



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

1. **Course: ZOOLOGY 577 – MAMMALOGY**

Lecture Section: L01 MWF 13:00-1350 EDT 723 WINTER 2015
Instructor: Dr. R.M.R. Barclay BI 330 220-3564 barclay@ucalgary.ca

D2L site: Zoology 577 Mammalogy

Biological Sciences Department BI 186; (403) 220-3140; biosci@ucalgary.ca

2. **PREREQUISITE(S):** Biology 313 and Zoology 477.01 or consent of the Department
See section 3.5.C in the Faculty of Science section of the online Calendar
(<http://www.ucalgary.ca/pubs/calendar/current/sc-3-5.html>)

3. **Grading:** The University policy on grading and related matters is described sections F.1 and F.2 of the online University Calendar. In determining the overall grade in the course the following weights will be used:

Term Paper	25%
Laboratory exam	15% March 16
Midterm test	20% March 2 16:00-18:00 (in lab period)
Oral Presentation	10%
Final Examination	30% (To be scheduled by the Registrar)

“Each piece of work (term paper, laboratory report, midterm test or final examination) submitted by the student will be assigned a percentage score. The student’s average percentage score for the various components 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.”

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 with these regulations. See also [Section E.6](#) of the University Calendar

5. **Scheduled out-of-class activities:** none

REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME-ACTIVITY. If you have a clash with this out-of-class-time-activity, please inform your instructor as soon as possible so that alternative arrangements may be made for you.

6. **Course Materials:** TEXT: N/A
7. **Examination Policy:** Electronic devices may not be used during examinations. Students should also read the Calendar, [Section G](#), on Examinations.
8. **Writing across the curriculum statement:** In this course, the quality of the student’s writing in the term paper will be a factor in the evaluation of those reports. See also [Section E.2](#) of the University Calendar.
9. **STUDIES IN THE BIOLOGICAL SCIENCES INVOLVE THE USE OF LIVING AND DEAD ORGANISMS.** Students are expected to be familiar with <http://www.ucalgary.ca/pubs/calendar/current/sc-5-1.html> of the on-line calendar. See also <http://www.ucalgary.ca/pubs/calendar/current/e-5.html>.

10. OTHER IMPORTANT INFORMATION FOR STUDENTS:

- (a) **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.
- (b) **Assembly Points:** In case of emergency during class time, be sure to FAMILIARIZE YOURSELF with the information on [assembly points](#).
- (c) **Academic Accommodation Policy:** Students with documentable disabilities are referred to the following links: Students with Disabilities: <http://www.ucalgary.ca/pubs/calendar/current/b-1.html> [B.1](#) and Student Accessibility Services: <http://www.ucalgary.ca/access/>.
- (d) **Safewalk:** Campus Security will escort individuals day or night (<http://www.ucalgary.ca/security/safewalk/>). Call 220-5333 for assistance. Use any campus phone, emergency phone or the yellow phones located at most parking lot pay booths.
- (e) **Freedom of Information and Privacy:** This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). As one consequence, 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 also <http://www.ucalgary.ca/secretariat/privacy>.
- (f) **Student Union Information:** VP Academic Phone: 220-3911 Email: suvpaca@ucalgary.ca.
SU Faculty Rep. Phone: 220-3913 Email: sciencerep@su.ucalgary.ca; [Student Ombudsman](#)
- (g) **Internet and Electronic Device Information:** You can assume that in all classes that you attend, your cell phone should be turned off unless instructed otherwise. Also, communication with other individuals, via laptop computers, Blackberries or other devices connectable to the Internet is not allowed in class time unless specifically permitted by the instructor. If you violate this policy you may be asked to leave the classroom. Repeated abuse may result in a charge of misconduct.
- (h) **U.S.R.I.:** At the University of Calgary, feedback provided by students through the Universal Student Ratings of Instruction (USRI) survey provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses (www.ucalgary.ca/usri). Your responses make a difference - please participate in USRI Surveys.

Department Approval _____ ORIGINAL SIGNED _____ Date _____

DEPARTMENT OF BIOLOGICAL SCIENCES
 COURSE OUTLINE
 ZOOLOGY 577
 MAMMALOLOGY

TERM: Winter 2015

SECTION NO: 01

PREREQUISITE(S): Biology 313 and Zoology 477.01 or consent of the Department

A student may not register in a course unless he/she has a grade of at least C- in each prerequisite course.

LECTURER: Dr. Robert Barclay BI 330

LECTURES: MWF 13:00 EDT 723

LABS: M 16:00 - 18:50 BI 046

TEXT: N/A

MARK DISTRIBUTION: A. Composition of Final Grade

Final Exam		30%
Lab Exam	Mar. 16	15%
Midterm Exam	March 2 (1600-1800)	20%
Term Paper*		25%
Oral Presentation		<u>10%</u>
		100%

B. Final Exam

There will be a final exam in this course scheduled by the Registrar.

*TERM PAPER: Each student will select a topic (in consultation with the instructor) and prepare a term paper in the form of a literature review. These will be due April 1, 2015.

FIELD TRIP: There will be a voluntary weekend field trip Feb. 7th and 8th to the Kananaskis Field Station during which various aspects of mammalian winter ecology will be studied (e.g. subnival conditions, winter mammal trapping & tracking, adaptations to winter).

LAB SCHEDULE

Jan. 19, 26	Mammals of Alberta
Feb. 2	Field techniques - marking, trapping, radiotelemetry
Feb. 9	Field trip data presentation and analysis
Feb. 23	Mammals of Alberta (continued)
Mar. 2	MIDTERM (lecture exam)
Mar 9	Mammals of Alberta (continued)
Mar. 16	LAB EXAM
Mar. 23, 30, Apr. 6, 13	Oral presentations

Tentative Lecture Topics – Zoology 577

1. Origin and evolution of mammals
 - what is a mammal?
 - the three major groups (Monotremes, Marsupials, Eutherians)
2. Monotremes – basic biology and unique aspects, electrolocation
3. Marsupials
 - origin and evolution
 - diversity and taxonomy
 - unique adaptations – reproduction
 - why are there so few large carnivores?
4. Eutherians
 - diversity and classical classification/phylogeny
 - evolution and radiation
 - continued species turnover
 - recent molecular-based relationships/phylogeny
5. Diversity and radiation of bats as an example of eutherians
 - mono- vs di-phyly debate
 - key adaptations - flight
6. Echolocation
 - whales and bats
7. Whale evolution (the confusion!)
8. Reproduction
 - ecology
 - behaviour (mating and parental care systems)
 - why don't male mammals lactate?
 - can females choose the gender of their offspring and why should they?
7. Life history strategies of mammals
 - patterns and anomalies
 - live fast and die young
8. Thermoregulation – torpor and hibernation, adaptations for desert environments
9. Digestion – herbivory in marsupials and eutherians
10. Conservation

GRADING SCHEME

A+	≥	90
A		87
A-		84
B+		81
B		78
B-		74
C+		70
C		66
C-		62
D+		56
D	≥	50
F	<	50