INTRODUCTION TO ANIMAL BIOLOGY
BIOL 160, Fall 2012
Sections 7, 8, 9, and 10

INSTRUCTOR: Dr. Karin Bodensteiner
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Office Hours: Tuesday/Thursday 9:00-10:30 a.m., by appointment, or try and find me

CLASS MEETINGS:
Lecture: TNR 170, Monday/Wednesday/Friday 12:00-12:50 a.m.
Laboratory: TNR 355 (time and instructor varies with section)
Lecture Exams: During class time (in the same room- TNR 170)
Laboratory Exams: TNR 351 or 355. Thursday p.m. See below for specific dates.
Open Lab Times: TNR 351 and 355, Monday-Thursday 6:30-8:30 p.m.
Additional Course Information: Available off of Desire 2 Learn (D2L)

REQUIRED TEXT: Raven, Johnson, Losos, Mason, and Singer. (2008) Biology, 8th Edition. McGraw-Hill, New York. Available for rent in bookstore.

REQUIRED FOR LABORATORY:
1. Introduction to Animal Biology Lab Manual. Available for purchase in the bookstore.
2. Dissecting kit. Available for purchase in bookstore.
3. Safety goggles. Available for purchase in bookstore or in local stores.
4. Strongly recommended for laboratory: rubber or plastic gloves. Available for purchase in local stores.

Note: Some students find A Photographic Atlas for the Zoology Laboratory to be a helpful reference.

COURSE DESCRIPTION:

This course will introduce students to the amazing and diverse world of animals. To do this, a wide range of topics pertaining to animal biology will be covered including (but not limited to): the chemistry of life, basic cellular biology, genetics, animal form and function, and animal diversity.

COURSE LEARNING OUTCOMES: By the end of the semester, students should be able to—
1. Apply fundamental concepts in cell biology, genetics, physiology, and animal diversity to your everyday life.
2. Describe key biological principles.
3. Compare and contrast physiological processes in animals from different phyla.
4. Perform basic laboratory procedures including light microscopy and animal dissection.
5. Identify animals based on taxonomy.
6. Show improvement in critical thinking, writing, and oral communication skills.

POINT BREAKDOWN:

Lecture Exams	4 @ 100 pts each
Laboratory Exams	3 @ 50 pts each
Other Assignments/Quizzes	TBA, 50 pts total
TOTAL	**600 pts**

GRADE SCALE (out of 100% of Total):

A ≥ 93-100	C = 73-76
A- = 90-92	C- = 70-72
B+ = 87-89	D+ = 67-69
B = 83-86	D = 60-66
B- = 80-82	F < 60.0
C+ = 77-79	

DATES TO REMEMBER*:

Lecture Exam 1	**Sept. 26:** 12:00-12:50 a.m.; TNR 170
Lab Exam 1	**Oct. 11:** TNR 351/355
Lecture Exam 2	**Oct. 22:** 12:00-12:50 a.m.; TNR 170
Lecture Exam 3	**Nov. 14:** 12:00-12:50 a.m.; TNR 170
Lab Exam 2	**Nov. 15:** TNR 351/355
Lab Exam 3	**Dec. 13:** TNR 351/355
Lecture Exam 4	**Dec. 19:** 2:45-4:45 p.m.; TNR 170

***Please note: Thursday evening test sections meet ONLY when a laboratory exam is scheduled and not on other days during the semester.

EXAMS AND OTHER GRADED WORK:

There will be four exams: three during the course of the semester and one during finals week. Each lecture exam is worth 100 points. Exams will consist of multiple choice, definitions, fill-ins, and possibly short answer questions. In addition, application of information provided in lecture to an unknown problem may be required. There will also be three laboratory practical exams worth 50 points each. Laboratory exams will be given on three Thursday evenings. Times vary depending on section. See laboratory instructor for details.

There will also be a number of quizzes and assignments during the semester. All exams, quizzes, and assignments will count towards the final grade (i.e. no grades will be dropped). If you have an unexcused absence, you will NOT be allowed to make up a missed quiz or assignment (i.e. skip at your own risk).

Exams (both lecture and laboratory) are not comprehensive. That said, course material will build over the semester and it will be important for you to remember and apply basic information learned early on to material covered later in the course. If there are students in the class who have a disability and need accommodation, please see me.

PROFESSIONALISM:

Attendance: Class and laboratory attendance are mandatory and you are expected to arrive on time and ready to learn. Unexcused absences and/or chronic tardiness WILL reveal themselves in your grade. Assignments are due when they are due. Exceptions to this rule will only be granted if arrangements are made with the instructor *well in advance*. Exams must be taken at the assigned time and alterations to this schedule will only be made for personal injury or emergencies (e.g. death in the family, serious accident, or hospitalization). In such cases, evidence of some kind must be provided and you are expected to complete the work as soon as possible. If you ARE allowed to make up work, format will be at the discretion of the instructor. It is your responsibility to get the notes for any missed classes.

Participation: I expect that students will come to class ready to be engaged and actively participate in the classroom experience. Open, honest discussion is encouraged and will factor in to your grade.

Classroom Behavior: I expect nothing short of complete mutual respect and courtesy. Cell phones and other personal electronic devices must be turned off while class and/or lab is in session.

ACADEMIC INTEGRITY:

Academic dishonesty in any form will result in disciplinary action in accordance with UW System Administrative Code.

See http://www.uwsp.edu/centers/rights/RRBOOKLET8-2005-06.pdf (pages 4-9) for more information.

EXTRA HELP:

Tutors are available to help students with lecture and lab material. Interested students should contact the Tutoring-Learning Center.

GENERAL COURSE OUTLINE*:	**CHAPTER(S)**
<u>Unit 1: Macromolecules and the Cell</u>	
Introduction/Overview	1
Macromolecules	(2) 3
Cellular Organization	4
Cell Membranes	5
Cellular Communication	9
<u>Unit 2: From DNA to RNA to Protein</u>	
Cellular Respiration	(6) 7
Mitosis and Meiosis	10 & 11
Patterns of Inheritance	12
DNA Replication	14
Transcription and Translation	15
<u>Unit 3: Animal Diversity, Reproduction, and Development</u>	
Reproductive Strategies	52
Vertebrate Sexual Differentiation	52
Animal Development	53
Other relevant chapters:	
The Tree of Life	26
Protists through Vertebrates: an analysis	29, 32-35
<u>Unit 4: Major Systems Physiology</u>	
Homeostasis and Feedback Mechanisms	43
Endocrine System	46
Digestion and Nutrition	48
Circulation and Respiration	49
Nervous and Sensory	44 & 45
Osmoregulation	50
Musculoskeletal System	47
Other relevant chapters:	
The Animal Body and Its Regulation	43
Musculoskeletal System	47
Sensory	45

*****Please note: Course schedule and topics covered are subject to change.