ZOOL 1110 PRINCIPLES OF ZOOLOGY: COURSE SYLLABUS
Lecture Time: 10:30-11:20 AM (M-W-F): **Location:** Room 130 Lind Lecture (LL)
Laboratory Location: 429 SL

Instructor: Dr. Robert Okazaki
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SI: Nickole Brooks

Office Hours: Mon & Tues 12:30-1:20 PM
Wed: 7:30-8:20 AM (or by appointment)
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Faculty Web Site: http://faculty.weber.edu/rokazaki

Text: Raven, Johnson, Mason, Losos, & Singer. 2011. Customized Version of ***Biology 9th Ed.*** McGraw-Hill
Lab: Hoagstrom, Mull & Okazaki. 2013. ***Principles of Zoology Zoology 1110 Lab Manual*** (Bookstore)

Objectives: Understand the four major disciplines of zoology: cell biology, genetics, evolution & ecology
Gain an awareness, appreciation, and interconnection of the four disciplines to everyday life
Learn to apply statistical analysis during data collection
Learn to read a scientific paper and how scientific ethics is ever so critical
Develop critical thinking skills and avoid memorization/regurgitation

Learning Outcomes: (1) **Levels of Organization**: All life shares an organization that is based on molecules and cells & extends to organisms and ecosystems; (2) **Metabolism & Homeostasis**: Living things obtain & use energy, & maintain homeostasis via organized chemical reactions known as metabolism; (3) **Genetics & Evolution**: Shared genetic processes & evolution by natural selection are universal features of all life; (4) **Ecological interactions**: All organisms, including humans, interact with their environment & other living organisms.

Evaluation: Total of **600 points** will be divided as follow:
(1) Okazaki: Cell & Genetics Lecture (200 pts)
(2) Meyers: Evolution & Ecology Lecture (200 pts)

Exams for Dr. Okazaki will be multiple-choice in a chi-tester format. No make-up exams will be given. A student with a valid (e.g. medical) excuse will only have the scores from the tests taken to be used in the final calculation of the grade. Students missing exams without a valid excuse will be assigned 0 points.

(3) Laboratory (240 pts):

Lab Assignments	140 pts
Lab Exam	100 pts

Grading: Based on the percentages of the **640** total points; e.g. 576/640 = 90% = A-

A: 93-100	A-: 90-92	B+: 87-89	B: 83-86	B-: 80-82	C+: 77-79
C: 73-76	C-: 70-72	D+: 67-69	D: 63-66	D-: 60-62	E: <60

Attendance: Exams will be based upon the lecture material and the reading assignments. Attendance will be crucial to ensure success in the course.

Academic Honesty: Academic misconduct will not be tolerated during the exams and will lead to 0 points. Study groups are encouraged to help stimulate an active learning process.

"Any student requiring accommodations or services due to a disability must contact Services for Student with Disabilities (SSD) in Room 181 of the Student Service Center. SSD can also arrange to provide course materials (including this syllabus) in alternative formats if necessary."

Tentative Lecture Schedule

Week of	Topics	Chapter Readings
7 January	Science of Biology	Chapter 1
	Nature of Molecules	Chapter 2
	Chemical Building Blocks of Life	Chapter 3
14 January	Cell Structure	Chapter 4
	Membranes	Chapter 5
10 September	How Cells Divide	Chapter 10
	Energy & Metabolism	Chapter 6
21 January	Energy & Metabolism	Chapter 6
	How Cells Harvest Energy	Chapter 7
28 January	Sexual Reproduction & Meiosis	Chapter 11
	Patterns of Inheritance	Chapter 12
1-2 February	**Midterm 1 (Chapters 1-7 & 10)**	
4 February	Chromosomes, Mapping, & Meiosis-Inheritance Connection	Chapter 13
11 February	DNA: The Genetic Material	Chapter 14
	Genes & How They Work	Chapter 15
18 February	Biotechnology	Chapter 17
25-26 February	**Midterm 2 (Chapters 11-15 & 17)**	