

**OGLALA LAKOTA COLLEGE**  
Course Syllabus for

**Mammalogy (Bio 413)**

**Fall 2009**

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*Instructor:* Alessandra Higa  
*Office Hours:* at the college center on Wednesdays after class; at Piya Wiconi on Mondays and Fridays.  
*Class meet:* Wednesday from 9:00 - 11:00am (pictel HSCC-PHCC) + 15 hours of lab or fieldwork;  
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Course Description

Mammalogy (Bio 413) will introduce you to the fascinating world of Mammals. The topics that will be discussed during the semester include (but are not limited to): classification and characteristics of the mammalian orders, evolution, natural history, ecology, behavior, and conservation. Mammals of the Northern Great Plains will be emphasized.

Prerequisites

Math 313 (Introduction to Statistics), Bio 223 (Ecology), and Bio 303 (Field Ecology), with a grade of “C” or better, or permission of instructor.

Required Text

Feldhamer, G.A.; Drickamer, L.C.; Vessey, S.H.; Merritt, J.F.; and Krajewski, C. 2007. Mammalogy: adaptation, diversity ecology (3rd edition). John Hopkins, Baltimore, 643 pp. (ISBN-10: 080188695-3; ISBN-13: 978-080188695-9)

Supplementary Materials

Several supplementary materials will be given during the semester as a handout (or available to download on Moodle).

Descriptive Reading Load

It is imperative that you **read** the scheduled chapters *before* coming to class in order to be prepared for discussion and participation. Reading is an important key to success in this class. Grade 14 reading level.

Research

For your mammal’s research component, you will be required to select one “order”; within this order, one “family”; and within this family you will select *a minimum of 3 species* recorded in South Dakota in order to write a research report. The research report must include: 1) general description of the order; 2) list of the all families occurring within this order (not restrict to SD); 3) list of

species occurring within the selected family (restrict to SD); and create a species account for the species you selected occurring in SD with relevant information such as: description, distribution, ecology, genetics, ontogeny and reproduction, curiosities, remarks (conservation status, threats, etc.). To fulfill this objective you will: 1) collect information from scientific publications (peer-reviewed journals), scientific collections, local agencies reports, on topics related to your subject; 2) analyze the data/text compilation; 3) write a scientific report, and 4) prepare an oral presentation. Your reports should be written in scientific style (Journal of Mammalogy format; <http://www.mammalsociety.org/>) with references to information sources cited in the text and should contain a literature cited section at the end that gives all publication data necessary for anyone to find your source papers. Internet resources as restrict to \*.edu or \*.gov websites and must be properly cited.

#### Class Attendance and Course Requirements

1. To succeed in this course, **regular attendance** is imperative. Your presence and participation is critical to your achievement. In accordance with OLC policy, you will be dropped from the course if you miss more than three consecutive class periods or if you miss more than five class periods during the semester.
2. If you plan to miss class you must contact the instructor **in advance** by e-mail and/or phone. It is *your responsibility* to make sure you receive all assignments and instructions.
3. Make-up exams and assignments will be given **only** in the case of **illness** of the student or a dependent, or **death** in the family. **Documentation is required.** If the absence is foreseeable, you must notify me at least one week in advance of the anticipated absence. If the absence is unforeseen, you must present documentation to me within one week of the missed exam to have the opportunity to make up the missed work.
4. All OLC and Math & Science departmental policies apply to this class.

#### Evaluations and Markings

1. **Homework:** read assigned chapter and supplementary material, and carry out your research.
2. **Research and presentation:** Keep all your data and notes in a notebook. This procedure helps you to organize and analyze data during your research project. These assignments are multifaceted: (1) you will gain experience in mammal's identification and ecology; (2) you will learn how to analyze data and apply the scientific method; (3) you will gain experience using the computer produce a power point presentation, and (4) you will develop your public speaking skills.

3. **Exams and grading procedures:** the class grade is equal to lectures (70%) and research (30%) grades. The lecture grade will rest on *quizzes*, one *midterm*, and one *final exam* (not comprehensive). Each examination will consist of multiple choice, matching, T or F, short answers, and essay questions, worth total of 100 points. The research grade will rest on your *final report*, and *presentation*.

Grading

Grade		The following scale will be used:
Final Exam	25%	A = 90% - 100%
Midterm	25%	B = 80% - 89.9%
Class and home work	20%	C = 70% - 79.9%
Final scientific report Including your presentation	30%	D = 60% - 69.9%
<i>Total</i>	100%	F = below 60%

Tentative Schedule

Week	Chapter	Information
1	1 - 2	Introduction
2	4	Origin and Evolution
3		Phylogenetic Systematics
4	3, 6-10	Methods for studying Mammal; Mammalian general characteristics
5	5	Biogeography
6	11	Mammals classification; Monotremes and Marsupials
7		<i>Midterm</i>
8	12 - 13	Insectivora (with new taxonomic classification); Chiroptera
9	14 - 15	Primates; Xenarthra, Pholidota, and Tubulidentata
10	16	Carnivora
11	18	Rodentia and Lagomorpha;
12	20	Perissodactyla and Artiodactyla
13	17 and 19	Cetacea; Proboscidea, Hyracoidea, and Sirenia
14	29	<i>Students presentations</i> ; Mammal ecology and conservation
15		<i>Final Exam</i>

**\*Note:** Information contained in this syllabus was, to the best knowledge of the instructor, considered correct and complete when distributed for use at the beginning of the semester. The instructor reserves the right to make changes in the syllabus in collaboration with the class with reasonable notice to all concerned.