the course that will be available on D2L. These surveys will be marked for completion only. These surveys are designed to improve instruction in this course and your effort on these surveys is important. You are asked to not use outside resources when completing these surveys. To ensure use of the survey information, there will not be opportunities for late submissions once each survey has closed.

STUDIES IN THE BIOLOGICAL SCIENCES INVOLVE THE USE OF LIVING AND DEAD ORGANISMS. Students taking laboratory- and field-based courses in these disciplines can expect involvement with and experimentation on such materials. Students perform dissections on dead or preserved organisms in some courses. In particular courses, students experiment on living organisms, their tissues, cells, or molecules. Sometimes field work requires students to collect a variety of living materials by many methods, including humane trapping.

All work on humans and other animals conforms to the Helsinki Declaration and to the regulations of the Canadian Council on Animal Care. The Department strives for the highest ethical standards consistent with stewardship of the environment for organisms whose use is not governed by statutory authority. Individuals contemplating taking courses or majoring in one of the fields of study offered by the Department of Biological Sciences should ensure that they have fully considered these issues before enrolling. Students are advised to discuss any concern they might have with the Undergraduate Program Director of the Department.

Students are expected to be familiar with [Section SC.4.1](#) of the University Calendar.

11. Reappraisal of Grades:

A student wishing a reappraisal, should first attempt to review the graded work with the Course coordinator/instructor or department offering the course. Students with sufficient academic grounds may request a reappraisal. Non-academic grounds are not relevant for grade reappraisals. Students should be aware that the grade being reappraised may be raised, lowered or remain the same. See [Section I.3](#) of the University Calendar.

- 1. Term Work:** The student should present their rationale as effectively and as fully as possible to the Course coordinator/instructor within **15 days** of either being notified about the mark, or of the item's return to the class. If the student is not satisfied with the outcome, the student shall immediately submit the Reappraisal of Graded Term work form to the department in which the course is offered. The department will arrange for a re-assessment of the work if, and only if, the student has sufficient academic grounds. See sections [I.1](#) and [I.2](#) of the University Calendar
- 2. Final Exam:** The student shall submit the request to Enrolment Services. See [Section I.3](#) of the University Calendar.

Requests for grade reappraisal must be submitted in writing with an explanation of the reason for the regrade request. Regrades are not limited to a single exam question and the entire examination/assignment may be regraded.

12. OTHER IMPORTANT INFORMATION FOR STUDENTS:

- a. Mental Health** The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the mental health resources available throughout the university community, such as counselling, self-help resources, peer support or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, [Mental Health Services Website](#)) and the Campus Mental Health Strategy website ([Mental Health](#)).
- b. SU Wellness Center:** The Students Union Wellness Centre provides health and wellness support for students including information and counselling on physical health, mental health and nutrition. For more information, see www.ucalgary.ca/wellnesscentre or call [403-210-9355](tel:403-210-9355).
- c. Sexual Violence:** The University of Calgary is committed to fostering a safe, productive learning environment. The Sexual Violence Policy (<https://www.ucalgary.ca/policies/files/policies/sexual-violence-policy.pdf>) is a fundamental element in creating and sustaining a safer campus environment for all community members. We

understand that sexual violence can undermine students' academic success and we encourage students who have experienced some form of sexual misconduct to talk to someone about their experience, so they can get the support they need. The Sexual Violence Support Advocate, Carla Bertsch, can provide confidential support and information regarding sexual violence to all members of the university community. Carla can be reached by email (svsa@ucalgary.ca) or phone at [403-220-2208](tel:403-220-2208) .

- d. **Misconduct:** Academic misconduct (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the University Calendar under [Section K](#). Student Misconduct to inform yourself of definitions, processes and penalties. Examples of academic misconduct may include: submitting or presenting work as if it were the student's own work when it is not; submitting or presenting work in one course which has also been submitted in another course without the instructor's permission; collaborating in whole or in part without prior agreement of the instructor; borrowing experimental values from others without the instructor's approval; falsification/ fabrication of experimental values in a report. **These are only examples.**
- e. **Assembly Points:** In case of emergency during class time, be sure to FAMILIARIZE YOURSELF with the information on [assembly points](#).
- f. **Academic Accommodation Policy:** Students needing an accommodation because of a disability or medical condition should contact Student Accessibility Services in accordance with the procedure for accommodations for students with disabilities available at [procedure-for-accommodations-for-students-with-disabilities.pdf](#).

