SAMPLE SYLLABUS

Bi 458/558 BIOLOGY of Seabirds and Marine Mammals

Instructor: Jan Hodder

Course Goals: In this class I plan to introduce you to the way in which marine birds and mammals make a living. We will explore some topics that are well understood and others that have little known information. I use a variety of teaching techniques including lectures and activities within the lecture, copious field trips with field activities, a few laboratory exercises, and student led presentations and discussions of the literature. During field trips and in class you will work in groups and I expect you to be an active participant. I welcome your questions, ideas and will ask for your input. I give a variety of assignments so that you have the opportunity to develop your writing and observational skills, oral presentations, and thinking skills. I expect you to read the weekly assignments prior to coming to class, as I will often reference these materials during class time. I use a variety of assessment and evaluation techniques including traditional exams, assessment of written materials including your field notes, and oral presentations.

Books: National Geographic Field Guide to Birds - this should accompany you on all of our field trips.

The Marine Birds and Mammals Reader - this is a list of papers that I have chosen to introduce you to some of the literature, it is by no means comprehensive and should you be interested in more information on any topic we cover in class please ask me and I will try to direct you to sources. The readings are chosen to complement some of the lectures and field activities, and to expose you to some of the more active areas in marine bird and mammal research. We may discuss some of the readings during class periods.

Supplies: You will need a Rite in the Rain field notebook, and for laboratory sessions, a scalpel, tweezers, scissors, and a blunt probe. All of these can be purchased in the office. Binoculars are essential.

Week 1

Tuesday Marine bird and mammal diversity

Field trips - Spotting scope use and marine birds of lower Coos Bay

Bird identification skills, Pelagic Cormorant colony visit
Thursday MARINE BIRD social systems
Field Trip: Bandon seabird colonies

Week 2
Tuesday MARINE BIRD SOCIAL SYSTEMS continued
Field Trip: South Jetty seabird colonies
Conservation issues I
Thursday Marine mammal locomotion
Pinniped natural history. Introduction to conservation issues.
Field trip: Cape Arago pinniped haul-out

Week 3
Tuesday Avian locomotion
All day laboratory session
Thursday OCEANOGRAPHIC FEATURES
Field trip: Ocean boat

Week 4
Tuesday Feeding ecology
Field trip – Coos Head and lower Coos Bay
Conservation Issues II
Thursday Field trip to Newport - Oregon coast aquarium and local bird colonies

Week 5
Tuesday Mid Term Exam
Field trip: Cape Arago pelagic cormorant colony
Thursday PINNIPED social systems
Field trip: Bandon seabird

**Week 6**

Tuesday Diving biology
Conservation issues III
Thursday Cetacean social systems
Field trip: Ocean Boat trip

**Week 7**

Tuesday SENSORY PERCEPTION - Sound production and reception
Lab session: Cetacean dissection
Thursday SENSORY PERCEPTION – OTHER MODALITIES
Conservation Issues IV

**Week 8**

Tuesday Evolution and zoogeography
Field Trip - Cape Arago
Thursday Final Exam

**Field Note Books**

I expect you to take field notes on each of our field trips. They are a tool to help you sharpen your observation skills, and assist you with learning about the biology of the animals. Each field trip has a specific focus for the notes that you will hand in to be graded. The field notebooks will be collected at the end of these trips.

In addition to the notes for grading you should record observations that will assist you with learning the natural history of the animals you are observing, and observations that help you understand the material we are covering in class. Keep the two sets
separate - use right and left pages, or front/back of the book, or however else you wish to organize your book. Make it clear though which are your notes to be graded.

Independent field notes

In addition to these notes I would like you to record two sets of observations during your own time, and hand them in on the dates shown above. Expectations and criteria for grading of field notes are explained on the separate handout. These can be taken in your class field notebook or on separate paper. They should be taken in the field and not rewritten.

Readings and Discussions

Some of the readings are to provide you with background information about topics. In other instances we will discuss the reading in class, and I will give you a list of questions for you to answer that serve as a tool to guide your reading. In these cases I will ask you to work in groups to develop questions from the reading.

Class Project

We will conduct a class project where we will record the chronology of breeding of two Pelagic Cormorant colonies.

Conservation Issues

In teams of three you will research a conservation issue that deals with marine birds and mammals. You will present your findings to the class, and write a paper.

GRADING

If you are taking this class for graduate credit I will meet with you during the first week of classes to talk about an additional graduate requirement.

Mid term and final - 25% each

Conservation issues presentation 5% and paper 10%

Field notebooks and hypotheses generation - 15% in-class notes 10% independent observations

Quiz, participation, Pelagic Cormorant project, class discussions and write-ups from field and lab data - 10%