BIOL 426: ORNITHOLOGY
SPRING 2010

Class meets: Wednesday and Friday 9:15-10:15 am, Elvey Auditorium
Lab meets: Friday 2:15-5:15 pm, 103 Irving I
Optional reading: (1) The Birder’s Handbook; (2) Manual of Ornithology

Instructors
(1) Roy Churchwell
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office in ATCO T5, E side of Arctic Health
Office Hours: 10:30-11:30 am W, F
(2) Brooke Hill (TA)
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Office Hours: during lab and review sessions

Week/Topic (Reading)                      Date
---SPRING BREAK----

Week 1: Intro to ornithology & history of field (text pp. xxi-xxvii) 22 Jan
Week 2: Diversity of birds; distribution; differentiation of species (Ch. 1, 19) 27, 29 Jan
Week 3: Origin and evolution of birds; classification and taxonomy (Ch. 2, 3) 3, 5 Feb
Week 4: Feathers, molts, plumages; flight (Ch. 4, 5) 10, 12 Feb
Week 5: Physiology; anatomy; feeding strategies (Ch. 6) 17, 19 Feb
Week 6: Endocrinology & life cycles; start of migration (Ch. 9, 10) 24, 26 Feb
Week 7: rest of migration, sociality; MIDTERM & PROPOSAL DUE (Ch. 11) 3, 5 March

Week 8: Reproduction: mates, breeding systems, bird sex (Ch. 12, 13, 14) 17, 19 March
Week 9: Reproduction: nests, incubation, parental care (Ch. 15, 16) 24, 26 March
Week 10: Behavior; communication (Ch. 7, 8) 31 Mar, 2 Apr
Week 11: Bird populations; demographics (Ch. 17, 18) 7, 9 April
Week 12: Communities; habitats; ecology; conservation (Ch. 20, 21) 14, 16 April
Week 13: How we study birds (no class or lab 23 April) 21, April
Week 14: Open, to be determined 28, 30 Apr
Week 15: Presentations week 5, 7 May

-----FINAL EXAMS----- 12 May 8 - 10

Course Grading 1000 pts total
35 % lecture: midterm 150 points
                      final 200 points
35% lab:            quizzes (15 pts each, 10 total) 150 points
                      lab final 200 points
30% project:        written proposal for field project 100 points
                      field project presentation + revised proposal 200 points

Grades: A=88-100%, B=75-87%, C=62-74%, D=50-61%, F=<50%
Course Expectations
Students enrolling in this course are expected to attend lecture and labs, to obtain and take notes, to take all quizzes or exams at the arranged time, and to complete an independent field project (see below). Failure to do these things will result in you a) failing the course, and b) failing to learn anything about birds, which means you are paying a bunch of money to take a course for no apparent reason, and are wasting your time and ours. Ornithology is a broad subject, thus we have a lot of material to cover this semester. If you will be absent from class I expect you to get notes from a friend and learn the material on your own. Your instructor is available for questions or extra help if you truly do not understand something, but I will not be able to help if you have not done the reading or gotten the notes. If you will be absent from lab you will need to make arrangements with the TA to make the lab up since it is imperative that you be able to view the lab specimens. **Missing more than two labs for any reason is grounds for failing the course.** If you will be absent for an exam you must let the instructor know as soon as possible, and arrange a time for a make-up exam. **Exams missed without prior notification of the instructor may NOT be made up.**

Your instructor will plan to correlate lectures with the material in the Gill text. However, additional material will be covered in class and on the exams that is not in the book or the Powerpoint notes, thus it is in your best interest to attend lectures personally. Much of the material covered in lab will ONLY be covered in lab, not in lecture or by the book. We will occasionally assign papers or readings that go beyond what is covered by Gill; if these are handed out as assigned reading they WILL be fair game for the exams.

I would like to set up a Blackboard site for the class, but I am in the process of figuring that out.

Field Projects
Ornithology at most universities is a field-based course. Due to our extreme winter conditions in Fairbanks, it is taught in the lab at UAF. However, we would like you to have the opportunity to observe and study birds in their natural environment at some point during this course. Thus, each student will complete a field-based research project on some detail of bird life. The research proposal for this project (~5 pages double-spaced; should have Abstract, Background, Research question/hypothesis, Methods, Anticipated Results, and Significance sections) is due at the midterm exam on 5 March 2010. During the second half of the semester you will conduct the research you have proposed, and give a 12-minute oral presentation (10 minutes talking, 2 minutes for questions) to your fellow students in lab. The presentation should follow standard research talk format, with Background, Objectives/hypothesis, Methods, Results, Conclusions, Future Directions sections. You will also turn in a revised version of your project proposal, taking into account the instructors’ comments on content and writing, and adding your results and conclusions. More details will follow.