Students needing an accommodation in relation to their coursework or to fulfill requirements for a graduate degree, based on a protected ground other than disability, should communicate this need, preferably in writing, to the Associate Head, Undergraduate of the Department of Biological Sciences, Heather Addy by email addy@ucalgary.ca or phone 403 220-6979. Religious accommodation requests relating to class, test or exam scheduling or absences must be submitted no later than **14 days** prior to the date in question. See [Section E.4](#) of the University Calendar.
- g. **Safewalk:** Campus Security will escort individuals day or night (See the [Campus Safewalk](#) website). Call [403-220-5333](tel:403-220-5333) for assistance. Use any campus phone, emergency phone or the yellow phones located at most parking lot pay booths.
- h. **Freedom of Information and Privacy:** This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). Students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page. For more information, see [Legal Services](#) website.
- i. **Student Union Information:** [VP Academic](#), Phone: [403-220-3911](tel:403-220-3911) Email: suvpaca@ucalgary.ca. SU Faculty Rep., Phone: [403-220-3913](tel:403-220-3913) Email: sciencerep@su.ucalgary.ca. Student Ombudsman, Email: suvpaca@ucalgary.ca.
- j. **Internet and Electronic Device Information:** Unless instructed otherwise, cell phones should be turned off during class. All communication with other individuals via laptop, tablet, smart phone or other device is prohibited during class unless specifically permitted by the instructor. Students that violate this policy may be asked to leave the classroom. Repeated violations may result in a charge of misconduct.
- k. **Surveys:** At the University of Calgary, feedback through the Universal Student Ratings of Instruction ([USRI](#)) survey and the Faculty of Science Teaching Feedback form provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses. Your responses make a difference - please participate in these surveys.

Week		Date	Lecture	Lab
1	F	07/09	Course introduction	
2	M	10/09	Phylogenetics	Introduction to vertebrate structure and diversity
	W	12/09	Jawless fishes	
	F	14/09	Cartilaginous fishes 1	
3	M	17/09	Cartilaginous fishes 2	Fishes: diversity
	W	19/09	Cartilaginous fishes 3	
	F	21/09	Ray-finned fishes 1	
4	M	24/09	Ray-finned fishes 2	Fishes: form and function
	W	26/09	Ray-finned fishes 3	
	F	28/09	Lobe-finned fishes	
5	M	01/10	Tetrapoda and living on	Amphibians: diversity

	W	03/10	land	
	F	05/10	Amphibians 1	
			Amphibians 2 (guest lecture)	
6	M	08/10	Thanksgiving, no lecture	Amphibians: form and function
	W	10/10	Amphibians 3	
	F	12/10	Amphibians 4	
7	M	15/10	Amphibians 5	Mammals: diversity
	W	17/10	Mammals 1	
	F	19/10	Midterm exam (in class)	
8	M	22/10	Mammals 2	Midterm lab exam
	W	24/10	Mammals 3	
	F	26/10	Mammals 4	
9	M	29/10	Mammals 5	Mammals: form and function
	W	31/10	Mammals 6	
	F	02/11	Turtles, lizards and snakes 1	
10	M	05/11	Turtles, lizards and snakes 2	Turtles and lepidosaurs: diversity
	W	07/11	Turtles, lizards and snakes 3	
	F	09/11	Turtles, lizards and snakes 4	
Reading Week	M	12/11	No lectures	No lab
	W	14/11		
	F	16/11		
11	M	19/11	Turtles, lizards and snakes 5	Turtles and lepidosaurs: form and function
	W	21/11	Turtles, lizards and snakes 6	
	F	23/11	Crocodiles and birds 1	
12	M	26/11	Crocodiles and birds 2	Archosaurs: diversity
	W	28/11	Crocodiles and birds 3	
	F	30/11	Crocodiles and birds 4	
13	M	3/12	Crocodiles and birds 5	Archosaurs: form and function
	W	5/12	Crocodiles and birds 6	
	F	7/12	Overview	

Zoology 403 - An Introduction to Vertebrate Zoology

Lab photographic device policy: No photography will be permitted in the lab section of this course. If you violate this policy, your device will be confiscated until the end of the lab period. Repeated abuse may result in a charge of misconduct.

Online course components: In the lecture component of the course, we will use the Top Hat Monocle classroom performance system, where you will be asked to use a cell phone to text answers to questions during class. The use of the Top Hat Monocle system is optional, but highly recommended to enhance learning in the classroom. If you answer 85% or more of the in-class questions, your lowest grade on one of your D2L quizzes will be replaced by 100%. It is your responsibility to ensure that your participation is being properly recorded by the Top Hat Monocle system. In the event of any discrepancy, you must contact the administrators of the Top Hat Monocle system to have them corrected. Correction of any discrepancies must be done prior to 5pm on Dec. 10, 2018. If a student is unable to use the Top Hat Monocle system, please contact Dr. Jessica Theodor by Sept. 14 to make alternate arrangements.

Course Learning Outcomes:

By the end of this course you will be expected to:

1. Contrast the features that distinguish vertebrates from other members of the Metazoa
2. Describe the major clades of vertebrates, their distribution, life history and evolutionary relationships
3. Explain the links between vertebrate metabolism and life history
4. Identify vertebrate specimens to major clade
5. Draw and describe vertebrate specimens using appropriate vocabulary and labels
6. Use a dichotomous key to identify vertebrate specimens to species for local fauna
7. Use calipers to take standard measurements of vertebrates
8. Identify the locomotor and feeding mode of vertebrates

Department Approval:

Electronically Approved

Date: 2018-09-04 14:27