

BIOLOGY 427: ORNITHOLOGY COURSE OUTLINE 2012

Instructor: Dr. Darren Irwin (Office: Beaty Biodiversity Centre 209; phone: 604-822-4357; email: irwin@zoology.ubc.ca)

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Course web site: <http://www.zoology.ubc.ca/~irwin/bio427>

Lectures: Tuesday and Thursday, 9:30-10:20 AM, MacLeod, room 220

Labs: 2:00-5:00 PM, Tuesday **or** Thursday (starting Jan. 10/12), Biodiversity 060

Field trips: Times to be announced.

Required books (Available at the UBC bookstore):

1) Ornithology, by Frank Gill (3rd edition, 2007, Freeman).

2) Any field guide to all of the birds of western North America. Highly recommended: *National Geographic Field Guide to the Birds of North America, Sixth Edition*, by Jon L. Dunn and Jonathan Alderfer (new in November 2011).

COURSE OBJECTIVES:

Note that, starting in January 2012, birds will be the primary focus of this course, with amphibians and reptiles referred to only briefly. We will discuss a wide variety of topics in ornithology, including avian ecology, evolution, physiology, behavior, and conservation, with particular attention to species from British Columbia. Students will learn: (a) how to identify species, both in the field under winter conditions and in the laboratory using prepared specimens, (b) how to conduct field inventories of birds and to present scientific surveys, and (c) general knowledge regarding the evolutionary history, taxonomy, ecology, behavior, and conservation of birds. Field research will take place in Pacific Spirit Park and/or other areas chosen by students. The practical skills taught in this course may be useful for obtaining employment as a naturalist, field ecologist, conservation biologist, or environmental consultant. We also hope that this course enriches the lives of students by generating enthusiasm and interest in biodiversity and natural history.

Note: This course involves much fieldwork outside of class time. Students who are uncomfortable outdoors in winter conditions or who do not have a strong interest in field observation might not find the course suitable. We do welcome motivated students who have unusual needs (please talk to the instructor).

COURSE ACTIVITIES:

Laboratory sessions will be devoted to learning to identify birds of B.C., using museum specimens, photographs, and in some cases recordings. Some lab sessions will be spent outside, learning how to identify live individuals in their environment, as well as how to conduct a survey of birds in the wild. Your knowledge will be tested by a lab quiz and a final lab exam, covering material from the entire term. You are responsible for knowing all families and orders of the species identified on the list provided by the instructor. You are expected to learn the official English names of bird species as established by the American Ornithologists' Union (knowledge of scientific names of

bird species is recommended but not required). Some lab sessions may be focused on learning specimen preparation and analysis of vocalizations.

Lectures will discuss selected aspects of avian evolution, ecology, behavior, physiology, and conservation. Some lecture periods will be devoted to field techniques. There will be a midterm and final exam each focusing on lecture and textbook material.

Field Project. Small groups of students (e.g. 2-3 each) will conduct field surveys of birds in two or more locations chosen by each group (for example, in Pacific Spirit Park). Students will (1) survey bird species in each area, and (2) compare species richness and composition between locations. Evaluation will be in two forms: first, each group will briefly present their results to the class; second, each group will submit a written report in the format of a scientific paper. Introductory field trips (in the laboratory sessions as well as occasional optional trips) will teach field methods and bird identification. Identifying birds by their calls is the most difficult skill that we teach in the course, and requires much practice. We strongly recommend that you attend these field trips. Dress warmly and bring raingear.

Evaluation

Group presentation	15%	March 29 / April 3 / April 5
Group report	20%	Due: Thursday, April 5
Lab quiz	10%	February 7/9
Lab exam	20%	March 20/22
Lecture midterm	15%	Thurs., Feb. 16
Lecture final exam	20%	Between April 11-25; to be set by Student Services

Policy on missed or late assignments

By signing up for this course, students agree to accept personal responsibility for taking exams and completing assignments at scheduled times. The schedule is provided at the start of term so that students can plan accordingly. Students who have an unavoidable schedule conflict with an exam session should talk to the instructor well in advance. Otherwise, students who miss exams will receive no credit for them, except in cases of sudden illness or emergency (in which case the student should talk to the instructor as soon as possible and will need to provide a doctor's note or other supporting evidence). Students who are experiencing a serious personal crisis are encouraged to speak with the instructor or TA sooner rather than later, as resources are available to help you and to minimize impact of the crisis on your academic record.

Note on academic integrity

Science is a social endeavor; knowledge is built up over time by scientists communicating with one another, sharing ideas and results. It is critical, however, that scientists give credit where credit is due. **You must not take credit for something that you did not produce.** This principal of academic integrity applies to exams, written assignments, and presentations; you must not present someone else's work as your own. When referring to someone else's work, you must give a citation to that work. In this class you will be working on group projects; the concept of academic integrity means that each member of the group must contribute solidly to the project in order to deserve authorship on the report. Students are reminded of UBC's policy on academic honesty: <http://www.students.ubc.ca/calendar/index.cfm?tree=3,286,0,0>